Critical Capacity Development towards
Inclusive and Participatory Governance of Coastal
Resources in Paraty, Brazil

By

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Abstract

The research took place in Paraty, Brazil, situated in the Atlantic Forest region on the south-east coast of the state of Rio de Janeiro, with a focus on the coastal community of Trindade. A protected area, Serra da Bocaina National Park (PNSB), was established by the Federal Government in 1971, but not enforced until 2008. The study area is perhaps representative of conservation-development issues in Brazil: how to implement conservation in an area where the local people depend on natural resources for their livelihood. The project investigated the development trajectory of the community of Trindade in relation to environmental governance, and implemented a capacity development initiative in conjunction with community members. Participation in governance, conservation and development, the capability approach, and capacity development, are the theoretical areas explored in this thesis.

The research was conducted as interdisciplinary action research, designed to be responsive to changes happening in the community, around issues that were important to people. The research brought together action and reflection, to help find solutions and improve the wellbeing of people and their communities. The study design was flexible and iterative and was adapted to the local context, with the participants largely determining the capacity development topics and methods. The qualitative research approach used mixed methods: narratives, interviews, focus groups, group interviews, participant observation and workshops, involving a total of 75 participants.

Four cross-cutting themes were identified, representing the contributions of the thesis to the literature: (1) Decolonizing conservation and development approaches, (2) Moving from co-management to co-jurisdiction with Indigenous peoples, (3) The nature and
context of “meaningful” participation”, and (4) Marine protected areas as a form of “coastal grabbing”.

The findings have policy implications as Brazil has been shifting to a focus on local participation in decision-making, with a commitment to speed-up establishment of marine protected areas. These policy developments in Brazil have been positive, but the analysis shows that changes are still necessary, and major challenges exist when considering broader aspects of the social-environmental policies. Thesis findings have relevance to important issues far beyond Brazil; the four cross-cutting themes emerging from the study connect to international conservation-development dilemmas.
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I thank the community members in Trindade, particularly members of ABAT. I am also grateful to Natalia Bahia, a very dedicated research colleague and community ally, and to other friends through UNICAMP and the Commons Conservation and Management Research Group (CGCommons) at the University of Campinas, and Staff of PNSB.

I thank my long-time friend and mentor Dr. Mike Mahon.

I would like to acknowledge the Pierre Elliott Trudeau Foundation – what an incredible gift, much more than the tangible support – the chance to meet and interact with people I would have not otherwise met and the new friends that I adore and who have taught me so much.

I am incredibly grateful to family and friends who have supported me in so many ways over the years. Erin Bockstael, Karine Landry, Kerri Tomy, Liasan Llewellyn, Rob Croxford, David Carew, Debra Kerby, Kelly Williamson...you have been there in so many ways through it all!

I thank my daughter Dahlia who has been through all the ups and downs with me, and was an amazing and resilient companion during our research adventures in Brazil.

And my parents, Jackie and David Bockstael. I just cannot possibly thank you enough for everything you have done. You have supported and accepted all the twists and turns of this winding road that I have been on, and are just always there, no matter what. None of this would have been possible without you.

Lastly, I would like to acknowledge and thank the funding sources that provided support throughout the PhD Program: The Pierre Elliott Trudeau Foundation, Joseph-Armand Bombardier Canada Graduate Scholarship (CGS) by the Social Sciences and Humanities Research Council of Canada (SSHRC), the International Development Research Centre of Canada, and the Canada Research Chair for Community-based resource management.
Dedication

Written with profound respect for the strength and resilience of Indigenous Peoples all over the world.

Written also with profound respect for the disabled people that I have had the privilege to work with over the course of this project, as mentors, friends, and research participants. The world needs more people like you.

To my daughter Dahlia, who is kind and smart and fierce and all around wonderful. I love you.

To my parents, the two most generous people I know. I really and truly could not have done it without you (and it is really okay that you still don’t know the name of my degree).
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Chapter One - Introduction

1.1 Introduction

Protected areas in all their forms, with myriad packages of rules and regulations, are a commonly used approach for conservation of the remaining natural spaces and biodiversity around the world. However, protected areas have caused harm to many peoples livelihoods, particularly Indigenous peoples and others whose daily lives are directly dependent on natural resources. This has been recognized and documented, and important work is being done to develop new models that protect our diminished and damaged natural environment but also equally consider the wellbeing of peoples.

Brazil is a country with vast and important natural spaces and resources, much international attention, and many challenges. The governance of natural resources in Brazil is in transition, with tension between those who seek a social-environmental approach and those who are strictly concerned with preservation, and more recently with those who pursue resource exploitation for large-scale development projects. One of the priority areas for protection is the Atlantic Forest biome in Brazil. This forest’s original range before the arrival of Europeans covered an area of approximately 1,315,460 km², spread out over 17 states. Estimates of the scale of remaining forest vary. Ribeiro et al. (2009) estimate that somewhere between 11.4 and 16% remains, while SOS Mata Atlantica (2016) put the figure at 8.5% remaining of this important biodiversity hotspot (SOS Mata Atlantica). Figure 1 shows the original spread and the remaining area.
Figure 1: Atlantic Forest Remnants 2010-2011 (http://www.sosma.org.br/en/project/atlas-of-the-atlantic-forest-remains/) The dark green on the map represents the forest remnants. The light green represents the area of land considered under the law to be Atlantic Forest.

The research for this thesis took place in the region of Paraty, situated in Atlantic Forest remnants on the south east coast of the state of Rio de Janeiro, with a focus on the coastal community of Trindade. A protected area, Serra da Bocaina National Park (PNSB), was established by the federal government in 1971, at a time when Brazil was under dictatorship. From that time there has been virtually no enforcement of the protected area, but this all changed in 2008 when PNSB began to enforce the rules and revitalize the management plan for the protected area.
The research topic was broad and many bodies of literature were relevant. Rather than working with one guiding theory, this research has been guided by multiple theoretical orientations. The capability approach, a people-centered and freedom-centered framework used to guide analysis of human development, was used as the main framework. Particular attention was paid to seek participation of people who belong to different social groups, such as women and disabled people. This is important as “The inability to understand how people of different ages, capabilities or income levels have been faring…has hampered the design and implementation of strategies to tackle discrimination and ensure achievement of the goals…. progress has often been made amongst those groups that are easiest to reach or whose situations are the easiest to ameliorate, leaving many of the poorest and most vulnerable behind.” (Sustainable Development Solutions Network, 2014:107). While this quote is specifically referring to the recently expired Millennium Development Goals and the need for disaggregated indicators in the newly launched Sustainable Development Goals, it is also very relevant to the field of environmental governance and natural resource management and reinforces the need to ensure inclusion of multiple community voices, as was done in this research.

Three main bodies of theory informed the basis and development of the research; participatory governance, conservation and development approaches, and capacity development. As the analysis progressed, Indigenous literature became more prominent, as did critical theory, a body of theory concerned with emancipation that challenge social structures and the social order, and raise questions of social justice (Keucheyan, 2010).

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1 Here and elsewhere in this thesis ‘freedom’ is used in the sense of Amartya Sen’s work on freedom, see chapter Three.
With regards to terminology, capacity development *per se* is not given a definition, as capacity development is context specific and there is no critical capacity development definition that fits with the approach used in this study. Note that because both capacity building and capacity development have been widely used in the literature, both terms were used interchangeably throughout this thesis. The UNDP (2008:5) differentiates between the two terms as follows:

Capacity development commonly refers to the process of creating and building capacities and their (subsequent) use, management and retention. This process is driven from the inside and starts from existing national capacity assets. Capacity building commonly refers to a process that supports only the initial stages of building or creating capacities and alludes to an assumption that there are no existing capacities to start from. It is therefore less comprehensive than capacity development.

The Organization for Economic Development and Cooperation (OECD) (2006) also recommends the use of ‘capacity development’ rather than the more commonly utilized term ‘capacity building’. They explain that ‘building’ implies starting from a bare or flat surface and adding layers in a controlled, linear fashion based on a “preconceived design” (OECD, 2006:12), and this is not representative of the actual process. Regardless of terminology, it is the philosophy and reasoning behind deciding on the need for a capacity development approach that is critical, as will be discussed.
Other terminology used is not without ‘baggage’, such as environmental governance. For many Indigenous peoples, the notion that humans have control over nature is not acceptable, as is the idea that the fundamental purpose of nature is to serve as ‘resource’ for humans (Berkes, 2012a). In using words around governance and resource management, I am referring to peoples’ relationships with nature and how nature changes though direct or indirect use. The word ‘community’ is used in the sense of place-based community (Armitage, Charles & Berkes, 2017). This thesis does not deal with the struggles with terminology and worldviews, only highlights that these tensions exist.

Terminology was definitely a challenge in the field research, both in translating words from English to Portuguese, and in translating meaning for the local participants. For example, being unaware, I made the mistake in using ‘recursos naturais’ as a direct translation of natural resources, and research participants in Trindade were frustrated by use of terminology that not everyone understood.

The following section will outline more specifically the research purpose and objectives, and then the study area and methods will be described. As this thesis is comprised of a series of three papers, only brief explanations are provided as these matters are covered in each of the papers in further detail. The chapter will then review the theoretical orientation and relevant bodies of literature, and then move to discuss the main contributions to knowledge as well as the delimitations of the research.
1.2 Research Purpose and Objectives

My research formed part of a broader five-year International Development Research Centre (IDRC) study that took place in Paraty, Brazil, called “Community-based resource management and food security in coastal Brazil”. This project was directed by Alpina Begossi, State University of Campinas, in Brazil, and Fikret Berkes, University of Manitoba, in Canada. There were seven communities involved in the larger project. My project focused on the community of Trindade, following the work of other project researchers, particularly Araujo (2014), and Bahia et. al (2013).

The purpose of the project was to investigate the development trajectory of the community of Trindade in relation to environmental governance, and to implement a capacity development initiative in conjunction with community members, based on an assumption of capacity, that supported identified needs and priorities related to environmental governance. The specific research objectives were to:

1) Analyze how recent changes to natural resources governance, including protected areas, has impacted on women, men, people with disabilities, youth and older adults.
2) Identify current and desired community capabilities and priorities related to participatory natural resources governance.
3) Collaborate with local community members to identify capacity gaps related to natural resource management, and cooperate on capacity development initiatives as appropriate.
1.3 Study Area and Methods

The municipality of Paraty is located in the Atlantic forest on the South-eastern coast of Brazil. The population of the Paraty municipality is approximately 37,000 (IBGE, 2011 as cited in Hanazaki et al., 2013). Paraty has become a popular tourist destination, as tourists are attracted to the historic town of Paraty and to the beaches and mountains across the municipality. Trindade attracts tourists year round, and has huge peaks of activity over major holidays, particularly during Carnavale. The main population group of Trindade are Caçiaras, a mixed heritage group of Indigenous People, Portuguese, and Africans. In Brazil, they are legally classified as ‘traditional people’, recognizing their distinct characteristics and way of life.

Over the past fifty years, three significant development shocks have drastically impacted the residents of Trindade, as will be described in greater detail in subsequent chapters. The current process of enforcement of the protected area is the main development shock studied. Figure 2 shows two different perspectives of the layout of PNSB.
Maps by ICMBio

Figure 2: The boundaries of PNSB. Trindade is located in the yellow box at the bottom of the map on the right, number three.

The following map shows in more detail the boundary of PNSB in Trindade.
Figure 3: PNSB Boundary

This research was an interdisciplinary, action research project, using a qualitative research approach. It was participatory, and it was action research, but it was not truly “participatory action research” (Fals Borda, 2001), as the design and focus was largely pre-determined before my entry into the community. The design was flexible and iterative and was adapted to the local context, and participants largely determined the capacity development topics and methods. Fajber & Vernooy (2006) described an iterative approach as part of their overview of capacity development efforts around integrating gender in participatory resource management, and stated that using this ‘learning-by-doing’ approach “significantly increased the quality and rigour of the research methods, data collection, analysis and hence emerging results” (Fajber & Vernooy, 2006: 150). The authors also underscored the value of using participatory
methods both in field research with the communities and in the overall capacity-building program.

The approach was to be as participatory, inclusive, and useful as possible. Research responded to current community issues and quickly focused on following the extremely important participatory governance process that was underway, described in chapter two, and this connected to the capacity development initiative, described in chapter four. Mixed methods of narratives, interviews, focus groups, participant observation and workshops were conducted with a total of 75 participants.

1.4 Theoretical Orientation & Background

In the influential book, *Pedagogy of the Oppressed* (1970), the Brazilian Paulo Freire recognizes that development measures based exclusively on income do not capture meaningful information. As the author states, “in order to determine whether or not a society is developing, one must go beyond criteria based on indices of “per capita” income (which, expressed in statistical form, are misleading) as well as those which concentrate on the study of gross income” (Freire, 2010:162). This early observation is consistent with the philosophy of the capability approach.

The Human Development and Capability Association (HDCA) describes this approach as a “conceptual framework that grounds many multidimensional approaches to poverty and social protection, including the MDGs [Millennium Development Goals], PRSPs [Poverty Reduction Strategy Papers], rights-based development, integrated social policy,
and other specific initiatives” (HDCA Newsletter, 2012:1). Amartya Sen (1985, 1999) is credited for conceptualizing the capability approach, although there are clearly connections to the writings of Freire (1970) as described above. The two key components of this approach are capabilities and functionings. Capabilities are defined as “a person’s freedom to enjoy various functionings – to be or do things that contribute to their well-being” (Alkire & Deneulin, 2009:22). Although standardization has been proposed by some authors, there is no widely agreed upon standard list of capabilities, and they are meant to be context specific. Functionings are defined as “being or doing what people value and have reason to value” (Alkire & Deneulin, 2009:22). The focus of this approach is on process as well as outcomes.

The main goal of the capability approach is to move away from a focus on economic development narrowly defined as income, and to focus on people’s real freedom to be and do what they value. Most of the literature in this field is housed in economics (Frediani, 2010). Frediani (2010) suggests that Sen’s capability approach, with some modifications, could present a radical alternative to current development models that have not had widespread success. The author suggests that the focus should be on capability space and the personal and structural conditions that impact on an individual, and outlines three factors that convert capabilities into functionings (how opportunities become achievements). These are personal, social, and environmental characteristics, known as ‘conversion factors’ (Robeyns, 2003).
Not having a predetermined list of capabilities may also address some of the Western-centric criticisms of development models, as the capabilities are context specific. The literature on the capability approach consistently states that the focus of development programs and research should be on capabilities, not functionings, so this can be the starting point to use the capability approach in these areas. Using the capability approach helps determine how we phrase the questions we ask, and with a focus on capabilities the fundamental question would be to explore if people are free to be or do things that enhance their well-being. Research would be designed around questions like “would this improve quality of life?”, rather than “would this lead to economic growth?” (Alkire & Deneulin, 2009). Some capabilities will need economic input, but others require removal of barriers, and appropriate political policies and practices, cultural and social norms, and other factors. (Robeyns, 2003). Reframing the questions is definitely important for inclusive participatory natural resource governance.

In the area of community-based natural resource management, recent research on resource dependent livelihoods, such as fishing, suggest that poverty measures are indeed complex. For example, Bene & Friend (2011) stated that “poverty in fishing communities often relates to a wide range of socio-institutional factors other than income, including landownership, debt, access to health, education and financial capital, and marginalization from political decision-making” (Bene & Friend, 2011:119). Traditional measures would not capture all of these areas, nor would they provide insight into how different people experience these aspects. Such information has major implications for resource allocation, policies and programs. A focus on freedom and choices across
community members would allow for an understanding of lived experiences, community values, and barriers to participation. The “freedom” focus of the capability approach is about freedom ‘from’, as a negative right, and freedom ‘to’, which includes the need to strengthen support systems. In Frediani’s (2007) study on squatters in Brazil, he argues for a removal of the obstacles that “constrain the dwellers’ ability to emerge from poverty” (Frediani, 2007:140).

The intellectual foundations of the capability approach include the following (Stiglitz et al. 2009:152):

1) A focus on human ends, and on the importance of respecting people’s ability to pursue and realize the goals that he or she values.

2) The rejection of the economic model of individuals acting to maximize their self-interest heedless of relationships and emotions, and recognition of the diversity of human needs and priorities.

3) An emphasis on the complementarities between the various capabilities for the same person, and their dependence on the characteristics of others and the environment where people live.

4) The role played by moral considerations and ethical principles, and its central concern with justice.

A final important point to note is that participation has been a widely used term in development and in research, but often it is meaningless. As Sen (1999) has explained,
people need to be actively involved in planning their future and not be “passive recipients” of programs designed by others. Sen was applying this to development in general, but this issue is also a major concern within participatory natural resource governance. In this field, applying the capability approach to participation when designing programs would lead to questions asking if people are able to meaningfully participate – not just being ‘allowed’ or ‘invited’, but being able to be there, to communicate, and to be heard and taken into account.

Another strength of the capability approach in regards to participation is that the lack of a predetermined capability set means that capabilities must be context specific and that people must participate in the identification of their desired capabilities. This is also important because it has been regularly shown that development and research interventions can cause harm, and as Frediani (2007) cautions in the context of research of squatter settlement dwellers, “imposed processes could destroy the existing capacities possessed by dwellers and aggravate the difficulty encountered by the poor in emerging from their poverty” (Frediani, 2007:138). Done properly, an inclusive and participatory identification of valued capabilities should mitigate this risk as it would provide an understanding of the differences within groups and of the different combinations of personal, social and environmental characteristics acting as conversion factors.

The capability approach is not considered to be a fully developed theory, but is well established as a framework for analyzing human development (Robeyns, 2003). The capability approach thus provided a framework for this comprehensive thesis project that
included participatory governance, conservation and development, and capacity development. The remainder of this section provides an overview of these three areas.

1.4.1 Participatory Governance
There have been major changes in natural resources and environmental management approaches over the years, through colonization and decolonization and widespread shifts to democratic governance. The current literature largely advocates for decentralization of natural resource and environmental governance and recognition of traditional knowledge and community capacities (Agarwal, 2001; Tsing et al., 2005). Despite the large body of literature, natural resources governance remains an incredibly complex field and natural resources and the livelihoods of those who depend on them continue to experience decline and stress. Governing natural resources has been recognized as being about managing complex social and ecological systems; a series of relationships with multiple linkages across vertical and horizontal scales with external drivers of change (Berkes, 2006). Most traditional societies have for centuries developed their own systems to govern and manage shared natural resources (Borrini-Feyerabend et al., 2007). Scholars have also demonstrated that in more recent times traditional community-based methods are not necessarily equipped to deal with quick changes and outside influences and infiltration (Borrini-Feyerabend et al., 2007). Leaning from the changes over the years, and often stemming from crisis (Plummer & Fitzgibbon, 2006), new management systems have emerged or been proposed, studied and evaluated.
Participatory governance is an umbrella that includes community-based natural resource management, and co-management. Co-management basically means bringing together the knowledge and needs of all resource users, rights holders and stakeholders at a local, regional, and national level, to share responsibility and power to manage resources (Berkes, 1994; Castro & Nielsen, 2001; Plummer & Fitzgibbon, 2006). One of the key elements of co-management is also one of the most difficult to achieve – power sharing, and there is disagreement in the literature about how much success has been achieved globally in reaching real co-management arrangements (Pomeroy & Berkes, 1997; Pomeroy et al. 2001; Jentoft et al. 1998; Jentoft, 2007). The cases of success that have been demonstrated have typically taken upwards of ten years to become functional, representative institutions (Berkes, 2009), and there are a wide variety of co-management arrangements.

Borrini-Feyerabend et al. (2007:229) list five principles of good governance. These are: legitimacy and voice; accountability; performance; fairness, and; direction. Under ‘legitimacy and voice’, participation is defined as meaning that “All men and women should have a voice in decision-making, either directly or through legitimate intermediate institutions that represent their intention. Such broad participation is built on freedom of association and speech, as well as capacities to participate constructively” (Borrini-Feyerabend et al., 2007:229). There are, however, risks to advocating participation. At times it is used as an excuse to download work to community level, but not resources or capacity (Marcus & Onjala, 2008). There are also the risks of reinforcing negative elements and power differentials in communities. As explained by Berkes (2006)
“community in community-based resource management is a gloss for a complex phenomenon, and may hide a great deal of complexity. Communities are not always simple; they often show characteristics of a complex system” (Berkes, 2006:4).

To avoid reinforcing power differentials, participation in governance should also be inclusive of all members of society who depend on the resources, including more marginalized members of society (Agarwal, 2001). One of the excluded groups is people with disabilities. The large body of literature on natural resources almost never recognizes or acknowledges the involvement or particular needs of people with disabilities. The absence of disabled people from the natural resources and environmental management literature is not surprising as literature in the field of disability geography demonstrates the lack of expectations around the presence and participation of disabled people (Hansen & Philo, 2007; Kitchin, 1998).

More than one billion people have a disability (World Health Organization/WHO, 2011), defined as “long-term impairment leading to social and economic disadvantages, denial of rights, and limited opportunities to play an equal part in the life of the community” (Department for International Development/DFID 2000:2). Twenty percent of the poorest people in the world have disabilities and nearly eighty percent of people with disabilities live in developing countries (Guy, 2011). Discrimination, distributive injustice and deficient state capacity limit access to livelihoods, health care, education, and shelter for people with disabilities (Baylies, 2002). As most people with disabilities live in the developing world, many of them have resource dependent livelihoods and should
therefore be involved in managing these resources. As resources are managed by communities with particular norms and institutions, it is reasonable to assume that the involvement of disabled people varies by community. As mentioned, community is a term that has many definitions, and is not necessarily automatically inclusive.

Ensuring inclusive participation in governance is not just important from a social justice perspective, but also from a development perspective, as people can learn and develop through their participation in governance. For example, in a study in of two long-standing community resource management committees in fishing villages in Cambodia, Marschke & Sinclair (2009) found that “participants experience both instrumental and communicative learning outcomes that, in part, led to changes in individual behaviour and influenced community sustainability practices” (Marschke & Sinclair, 2009:213). The authors further state that their findings “add further support to the notion that participation in resource management, that is community-based, allows people to learn and that such learning outcomes can lead to concrete actions on the ground that promote sustainable solutions” (Marschke & Sinclair, 2009:215).

The governance of natural resources by the Brazilian Government has been a long and evolving process. There are many different types of arrangements in place, from completely top-down management, to active co-management agreements and empowered community-based management. Table 1 summarizes the ongoing administrative changes within the Brazilian Government and aligns these with the effects on artisanal fishers.
Table 1: Changes in Fisheries administration within the Brazilian Government (based on Kalikoski et al., 2002; Kalikoski & Satterfield, 2004; Vasconcellos et al., 2011).

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1921</td>
<td>the first fishers guilds were created by Brazilian Navy</td>
<td>Fishers had to register to be permitted to fish</td>
</tr>
<tr>
<td>1988</td>
<td>Brazilian Constitution of 1988</td>
<td>Fishers granted rights to establish free associations; Women granted legal right to work in fisheries</td>
</tr>
<tr>
<td></td>
<td>SUDEPE – Federal Sub-Secretary for Fisheries Development, Ministry of Agriculture</td>
<td>The main responsibility of SUDEPE was to encourage the development of industrial fisheries. Women only allowed to harvest shellfish or algae.</td>
</tr>
<tr>
<td></td>
<td>Created in 1962</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Terminated in 1989</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IBAMA – Brazilian Institute of the Environment</td>
<td>Took over responsibilities from SUDEPE Before 1998: Officially included responsibility for artisanal fishers but in practice the focus has been on the environment and law enforcement. After 1998: responsibilities changed to focus on endangered and overexploited species, and on decentralization through co-management and community-based natural resources management.</td>
</tr>
<tr>
<td></td>
<td>Ministry of Environment Created in 1989</td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>A number of management responsibilities were shifted from IBAMA to the Department of Fisheries and Aquaculture (DPA), under the Ministry of Agriculture.</td>
<td>Focus on the development of industrial fisheries.</td>
</tr>
<tr>
<td>2003</td>
<td>Special Secretariat of Aquaculture and Fisheries (SEAP) was created.</td>
<td>The mission of SEAP is “formulating, coordinating and implementing guidelines and policies for the development and fostering of a sustainable national fishing and aquaculture production under an economic, social and environmental perspective” (Kalikoski &amp; Satterfield, 2004: 519).</td>
</tr>
<tr>
<td></td>
<td>Ministry of Fisheries and Aquaculture (MPA)</td>
<td>Responsible for general coordination, and a new law “put an end to the division of responsibilities in the management of fish stocks…making mandatory the joint work of MPA and IBAMA…in the design of rules and the governance for sustainable use of resources” (Vasconcellos et al., 2011:100).</td>
</tr>
<tr>
<td></td>
<td>SEAP became MPA in 2009 (subsequently terminated in 2015).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GERCO Ministry of Environment</td>
<td>Program with the highest authority over coastal zone management. The policies and management plans established at State, Municipal and Regional levels have to be based on the conditions and legal aspects defined by GERCO. GERCO has no mandate over fisheries, as these fall under the Federal Government</td>
</tr>
</tbody>
</table>
As is evident by reviewing Table 1, there has been a great deal of change and uncertainty at the government level, all of which impact on the situation of artisanal fishers. The continuously changing policy environment has positive and negative effects on the ability of local communities and stakeholders to effectively manage the resources (Kalikoski & Satterfield, 2004).

Recent legislative changes related to natural resource management in Brazil present an opportunity for participatory governance. Seixas et al. (2009) examined how the policies of the Brazilian government impacted co-management arrangements, with the goal of ultimately influencing policy to encourage co-management arrangements. The authors found that while a number of policies related to natural resource governance did allow for stakeholder participation in decision-making, in reality there has not yet been a shift of power to allow for this to occur. Where there is evidence of more balanced power-sharing, the authors find that there are still issues with participation by more marginalized groups, including artisanal fishers and “traditional populations that strongly rely on extractivism” (Seixas et al., 2009:6). With the establishment of the National System of Nature Conservation Units (SNUC), protected areas were classified as either no-take conservation units or sustainable-use areas. Both classifications require a certain degree of co-management, although there are not many examples of implementation (Seixas et al., 2009). The policy environment does however provide a window of opportunity to focus capacity development efforts to help communities and government develop agreements for participatory governance and implement these agreements. With regards to inclusive participation, while Brazil has a substantial literature on natural resources
participation by Indigenous groups, the area of the SNUC law of 2000 and on participatory governance seems to be underdeveloped, at least in the literature that is accessible to the international scientific community. For the Paraty area, the literature on participatory governance and the participation of women is very recent.

1.4.2 Conservation and development
Approaches that link conservation and development emerged in the 1980s. They have commonly been called integrated conservation and development projects, as well as community-based conservation projects. The intention of this approach is to connect biodiversity conservation with local community development (Brown et al., 2005). Conservation and development approaches consist of initiatives such as: allowing local people to access resources in protected areas; developing alternative livelihoods such as ecotourism; community conservation, and; partnership in management approaches (Brown, 2003). The drivers behind this linked approach are primarily unsustainable natural resource exploitation and changes to land use (Brown et al., 2005). The approach “emerged in response to the growing recognition that conventional protection approaches, which tend to ignore local needs and calls for equity, are largely inefficient or even counter-productive as pressure from growing rural populations is threatening the viability and integrity of protected areas” (Brown et al., 2005:450). The conservation and development approach has been primarily used in places that are adjacent to protected areas (Brown et al., 2005).
The Millennium Ecosystem Assessment (MA) published an important volume looking at different response options that have been adopted to manage ecosystems. This volume included a chapter on ‘Integrated Responses’ that contains a section on integrated conservation and development (Brown et al., 2005). In this chapter, the authors report that since the early 1990s, conservation and development approaches have received a significant portion of international funds that are earmarked for biodiversity conservation.

The main issue with linking conservation and development approaches has to do with coordinating multiple objectives. While there is debate within the conservation literature about the feasibility of pursuing more than one objective, a number of fields, such as water resources management, routinely deal with multiple objectives and tradeoffs (Berkes, 2007). One very well known global development initiative that exemplifies the use of multiple objectives is the Millennium Development Goals (MDGs). The MDGs are eight goals that each have multiple objectives. These goals link environmental, social and economic objectives (Fisher et al., 2008). All of the goals are considered to be equally important, and all have the same deadline to reach the associated targets. While substantial progress has been made in many areas, the lack of overall progress on sustainable development within the MDGs has been attributed not to “a fundamental problem with the concept”, but to disproportionate emphasis on economic development (Fisher et al., 2008). The same can be said of the conservation and development approach; the issue is not a fundamental problem with the concept, but lies with balancing the multiple objectives.
Linking conservation and development does not have a strong record of success (Brown, 2003). According to Brown (2003), the primary reason for the lack of consistent success of this approach is that in many cases the design of the management institution does not fit the ecosystem. This means that the ‘rules-in-use’ being applied to an area are not consistent with the needs of the local people who use the resources (Brown, 2003). Berkes (2012b) also raises the issue of the lack of fit between the incentives (often cash) offered for conservation and the cultural and social priorities of local people.

The challenges faced by communities stemming from the top-down establishment of protected areas and associated rules are not unique to Paraty. In fact, this conservation approach has traditionally been widely used in Brazil. The Mamiraua Sustainable Development Reserve in Brazil is a good example of shifting from a strict protected area to a conservation and development approach. Gillingham (2001) studied the Mamiraua Sustainable Development Reserve in Amazonas, a conservation and development project in the Amazon. The reserve was established in 1990 as an Ecological Station in order to conserve a specific endemic species. The Ecological Station designation meant that the reserve was a strict conservation zone. It was soon evident that for the reserve to be viable over the long-term, local people would need to participate in management. In 1992, international and national groups provided funding to establish the Mamiraua Project “to develop an approach for the integrated conservation and development of the reserve” (Gillingham, 2001:805), and after significant research efforts the reserve was eventually reclassified as a sustainable development reserve in 1996.
Communities surrounding the reserve live in difficult circumstances and have high infant mortality, low education levels and low life expectancy. In order to support the livelihoods of the affected population, the project aims to “promote sustainable alternative economic activities for local people to offset the opportunity costs of compliance with the rules of resource use, and to strengthen local participation in resource management” (Gillingham, 2001:806). Alternative activities include ecotourism, agroforestry and community-based forestry, beekeeping, handicrafts, and fish processing and marketing. While local people have participated in establishing the use rights for the reserve, there continue to be challenges with acceptance of and compliance to some of the rules. To address the “nature of customary social organization in the area, and its incongruity with imposed units of resource management”, the project needs to continue to work to build “institutional capacity for democratic decision making at the grass-roots level” (Gillingham, 2001:812), and to continue to support the development of alternative livelihoods. In another study in the same reserve, Castello et al. (2009) focused on the management of a specific fish species, the giant Amazon pirarucu, and found that participation by the fishers in management of this species was the ultimate solution, both for economic reasons and for enforcement.

The establishment of Extractive Reserves and Sustainable Development Reserves in Brazil is in fact a conservation and development approach with multiple objectives. Extractive Reserves are defined as Reserves that allow for habitation by people, who are allowed to pursue traditional livelihoods, provided that they are sustainable. The intention underlying Extractive Reserves is that they should be managed by both local people and
the government (Lopes et al., 2011). There are now seventy-two Extractive Reserves in Brazil. These have addressed numerous issues, but many issues remain that are attributed to a lack of consideration for the socio-economic context, and due to lack of capacity of both government and local people (Lopes et al., 2011).

According to Lopes et al. (2011), it is difficult to distinguish between the theory and practice of the two categories of Reserves. One of the differences noted by the authors is that local people must live in the Sustainable Development Reserves to access the resources, but that is not the case for Extractive Reserves. Another difference noted is that the establishment of Sustainable Development reserves is usually at the behest of scientists, whereas Extractive Reserves are usually requested by local groups. The success of both types of reserves is linked to environmental and social factors, such as: size, with bigger sizes being more successful; whether or not they are surrounded by forests; human density inside the reserves; social factors, and; income diversification (Lopes et al., 2011). The authors also highlight the importance of a management plan for the reserves and the need to develop alternative livelihoods. Both types of reserves achieve greater success with more participation from local communities, so “the level of participation of local people in the decision-making process should be increased” (Lopes et al., 2011:439), which may require explicit capacity development.

Specifically looking at fisheries, the usual approach to fisheries management in Brazil has been top-down, and fishing communities are generally not consulted in the management process and their knowledge is discounted (Lopes et al., 2013). In fact, in
many countries, government managers question the knowledge, capacity to organize, and sustainable management ability of fishers (Berkes et al. 2001; Berkes 2015). However, small-scale fishers are often highly motivated to sustainably manage the fishing resources, as their economic alternatives are often limited (Castello et al., 2009:198). Attempts are being made to implement fishing agreements in coastal Brazil. These agreements originated in the Amazon and there is a substantial literature on this from Castro & McGrath (2003) and others.

One of the first attempts to initiate these agreements is taking place in the Paraty area, in Ilha Grande Bay. This is an area with significant resource conflicts, and implementation of the fishing agreements is a challenging process. While the government is in support of the agreements, which are co-management arrangements, the communities are less willing to participate (Araujo, 2014). “The historically over-restrictive conservation measures established by the Brazilian government (forbidding or restricting fisheries around many inhabited islands) may be a reason for local suspicions of fishing agreements” (Lopes et al., 2011:423). There are also issues with the capacity of fishers to participate, as the history of centralized and top-down resource management has impacted many generations of local resource users, and has had a tendency to “suffocate the ability of fishing communities for self-governance” (Berkes et al., 2001:187).

Seixas & Davy (2008) examined several conservation and development projects to examine common elements of what works. The projects were recipients of the 2004 Equator Prize, an initiative that rewards projects that successfully combine conservation
and development objectives. Seixas and Davy (2008:109) found that most of the projects demonstrated the following elements: involvement and commitment of key players (including community); funding; strong leadership; capacity building; partnership with supportive organizations and government, and; economic incentives (including alternative livelihood options).

Looking specifically at capacity building, Seixas and Davy (2008) found that the approach used in most projects were formal and informal training programs. Projects also used a two-way process between governments, NGOs and the private sector on the one hand, and local communities on the other. Meetings, workshops and guided visits were described as good avenues for learning, and investing in youth leaders was also considered to be a means to build capacity. The authors also noted that from 24 finalists for the Equator Prize in 2004, at least 50 percent focused their capacity building initiatives on community organization, with 42 percent building capacity for small-business development and the remaining 29 percent focused on resource management. Many of these projects had multiple partners for capacity building, some as many as twenty. These large numbers can be interpreted as capacity building for multiple needs, but also in terms of the resilience conferred by having backup (“Plan B”) partners for various tasks (Seixas & Berkes, 2010).

In summary, combining conservation and development is a globally well-established approach since the 1980s. Yet, many people all over the world continue to be displaced by the creation and expansion of protected areas and there are major issues remaining
with balancing multiple objectives and management responsibilities. Community-based approaches are at the core of conservation and development, yet “many rural communities are no longer in charge of managing their natural resources, and, importantly, they are not “trusted” by the state bureaucracies to be able to do so. Their inventiveness and autonomy are brushed aside in the name of state rationality, economic development and conservation” (Borrini-Feyerabend et al., 2007; xxix). Finding a balance between multiple objectives that may appear to be in competition is an important consideration for the Paraty area where this project is based, and supporting the capacity for communities to engage in this approach is critical.

1.4.3 Capacity Development
From the early 1990s there has been a major proliferation of articles and books about capacity building (Black, 2003). The lack of a clear definition of capacity development or of an agreed upon approach is well-documented (Black, 2003). The capacity to learn, participate and deal with change often exists in communities, but there may be gaps in capacity when change is rapid and when there are strong external pressures (Borrini-Feyerabend et al., 2007). Capacity development can support the learning process and facilitate adaptation to sustainably accommodate rapid changes and external pressures. Capacity development is a participatory process that may require many partners and a long-term commitment (Berkes, 2007); it is “one of the defining ideas within contemporary international development” (Ubels et al., 2010:1).
Eade (1997) explained that the capacity building approach that is used today was influenced by ideas about participation, empowerment, civil society and social movements. The earlier ideas that underlie current approaches come from Freire and the influence of Liberation Theology (Freire; Gutierrez).

Two inter-weaving strands of thought emerged from Latin America during the 1970s and 1980s, influencing more than a generation of popular organisations, revolutionary movements, political actors, and development NGOs, and they continue to shape the intellectual and moral framework for defining human development and empowerment. They are the conscientisation or awareness-creation approach to adult literacy of the Brazilian educationalist Paulo Freire; and Liberation Theology. (Eade, 1997:10).

There are many different definitions of capacity building and capacity development, and both terms are widely used. Using some humour, Potter & Brough (2004) state that capacity building is often used a euphemism for training, and that “it is as diagnostically useful to say ‘there is a need for capacity building’ as to say ‘the patient is unwell’. However, capacity development has to be more than just training in the technical sense. It needs to include more of a two-way interaction and be grounded in the realities of the needs and priorities of the participants.

Black (2003:117) undertook a critical review of the capacity development literature, and identified the following three themes that cut across different epistemologies:
1) The multi-dimensional focus of capacity building, integrating macro-to micro-level dynamics as a necessary response to the systemic nature of society and change.

2) The interplay between 'soft' (motivational and process) and 'hard' (technical) elements of capacity as having significant bearing on the efficacy of development initiatives.

3) The need to create and strengthen intra- and inter-sectoral partnerships as part of a systemic approach to development.

Black (2003) criticizes the field by stating that there is far too much emphasis on the technical and communicative aspects, and that the foundation of emancipation, stemming largely from Freire, has been lost. Black (2003:117) stresses that while “facilitating the voices of the poor and marginalized” is a well-represented objective, this is not the same as Freire’s representation of emancipation and the need for sweeping structural changes. The critical analysis demonstrates “a real lack of attention being paid to the capacitation of the poor and marginalised to act as free and equal agents in determining the conditions of their lives” (Black, 2003:118).

Smyth (2009) suggests that the focus should be on community organizing, rather than capacity building. Smyth (2009) indicates that what is labeled capacity building is at times just a means for a State “to veil a cost-cutting agenda” (Smyth, 2009:12) that puts too much responsibility on disadvantaged communities and can have a tone of ‘blaming
the victim’ that discounts concerns with social justice and structural inequities. Smyth (2009) cites Brown (2003b) accusing traditional capacity building, or ‘a conservative view of community building’ as she calls it, as ignoring relational aspects. Brown raises some important issues including tension around inclusion and exclusion; “consensus is not only unattainable in diverse communities, but it comes at the considerable expense of silencing some voices and sustaining the status quo (Brown, 2003b:10, as cited in Smyth, 2009:13). Further, Brown (2003b) states that under the auspices of conservative community building there tends to be a “denial of history, cheating social justice – there is acknowledgement of the often-buried reality that not everyone starts from the same place and that the playing field is far from level. Relational community building foregrounds historical oppression and seeks to deal with inequities by asking ‘how do our community building actions maintain or challenge inequalities?’ – for example, by actively challenging hierarchies of ‘racism, homophobia, abelism, classism’ and gender” (Brown, 2003b, p.4, as cited in Smyth, 2009;13-14).

How has capacity development been applied to natural resource governance? Pomeroy & Rivera-Guib (2006) divide capacity development into three levels; individual, organizational and system or enabling environment, that “are nested within each other and there is regular interaction to form a whole” (Pomeroy & Rivera-Guireb, 2006:144). The authors consider individual capacity development as the most important area, and suggest that this should include “both members and non-members of fisher and other co-management organizations, as well as other beneficiaries of the programme” (Pomeroy & Rivera-Guireb, 2006:145).
Jorge (1997) conducted an interesting case study with a community in the Dominican Republic that developed an integrated coastal management plan in the absence of support from the government. A small group of local community members, biologists, sociologists, lawyers, community workers and artists founded an NGO to work with local communities and the government to better manage natural resources with a participatory management system. The NGO was not able to get government involvement, but continued to work with the community to establish a management process. They were able to raise funds from external donors, as well as receive external technical assistance. One of the objectives of the NGO was to use “community organization promoters” with good leadership and communication skills (who were people from larger towns) to build CBOs that would be able to participate in the design and implement elements of the management systems. This was deemed to be an effective approach, but the project leaders had to modify their expectation of what community groups would be able to address. Community members were willing to work to address problems within communities, but there were issues of scale in that community groups were able to make decisions at the local level but not at a regional planning level.

After two and a half years there are only small changes evident with resource-use, but there are indications that communities are more able to be active in management. They have a better understanding of “the relationship between coastal ecosystems, economic growth, and their well-being”, and “there is capacity to act upon that understanding – through their direct involvement, the participants have now experienced the benefits of
organization, coordination, network building, lobbying, and direct action” (Jorge, 1997: 67).

There are other examples in the literature, but there is not an overwhelming amount of clear examples of success. Laverack & Thangphet (2009) undertook a participatory approach as capacity building for ecotourism in two communities in Thailand. Dumaru (2010) reported on a project in Fiji aimed at enhancing the adaptive capacity in communities related to climate change. Crabbe et al. (2009) implemented a capacity development program in Belize to enhance the governance of Marine Protected Areas. Voeten & Ottens (1997) undertook training in Vietnam to enhance small-scale aquaculture and to increase awareness about gender roles and relations. Subramaniam (2003) reported on a large-scale capacity building program for poor women in villages in India. Subramaniam (2003) and Voeten & Ottens (1997) both discussed the importance of consciousness-raising, and Subramaniam (2003) stated that “capacity building initiatives should be viewed not only as facilitating the transfer or development of tangible skills but also as a most likely route to addressing oppression and thereby changing gender relations” (Subramaniam, 2003:206). This provides support for my research design and objectives.

Looking specifically in Brazil, one would expect capacity development to be strongly influenced by Freire, a Brazilian. In the area of natural resources, Pinto da Silva (2004) drew lessons from the establishment of a marine extractive reserve in Arraial do Cabo. The establishment of the reserve was possible under the classification ‘extractive reserve’,
and it was designed to move away from conventional fisheries management that had been largely modelled on North America. While the fishers traditional methods were reasonably sustainable and the creation of the reserve did not require the fishers to change their methods, one of the issues is that depleting fish stocks have created issues with subtractibility. The fishers overall are not actively participating in the governance of the reserve, and the author found that there were major social barriers to collective action and that the traditional institutions in the communities were no longer robust. Pinto da Silva (2004) ultimately described the governance of the Arraial do Cabo reserve as “a form of co-management arrangement in which both sides lack the capacity (funds, training, and experience) to support an effective systems for collaborative resource governance. Greater fisher participation and more support from the government are necessary in order to achieve a more equitable and effective management system” (Pinto da Silva, 2004:427). With all of the external factors impacting on fisheries, the author also cautions against assuming that traditional communities have maintained their collective resource management systems over time.

It appears that overall in Brazil, capacity development with respect to participatory governance of natural resources in general, and coastal resources in particular, are underdeveloped areas that have not been influenced by the work of Freire. Although Brazil has non-governmental organizations (NGOs) in the area of environment, there appears to be a deficiency in NGOs that focus on development. Compared to countries like the Philippines, Bangladesh and Thailand, Brazil’s development NGOs have a low-profile. There are some exceptions, and in the Amazon area there are some high-profile
development organizations, but this can largely be attributed to the struggles of ‘rubber tappers’ of Amazonia (Pinto da Silva, 2004) and to initiatives of the Catholic church working in the area (Gillingham, 2001).

Seixas et al. (2009) described capacity development undertaken in the Sao Francisco River that may provide some guidance for capacity development efforts within Paraty;

Activities such as workshops, courses, and meetings have been carried out in order to promote community empowerment and to develop conditions for governmental decentralization in managing common-pool fisheries resources. As a result, a broader range of individuals from fishing communities are expressing themselves effectively in meetings and participating in constructive discussions; goals and issues of concern are being effectively organized; dialogue with government regulators has been established; relationships with environmental police have been remarkably improved; and, opportunities for women and youth have been developed (Seixas et al., 2009:12).

While it is clear in the literature that capacity development is a development process that has not consistently met expectations or more worryingly used as a form of social control and ongoing oppression, in Brazil there is a window of opportunity, due to new legislation and government policies, to focus on capacity development in the area of participatory governance of natural resources.
1.5 Main Contributions to Knowledge

This thesis comes at a timely moment with the policy environment in Brazil providing space for participation, and with the commitment in Brazil and globally towards speeding-up the establishment of marine protected areas. Thesis finding have relevance to important issues far beyond what is taking place in coastal Brazil. Four cross-cutting themes have been identified that connect to important global issues, and they provide a structure for Chapter Five of the thesis, the Discussion and Conclusion. These four headings represent the contributions of the thesis to broader literature. These themes are: (1) Decolonizing conservation and development approaches, (2) From co-management to co-jurisdiction with Indigenous peoples, (3) The nature and context of “meaningful” participation”, and (4) Marine protected areas as a form of “coastal grabbing”.

As discussed in Chapter Five, the thesis contributes to the literature in two key areas. In the area of the capability approach, there is a gap in that literature in applying this framework to environmental governance, and in community-based research eliciting capability lists from different social groups. Secondly, the use of action research for capacity development has not been discussed in the literature, and the capacity development efforts in this thesis, though not fully decolonized, did not aim to unquestioningly teach people to fit into an imposed structure, but also questioned the structures of Brazil’s coastal and environmental management and protected area policies and supported community members in their struggle to organize and claim their rights.
1.6 Delimitations

The main issue was with my language skills. I did not achieve more than a beginner level of Portuguese, and this limited my interactions with community members. Working closely with a research assistant, Natalia Bahia, allowed me to function and she interpreted for me in the field. I also hired a translator, Jessica Mazzetti, and we worked together to translate all of the transcripts from Portuguese to English.

The second delimitation was with the inclusion of people with disabilities in the research project, and therefore the lack of a strong disability voice in the analysis. The first issue was the lack of people with disabilities living in Trindade. Whether this is because there are not many people actually living there, or because we were not able to find them, is not known. When it was decided to expand the geographical range for inclusion of more disabled people, it became clear that the starting point with the participants was not in the area of participation in natural resource governance. A separate project was designed in-situ and carried out with participants with disabilities, and this will be written about outside of this thesis.

1.7 Organization of the Thesis

This thesis is divided into five chapters. Following this introductory chapter, the following three chapters address the three specific objectives of this thesis research, with some overlap. Chapters Two, Three and Four have been published. Chapter Two is focused on participatory governance and how this played out in Trindade in the research timeframe. As described earlier in this chapter, the capability approach was used as a
theoretical framework. By recognizing the diverse needs of different social groups and the value of all perspectives, capability priorities were established for women, men, older adults and people with disabilities. The impacts of development and conservation policies are different for the four groups, as are the priorities for capabilities. This is presented in chapter Three. The collaborative design and implementation of the capacity development initiative is described in detail in chapter Four. The thesis concludes with a combined discussion and conclusion chapter tying together the findings of chapters Two, Three, and Four.


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Chapter Two- Participation in Protected Area Management Planning in Coastal Brazil

Abstract

Over the past ten years, efforts have been made in the Paraty region of Brazil towards more active state governance of coastal resources through the implementation and enforcement of various types of protected areas. Trindade is one of the communities making efforts to advocate for themselves as the key stakeholders in a negotiation process for a no-take protected area management plan. As is happening across South America, there has been a shift in policy in Brazil towards participatory environmental governance practices. The objective of this paper is to analyze the quality of community participation in a resource governance process, the perceptions of participating and non-participating community members, and the actual influence of community participants on the protected area management plan under review (in 2012/2013). The research was conducted as interdisciplinary action research. Data were collected through a qualitative approach, using mixed methods of narratives, interviews, focus groups, participant observation and workshops. The negotiation process and community participation in this negotiation process was studied through observation of meetings. Analysis of the negotiation process revealed the importance that community participants place on their rights as Caiçaras, and four further key themes emerged; communication disconnect, opportunity and capacity to participate, representation and decision-making, and conflict.

Meaningful participation in natural resources management has not yet been achieved in the process reviewed. The process described is the initial phase of a long-term relationship between community members and government authorities, and changes need to be made so that the desired outcomes for natural resources management are more likely to be achieved.

**Keywords:** Brazil; Caiçaras; Environmental Governance; Natural Resources Management; Participation; Protected Areas

2.1 Introduction

Participation in development has been both widely supported and harshly criticized. On the positive side, participation discourse offers more “voice and choice” to the poor in development (Cornwall, 2006), and participatory development is based on “involving ‘beneficiaries’, or more generally, ‘local people’, in development processes” (Eversole, 2003:781). From a critical perspective, participation has often been oversimplified, decontextualized, exclusive and depoliticized. Even a thoughtfully designed program focused on a marginalized group can still exclude people or allow for elite capture (Sesan, 2014).

In the natural resources management literature, there has also been a great deal of focus on participation (Morinville & Harris, 2014; Coelho & Favareto, 2008), such as in the area of community-based natural resource management and in the discourse on protected area management. Although protected area management is still predominately executed
through top-down approaches, Murray & King (2012:385) explain that there has been a shift, and that the approach from the 1980s onwards can be characterized by what some call a 'new approach', based on a changing dialogue that includes concepts of "plurality, increased community participation, decentralization, and a broadening of the perceived objectives for protected areas".

In Brazil there has been a shift in terms of policy, to a certain extent. Like many countries, Brazil does not have a strong history of capable governmental natural resources management, and generally has favoured a top-down approach often more linked to political reasons than conservation (Adams, 2003). The approach was strongly influenced by the 'fortress model' of conservation that has roots in the United States (Dean 1997; Diegues, 1998; Adams, 2003, Rylands & Brandon, 2005). Brazil is signatory to the Convention on Biological Diversity and considers protected areas³, known as Conservation Units, “the territorial space and its environmental resources…with conservation objectives and defined limits, under special management regime” (Brazil, 2000). Conservation Units may be of sustainable-use, such as an extractive reserve, or no–take strictly protected areas such as parks and ecological stations. In 2000, a law called the National System of Conservation Units (SNUC) was issued. Under this system, management structures and policies dictate that the process of developing or modifying environmental management plans must be participatory (Silva, 2005; Seixas et al. 2009), but in most cases only to the level of being consultative, and not deliberative⁴.

³The term 'Protected Areas' is used in Brazil to include Conservation Units, Indigenous land, and Marrons lands (Quilombolas).
⁴Deliberative participation takes place only within Extractive Reserves and Sustainable Development Reserves. The terms 'deliberative' and 'consultative' are used as per the legal definition under SNUC.
Brazil is under significant international pressure to maximize conservation efforts in the Atlantic Forest. The Atlantic Forest Biosphere Reserve was created in 1991 (Adams et al., 2013), and it is one of the largest Reserves ever recognized by UNESCO (Rylands & Brandon, 2005). In 2010, the International Union for the Conservation of Nature (IUCN) a globally influential member organization, opened a new office in Brasilia, and its plans involved an emphasis on working closely with ICMBio\(^5\), the Federal Agency responsible for conservation of biodiversity (IUCN, 2010). In 2012, at the 'World Conservation Congress', IUCN passed a resolution to include the Atlantic Forest as a "priority biome for conservation" and requested the inclusion of programs with "specific and measurable initiatives to influence public policies to better protect the Atlantic Forest" (IUCN, 2012).

In November 2014 at the IUCN World Parks Congress, Brazil pledged to protect five percent of its marine waters (IISD, 2014).

The Paraty region of Brazil is located in the Atlantic Forest biome. Over the past ten years, efforts have been made in the Paraty region towards more active state governance of coastal resources through the implementation and enforcement of various types of protected areas. Trindade is one of the communities making efforts to advocate for themselves as the key stakeholders in a negotiation process for a no-take protected area management plan. For more than 200 years, the community of Trindade self-governed their small-scale resource use for coastal fishing, agriculture, forestry, and shellfish harvesting. The combination of large amounts of tourists and associated revenue in an area with Atlantic Forest remnants makes Trindade an important area of interest for

\(^5\) Instituto Chico Mendes de Conservação da Biodiversidade (Chico Mendes Institute for Biodiversity Conservation), a branch of the Ministry of Environment.
conservation. With the enforcement of the protected area on the community land and coastal waters, Trindade may largely become a gateway community to the protected area, and the long-term outcomes of these changes are unknown.

The objective of this paper is to analyze the quality of community participation in a resource governance process, the perceptions of participating and non-participating community members, and the actual influence of community participants on the protected area management plan under review (in 2012/2013). There is a gap in the literature related to evaluating participation in natural resource management (Clarke, 2008), and evaluating participation in a negotiation process is also an area that needs exploration. In the experience that will be described in this paper, the policy regarding participation has not necessarily been fully operationalized. Although there were indeed some efforts to allow for community member participation, numerous issues remain with the process. In the absence of an enabling process, people will have to ask themselves if participation is really worth their time (Trimble et al., 2014).

The next section will consider the literature on participation in development and in the resource management literature. We will then describe the community and the process in question, and then present findings related to the management plan negotiation process as well as the key themes that emerged related to participation. ICMBio is the Federal Authority responsible for governance of the protected area discussed in this paper. The government officials involved in the specific management process are staff of the Serra da Bocaina National Park (PNSB), and will hereinafter be referred to as PNSB.
Community members with official roles in the negotiation process as members of the Park Management Council will be referred to as Councillors.

2.2 Participation in Development and Natural Resources Management

A common theme in development and natural resources management literature is that making processes, programs, and management arrangements more participatory is valued, but there are many concerns related to the emphasis on participation. Much of the development literature on participation is focused on techniques of participation (Cleaver, 1999). Hickey & Mohan (2005:11) argue that many of the problems are due to participation being dominated by a focus on “development interventions and experts” that “obscures an analysis of what makes participation difficult for marginal groups in the first place”.

There are a number of dichotomies apparent in the literature on participation – top-down/bottom-up; insider/outsider perspectives (Eversole, 2003); participation as a means/ends, or as a tool/process (Cleaver, 1999); instrumental/empowering (Cleaver, 1999); empowering/colonial, active/passive, objects/agents. Participatory development is generally framed as emerging due to the ineffectiveness and failings of ‘top-down development’, and Robert Chambers (1983) and the Participatory Rural Appraisal approach are often cited as a catalyst for this emergence (Cooke & Kothari, 2001; Hickey & Mohan, 2005). Participation in development was mainstream by the mid 1980s, and then in the 1990s there was a “growing backlash against the ways in which participation managed to ‘tyrannize’ development debates without sufficient evidence that
participatory approaches were living up to the promise of empowerment and transformative development for marginal peoples” (Hickey & Mohan, 2005:3). The involvement of ‘local’ people was seen as an alternative to “donor-led and outsider-led development” and individuals and organizations quickly adopted this approach and philosophy (Cooke & Kothari, 2001:5). Like other popular theories or concepts, there are many different approaches to participation and participatory development, and numerous definitions. Regardless of the definition used, power is considered by many to be the fundamental issue (Mohan, 2002), and "participation is conflictual whereby the less powerful must struggle for increased control over their lives” (Mohan, 2002:51). Table 2 summarizes a number of criticisms of the participatory approach in the development literature. They address either the instrumental or methodological issues, and the politics of participation.

Table 2: Criticisms of participation in the development literature

<table>
<thead>
<tr>
<th>Criticism</th>
<th>Description</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elite capture</td>
<td>Local elites can capture more power, influence development decisions, and/or enhance their control over services and resources. This also includes organizations.</td>
<td>Costa et al., 1997; Mohan, 2002; Sesan, 2014</td>
</tr>
<tr>
<td>Power</td>
<td>Lack of understanding about power relationships; failure to treat power as a central issue.</td>
<td>Hickey &amp; Mohan, 2005</td>
</tr>
<tr>
<td>Co-optation</td>
<td>Can occur from above or below. From above, people may be coerced or only nominally participating for various reasons. From below, people can refuse to participate unless some demands are met.</td>
<td>White, 1996; Cooke &amp; Kothari 2001; Mutamba 2004</td>
</tr>
<tr>
<td>Depoliticised</td>
<td>Give people a role to participate, rather than change the existing system. Narrow focus on the technical aspects of participation.</td>
<td>White, 1996; Cooke &amp; Kothari, 2001</td>
</tr>
<tr>
<td>Localism</td>
<td>Focus is on the local situation, neglecting the broader institutions and forces causing injustice and oppression.</td>
<td>Hickey &amp; Mohan, 2005; Mohan &amp; Stokke, 2000</td>
</tr>
<tr>
<td>Downloading</td>
<td>Increasing burden on individuals and</td>
<td>White, 1996; Marcus &amp;</td>
</tr>
<tr>
<td>without resourcing</td>
<td>communities; cost cutting and blaming communities.</td>
<td>Onjala, 2008</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Lack of rigour</td>
<td>Dearth of evidence that participatory approaches meet claims made about their potential.</td>
<td>Cleaver, 1999</td>
</tr>
<tr>
<td>Assumption of heterogeneity</td>
<td>Underestimates complexity of communities, and discounts cultural differences.</td>
<td>Costa et al. 1997; Eversole 2003; Reddel &amp; Woolcock, 2004</td>
</tr>
</tbody>
</table>

The environmental literature has raised many of the same issues about participation that are found in the development literature. The ‘ladder of participation’ developed by Arnstein (1969) and adapted to developing country contexts by Choguill (1996) was also adapted to be specifically used in community-based natural resource management by Sen & Nielsen (1996) & Berkes et al. (2001), for example. These figures and other classifications that have been developed imply that the goal for better development and better resource management involves a move upwards, to levels with higher levels of participation (Ross et al., 2002). While this may be the case, moving up the ladder is not simply about higher levels of participation; type of participation and representation are also important factors, among others.

The concepts of participation, empowerment and decentralization were at the heart of the shift to community-based natural resource management that began in the 1970s. It was seen as a means to return stewardship over natural resources to local communities (Dressler et al., 2010). The 1990s saw a move towards a co-management approach, attributed to ongoing challenges with resource management and to cutbacks in government funding and a move to decentralization (Plummer & Fitzgibbon, 2004). Some natural resource management programs “recognise that unless people are ‘brought in’ to the programme, they may actively sabotage it, by cutting trees or embankments,
killing animals in nature reserves, and so on” (White, 1996:14). This is a very particular way of looking at participation, and begs the question, whose interests are really at stake? Participatory approaches in natural resource management are assumed to be necessary for achieving sustainability goals (Mutamba, 2004), as governmental agencies are generally considered incapable of managing sustainable practices (Bene & Neiland, 2006).

Following White (1996), we should therefore ask the question, sustainability of what and for whom? For example, many of the global struggles faced by Indigenous peoples have to do with control over land, territory and natural resources (Tauli-Corpuz, 2008). The UNDRIP\(^6\) recognizes Indigenous rights to control these resources, and also enshrined cultural rights and the right to development. According to Tauli-Corpuz (2008:32), “Integral to the right to development is the right to participation…this is why we fought very hard to ensure that our right to free, prior and informed consent is recognized in the Declaration”. This is one of the reasons why it is important for natural resource management scholars to be involved in the discussion about participation, as resource tenure is an important issue that is linked to participation (Ross et al., 2002).

2.3 The Trindade Context

In the coastal municipality of Paraty, government agencies are undertaking initiatives to enforce new rules or existing rules that have been dormant for many years, and to negotiate or renegotiate management plans with various communities. The Serra da Bocaina National Park (PNSB) falls under the authority of ICMBio. Encompassing five

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\(^6\) The United Nations Declaration on the Rights of Indigenous Peoples.
municipalities, it has existed on paper since 1971 (Dean, 1997), but enforcement actions by PNSB only began in earnest in 2008.

Trindade is one of a number of Caiçara communities in Paraty. Situated on the Atlantic coast at the boundary of the states of Rio de Janeiro and São Paulo and with beautiful beaches, it has seen enormous tourism growth. The paving of the community access road in 2000 allowed for ease of access to land-locked residents of the enormous city of São Paulo and the nearby city of Rio de Janeiro, among other places. Trindade is in the Atlantic Rainforest region – one of the most biologically diverse and one of the most threatened biodiversity hotspots in the world. Recent estimates indicated that somewhere in the range of 11.4-16% of this forest remains (Ribeiro et al., 2009). Deforestation has historically been linked to the "economic exploitation of different commodities" (Metzger, 2009:1138), such as the Pau-Brasil tree, sugar cane, pasturelands, coffee, urban area growth, and Eucalyptus tree plantations (Dean, 1997). Traditional livelihood activities include fishing and shifting agriculture as key activities, but the growth of tourism has caused this to change with many families now also having tourism-based businesses as an important livelihood activity (Hanazaki et al., 2013). Culturally many Trindadeiros are proud of their identity as Caiçara people and traditional livelihood activities, particularly fishing, are an important part of this identity.

As mentioned in the introduction, there is increasing space for public participation due to the current policy environment in Brazil. Current policy in Brazil dictates that the process

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7 Caiçaras are a mixed heritage group of Indigenous People, Portuguese, and Africans. In Brazil, they are legally classified as ‘traditional people’, recognizing their distinct characteristics and way of life.
8 Residents of Trindade
9 I am using ‘identity’ to refer to individuals and the word ‘culture’ to refer to the collective or the group.
of developing or modifying environmental management plans must be participatory. But as is occurring in most cases, the participation in Trindade is only to the level of being consultative, not deliberative. A consultation process with PNSB regarding the revision of the management plan relevant to the community of Trindade occurred from mid-2012 to late 2013. The previous PNSB Management Plan was developed by consultants and approved in 2002 by the protected area manager. It was very detailed and included aspects such as a description of the flora and fauna and geographical characteristics of the area, and it included all six municipalities located in the PNSB. This version of the plan was never fully enforced. In 2008/2009, staff of ICMBio Brasilia worked on a version of the management plan specific to the Trindade area. This version of the plan did not provide detailed information about the current state of the natural environment. Subsequently, PNSB staff reworked this version of the plan and it was this version that was used for the revision process with the community.

The revision was initiated to follow the more recent policies under the National System of Conservation Units (SNUC) regulations that were brought into effect in 2000. The management plan includes issues of critical importance to multiple stakeholders in the community and it includes various types of natural resources. The negotiation concerned the loss of community livelihoods, with impacts on cultural activities, fishing, local businesses (restaurants, tourist boat tours, parking lots), control of and access to beaches and the community cemetery, among others. Two of the main beaches of the community fall within the boundary of the protected area, Meio beach and Cachadaço beach. The source of water to many community households is in Cachadaço, and the adjacent marine
Bay area is one of the main fishing location for the community. Figure 1 shows the protected area boundary in relation to the community of Trindade. The cross-hatched section of the map shows the community use area including the town site. The area shown is not an exact representation of historic and current use, but indicates the primary space used during the research period that is discussed in this paper. The town site itself is largely outside of the protected area boundary.

Figure 4: Map showing Parque Nacional boundary (Trindade indicated by the darker shaded area)

From the early 1970s to the early 1980s, Trindadeiros lived through a forceful attempt by
a commercial development company to acquire land and remove the local community (Lhote, 1982; Plante & Breton, 2005; Conti & Antunes, 2012). The experience of violent conflict influenced the structure and identity of current day Trindade and Trindadeiros, and based on data from interviews and researcher observations, the current experiences with PNSB has brought back many memories and fears from this time and has to a certain extent shaped the community response. A division in the community exists: those who accept the protected area and choose to negotiate with its authorities, versus those who reject the protected area and strive to keep PNSB entirely out of the community. Those who fall on either side of this division are also many of the same people who have been in antagonistic relationships since the settlement of the land-based conflict described.

2.4 Study Methods

The research\textsuperscript{10} was conducted as interdisciplinary action research, designed to be responsive to what was really happening in the community, around issues that were important to people. The research brought together action and reflection, hoping to help find solutions and improve the wellbeing of people and their communities (Reason & Bradbury, 2008). Data were collected through a qualitative approach, using mixed methods of narratives, interviews, focus groups, participant observation and workshops. The negotiation process and community participation in this negotiation process was studied through observation of eleven meetings involving PNSB, Trindade

\textsuperscript{10} This research is part of a PhD thesis for the first author, and formed part of a broader five-year IDRC/SSHRC funded study in Paraty, Brazil, called “Community-based resource management and food security in coastal Brazil”, that took place from 2009-2014.
representatives on the PNSB Consultative Council, and other key community leaders and members. In addition, interviews, focus groups, and small group meetings directly and indirectly exploring participation were carried out with 63 people.

Research participants were selected based on various criteria. We intentionally sought to interview people from different social groups; women, men, people with disabilities, seniors and youth. Research participants were selected based on our knowledge and relationships, and also through a snowball sampling method. We conducted interviews with people who were, and who were not, involved in the negotiation process with PNSB and at community level. As will be further discussed in the following section on findings, only 13 research participants attended at least one negotiation meeting at the level of community-PNSB. A total of 35-40 of the 63 people involved in this research participated through the community-based organizations. Research participants not involved in the negotiation process (some 20-25) were randomly selected on the basis of availability and willingness, to represent the different social groups as much as possible. Trust of researchers was at times an issue, partially attributed to the history of conflict related to land-appropriation by outsiders and the difficulty that some community members had with understanding the role of researchers in this process and the relationships with PNSB. As one of the authors (NB) of this paper lived in Trindade for an extended period, this allowed us to find many non-participants and include them in the research. Table 3 provides a breakdown of research participants.
At the conclusion of the negotiation process, semi-structured interviews were conducted with official community representatives to capture their reflections on the process and outcomes of their participation. Analysis of findings were disseminated through two meetings in Trindade, one open to the whole community and one specifically with a community-based organization that had significant involvement in the process. Information was shared through different visual presentations and through discussion. As we encountered throughout the research cycle, the meeting with the community organization was well attended, but the open community meeting did not draw many participants.

2.5 Findings

2.5.1 The Process

How did the PNSB go from being a 'paper park' to an actual park in Trindade, and how was the consultation process initiated? In 2008, PNSB began actions in earnest to enforce the rules of the protected area. Initial actions were to embargo the community camping and the sewer treatment system located near Praia do Meio and to carry out surveillance operations during high tourist season and holidays. In 2011, the Brazilian government
launched a program called “Parques da Copa” (World Cup Parks) Project. The goal of the project was to invest in tourist infrastructure in selected parks close to major cities hosting the soccer games (Bahia et al., 2013). The federal government hoped to develop high-end tourism infrastructure that would encourage tourists attending the World Cup 2014 to extend their stay in Brazil. In 2012, PNSB was chosen to participate in this project. As a result, PNSB accelerated certain management actions, such as revising the management plan, in order to meet the project requirements and receive the associated funding. In 2012, PNSB closed a community parking lot and forcefully demolished nine small locally built and owned restaurants on Meio beach. Community members responded to these actions with resistance and protests on the access road to Trindade, in the Paraty municipality, and at the People’s Summit at Rio+20.

There were four community organizations in Trindade when the negotiations began: the Community Residents Association (AMOT); the Association of Small-scale Fishermen and Boatmen of Trindade (ABAT), Cachadaço-Bocaina Mar (an NGO advocating for one of the community beaches now in the protected area) and the Surfers Association of Trindade (AST). PNSB officially allocated Councillor positions on the Park Consultative Council to one representative from AMOT; a representative of ABAT; and a representative of Cachadaço-Bocaina Mar. The representatives were not all present in all the meetings and some roles and people changed along the course of the process, but these three organizations were actively engaged from beginning to end and were charged with representing the entire community of Trindade. The AST was not included in the Consultative Council, although one of the AMOT representatives was also a key member.
of the AST. Meetings were also attended by other Trindade community members and by staff of Paraty city hall. Although not in the scope of this paper, it is important to note that throughout the research period, ABAT was involved in a parallel negotiation with PNSB, lobbying to obtain a license to continue small-scale tourist boat operations and to continue fishing.

Although Councillors were formally delegated to the Park Consultative Council, through our observations at eleven meetings concerning the Trindade case, it was evident that this was not strictly followed. There were different people at the table over the course of the process including people who were not officially in a role of representation of the community. The negotiation process was consultative and not deliberative, which could explain flexibility of who could negotiate on the part of the community. For example, for nine of the eleven meetings we attended, a Trindade resident, not native to Trindade, participated in the negotiations. Using her experience as a lawyer, she demonstrated great skill in negotiating specificities of the language used in the document, and tended to dominate the meetings.

Most of the meetings were held in the PNSB office in Paraty, approximately a 30-minute trip by road. There is a bus that runs regularly from Trindade to Paraty, but the PNSB office is outside of the city centre so participants either had to come by car or take the bus to Paraty city centre and then take a taxi or walk for about another 30 minutes. Three key PNSB staff members were involved in the negotiation process: one woman and two men,
with occasional involvement of other staff members. All three staff were Brazilians from other parts of Brazil; none were native to the Paraty area or were Caiçara.

The closure of the parking lots and the demolition of the restaurants was a flashpoint for division within the community, along family and historic conflict lines. The struggle for control and across different interests within the community is ongoing and conflictual. The community groups are polarized and embark on different strategies in their interactions with PNSB. For example, as part of the resolution to the land-appropriation conflict previously mentioned, Meio Beach was designated as shared community land, but when tourism started increasing a number of residents built privately owned restaurants and a large parking lot. When PNSB closed the parking lot and demolished the restaurants, some community members protested. Other community members did not protest however, believing the private restaurants and parking lots had been wrongly built on shared community land. Some of those community members who lost their businesses resented the lack of support from others within the community (this is a simplification of a complex situation). These polarized opinions led to less participation in AMOT, as there was disagreement about the response to these demolitions.

The community division continued throughout the negotiations with PNSB. A group of community members continued to object to PNSB and wanted to expel them from the community. An active protest was staged on November 14, 2013, preventing a meeting from taking place on one of the few occasions PNSB attempted to hold a meeting in the community. This was the same day that PNSB installed a chain across the road to Meio
beach and erected signs depicting the boundary and the rules of the protected area. These actions angered many community members. A number of the protestors had recently formed a new community association focusing on the rights of Traditional People. This organization did not participate in the negotiation process, and the President did not agree to an interview with the research team.

While a quick glance at the community associations involved in the negotiations gives an appearance of fairly comprehensive representation, a more thorough review reveals that in reality, the three associations did not necessarily have significant cross-community involvement, nor the capacity to actually represent their members. One community member explained,

"...I think the councillors didn't place themselves with the same view of the community. The community did not participate effectively in this process. The community was not heard. The contribution was more the personal opinion of each councillor then of the community as a whole. The councillors were elected without community participation." (community member)

It is important to also note that no efforts were made to include the voices of groups who may need more support to attend and participate in meetings, such as people with disabilities, youth and seniors. Furthermore, those who did participate did not receive any assistance from PNSB for transportation costs, nor any consideration for time missed from livelihood activities or family responsibilities, meaning that participants had to have
a level of personal means to be able to participate. Comments by a couple of research participants capture these issues;

"I've never had to travel so much and so far to go to meetings, this way I don't have time to fish". (councillor)

"There weren't people available, it hurts in the pocket of who wanted to participate. Not everybody has a car and can't miss work to go to the meetings". (councillor)

Key outcomes of the negotiation process, based on the issues that community councillors and participants frequently raised in the meetings, are listed in Table 4. This summary is based on the version of the management plan document sent by the Manager of PNSB to the ICMBio headquarters in the country’s capital, Brasilia, for final approval. After all this period of negotiation there is no guarantee the claims of community representatives will be accepted in the final version of the management plan. At the time of writing, though more than one year has passed since the negotiations ended and PNSB has received some feedback from Brasilia, there has been no communication back to the Consultative Council members or to the community.
### Table 4: Outcome of negotiation

<table>
<thead>
<tr>
<th>Negotiation Topics</th>
<th>Initial Rules in the Management Plan being Negotiated</th>
<th>Modified through Negotiation</th>
<th>Requested by Councillors but not accepted by PNSB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry tickets to PNSB</td>
<td>Every person must buy an entry ticket</td>
<td>Residents and immediate relative of resident exempted</td>
<td>Revenue sharing; Guests</td>
</tr>
<tr>
<td>PNSB Opening Hours</td>
<td>Fixed schedule applies to everyone</td>
<td>Residents allowed to apply for authorization to enter PNSB outside of opening hours for cultural or religious events</td>
<td>Open Access</td>
</tr>
<tr>
<td>Use of existing community cemetery within PNSB</td>
<td>No further use of cemetery</td>
<td>Allowed to continue to use</td>
<td>Enlargement</td>
</tr>
<tr>
<td>Rules around hiring labour</td>
<td>Nothing stated</td>
<td>Encouragement to hire local labour and partner with local institutions</td>
<td>-</td>
</tr>
<tr>
<td>Potential of future development of commerce/services</td>
<td>Nothing stated</td>
<td>Not decided; Community should be consulted</td>
<td>Participation in decision-making</td>
</tr>
<tr>
<td>Parking within PNSB</td>
<td>No parking lots</td>
<td>-</td>
<td>Location for visitor parking</td>
</tr>
<tr>
<td>Ability of small-boats to enter Natural Pools</td>
<td>Not allowed</td>
<td>In emergencies or with prior negotiation</td>
<td>Open Access</td>
</tr>
</tbody>
</table>

The main theme that emerged in our analysis of the negotiation process was that the majority of the Councillors and participants consistently argued that the rights of community members as Caiçara, as Traditional People, should be respected and valued. PNSB representatives consistently refused to make this a part of the management plan or part of the negotiations.
2.5.2 Thematic Areas

Through our analysis, we identified four further key themes related to participation in this process. We have separated them into four thematic areas, recognizing that there is overlap among them: (i) communication disconnect, which is about communication between the community and the government, and within the community, (ii) opportunity and capacity to participate, involving both participation mechanisms and the structure of the process, (iii) representation and decision making, given that the process was consultative and community members held no power to influence outcome, (iv) conflict, both internal and external. These are presented in the following table, with quotes and a brief explanation.
<table>
<thead>
<tr>
<th>Themes</th>
<th>Quotes from community members</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>&quot;... Most people who live here are Caiçaras...And you see such a well preserved place like it is here, and the communities have always lived here, without studying, without any knowledge about cleaning the trash, all these things, and the community is preserved. Then someone from out of here comes and says, 'You have to get out of here, because this area has to be conserved.' I think there is an imposition...&quot;</td>
<td>The Caiçaras feel that their stewardship of their lands and waters is not appreciated. PNSB offered no positive encouragement to the community for their conservation and management efforts, nor did they provide any information about the overall loss of Atlantic Forest biome, which is the driver behind the enforced conservation measures. According to some participants, the selection of Councillors was not done in a community-wide or participatory process. Once the Councillors were appointed, there was no communication about the role of the Councillors or their scope of responsibilities and influence in the negotiation process. PNSB left it entirely up to the Councillors to inform community members about any meeting plan. There was no agenda set or circulated; minutes were often quite delayed and did not tend to accurately capture the discussions that took place.</td>
</tr>
<tr>
<td>ii</td>
<td>&quot;But, after a long break between meetings, scheduling and cancelling them, the process got lost. And at the end, the people from the Park rushed and made things happen. It wasn't only their fault, there was lack of organization from the community too.&quot; &quot;...The Park gave the community opportunity to participate in the 'monitoring' of the management plan; if people didn't go it's because they didn't want to.&quot;</td>
<td>The capacity to participate goes beyond merely having the opportunity, and has to do with people's abilities as well. Some community members felt that on the one hand, PNSB assumed that the community had no capacity to govern or act as meaningful partners. Yet on the other hand, the legislated process required communities to have capacity to organize, participate, and meaningfully represent themselves. Diverse reasons for not participating included: sense of personal inability; assumption that other people represent them; fear of PNSB; dislike of meetings that are often disorganized and with lots of talking and no results; time required; lack of knowledge of the process; and that only the powerful have influence.</td>
</tr>
<tr>
<td>iii</td>
<td>&quot;It's complicated. If we hadn't gone there to participate in the...&quot;</td>
<td>There was no support provided to the community for structured representation. There was definitely a gap in representation, with many not...&quot;</td>
</tr>
</tbody>
</table>
negotiation it would have been worse. I'm not satisfied, although we could get most that we could."... "ABAT... has helped a lot, otherwise there wouldn't be any negotiating, it would be harder. When you have an organized group, you have a voice in the council." feeling represented. However, the experience with ABAT demonstrated that representation was an achievable goal. ABAT became very adept at meaningfully representing their members, which included preparing for a meeting, participation at the meeting, and dissemination. Overall this process did not allow for, or actively seek, inclusive representation of youth, elderly, or disabled people.

| iv | "When the community representatives are not aligned at the meeting, when they show different interests, the community loses power"... "There are people in the community who are capable of discussing and there is another group who won't let the meeting happen. With that, [Name of PNSB Manager] raises his hands to the sky and takes the meeting far away..." The enforcement of the protected area and the long negotiation process has both united community members and caused conflict and division. Trindade is a small community and conflicts between community members can have significant impacts. The ongoing lack of knowledge about the protected area plans and negotiation process feed into the conflict as it feeds into fear and rumours. People do not have shared knowledge to explain why PNSB is so concerned with conservation in Trindade, or about the reasons why different groups are negotiating while other groups refuse to negotiate with PNSB. Conflict is also occurring due to perceived inconsistencies in the enforcement measures. |
2.6 Discussion

The need for effective public participation in resource management is widely accepted, and countries across South America are following a similar trajectory (Premauer, 2013; Trimble & Berkes, 2015). However, there is a lack of shared understanding about what this requires (Clarke, 2008), and many challenges remain in implementing participatory processes. This paper describes and evaluates the implementation of the recent SNUC policy related to participation in protected area management in Brazil by analyzing the negotiation process between PNSB and the community of Trindade. According to policy, protected area management plan development/revision is open to public attendance at official meetings, and is participatory, at least to the level of being consultative. The actualization of the SNUC policy in this case only allowed for a small group of people to participate in a process that had a major impact on the entire community, and did not lead to meaningful representation.

Given the huge amount of resources dedicated to this process and the challenges, as described throughout this paper, the question that needs to be asked is: Was it worth it? From the perspective of the community Councillors who were involved for the long process, the answer is yes, because they recognize that it would have been worse if they had not participated. In the community of Trindade in general the answer is mixed. There is a vocal group who do not recognize the authority of PNSB in Trindade and refused to participate, but other community members participated to varying degrees and supported the participation of the Councillors.
From the perspective of the researchers, we also recognize that yes, it was ‘worth it’, because we recognize that participation in the flawed process is the best option at this point. This 'yes' comes with qualifications, as many aspects of the process need improvement. The purpose of this paper is not to make comprehensive recommendations; these have been shared through discussion forums and other means in Brazil (for example, a Forum was held in in May 2014 bringing together community members, government officials, academics, CBOs and NGOs). To further the discussion in the literature in the area of participatory processes and evaluation, we see value in bringing forward three key changes that should be made to the front-end of the process.

First, we suggest not approaching a protected area with a pre-determined set of rules. In the Trindade case, imposing a type of protected area with a predetermined package of rules was detrimental to the process and may not lead to positive long-term outcomes. Having the rules of the protected area provided by the external consultants who designed the management plan limited the modifications that could be made to the plan, and meant that the rules were not grounded in the realities of the community nor based on the actual state of the natural resources in question. Furthermore, as Sanches (2001) argued based on research with another Caiçara community living in the Atlantic Rain Forest; "policies creating protected areas without the participation of local populations have generated conflicts and further obstacles for the management of these areas, causing detrimental effects to conservation efforts" (Sanches, 2001:62), and this has indeed been the case in Trindade. De Castro et. al (2006) also conducted research in the Atlantic Forest of Brazil and put forward the argument that success of conservation units is linked to participatory
management strategies. A new approach with a long-term commitment to develop a shared vision and plan based on the actual context would certainly lead to better outcomes.

The second major change that could have an important impact would be to focus at the outset on developing relationships, and one way could be through reciprocal education and knowledge sharing. Appropriate front-end preparation would have made for a smoother process and reduced stress on the community. This is the beginning of a long-term relationship, without an end-date, and the initial phases of engagement set the tone for the long-term relationship (Chuenpagdee & Jentoft, 2007). Our experience as researchers in Trindade helped us understand that the community needs the opportunity to learn about the conservation issues behind the implementation of the protected area. At the same time, the government officials need to be open to learning about the community-held knowledge, as "Caiçara communities can be of great importance to Atlantic Forest conservation, due to their knowledge about nature, acquired through generations" (Hanazaki et. al, 2000:597). Knowledge sharing and issues around reciprocal respect of knowledge has been raised by many authors (Bawa et al., 2004, Reid et al., 2006; Berkes, 2007).

The third point is that the overall process needs to be clear and agreed to from the outset, along with the roles and responsibilities of all involved. This would alleviate many of the issues described in the previous section, such as communication disconnect and the issues identified with representation. An important activity at this preparatory phase is the
identification of the needs and interests of the different stakeholders, including a clear articulation of the goals of the conservation authority. Taking the time to identify and discuss these may also identify the commonalities and points of intersection. Defining roles and responsibilities includes clarifying the level of decision-making authority of the PNSB staff involved, as well as transparency about the actual ability of community representatives to influence the decisions. This may also help with interconnected challenges being dealt with in Trindade and other parts of Brazil surrounding providing distinctive rights to "traditional populations" versus "non-traditional populations" as this risks misleading characterization and assumptions and can trap people into certain predetermined and limited roles and behaviours (de Castro et al., 2006, West et al., 2006, Idrobo et al., 2015). While this debate is beyond the scope of this paper, it does speak to process issues and how to address a community as a whole that is made up of various interest groups and rights-holders.

Making these changes would not address all the issues identified, but provide a straightforward way to make some immediate improvements. This would move to a model where the conservation approach is congruent with the social-ecological system (de Castro et al., 2006). Continued pressure on the park authorities at multiple levels of administration is needed to advocate for these improvements, and this is a role that researchers can play. It is important that we, as scholars, address the criticisms and concerns about participation. If we do not address the problems of participation, initiatives will have limited impact at best, or, at worst, create or exacerbate problems or cause harm (Mosse, 2001).
Following from this, another important point is that it is important to evaluate the outcomes in a participatory process in order to determine if the initiative was successful, identify possibilities for improvements, and make decisions about material resource allocation (Clarke, 2008). This is important in Brazil because there is significant ongoing investment of time and resources in participatory processes across the country that would benefit from ongoing evaluation. Evaluation also allows for consideration about issues of exclusion, as were identified in this process, and allows for adaptive management within changing political context that has a long-term vision and that can be monitored at multiple scales to ensure that any possible barriers to participation will be identified (Rodriguez-Izquierdo et al., 2010). When evaluating a process, far deeper analysis has to happen beyond simply documenting who was at the table (Eversole, 2003). Meaningful representation is a key issue. The case in Trindade is an example of an exclusive process and only a small sample of voices were heard at the negotiation table. There is also a need for intentional representation. Women, people with disabilities, youth, and the elderly should be meaningfully included. Parkins & Mitchell (2005) raise an interesting discussion about exclusion. They distinguish two forms – external and internal. External inclusion is the form that keeps people out, which they describe as being consistent with much of the natural resources literature. Internal exclusion is the less obvious form of exclusion whereby some people or groups are nominally included, such as having certain non-representative spokespersons or only being allowed to discuss certain issues (Parkins & Mitchell, 2005). The Trindade case demonstrates both forms of exclusion.

We also recognize that while there are many negative outcomes of the long process, there
was also important capacity development occurring as a result of participation in the process, in terms of people’s ability to organize, represent themselves, and speak more effectively to government, and this has to some extent transferred to how they manage and participate in some important community-based organizations. Finally, the current policy related to SNUC suggests that protected area management plans be revised every five years. Given that the current process has been going on for about three years and is still not completed, it is apparent that this is an unrealistic objective with the current process in place. Ideally, with a strong process in place authorities may be more open to consider a move to a deliberative process and actually share decision-making authority (Berkes, 2007), although this would require a change in Brazilian law.

2.7 Conclusions
There is an ongoing shift in Brazil to greater concern for the social impacts of conservation, but it is an ongoing struggle, and this research demonstrates that the policies in place are not sufficient. As has been described, the community was expected to organize themselves to participate in a high-stakes negotiation process with no support or guidance. PNSB in the case discussed took forceful, unilateral actions and with an ongoing lack of community-based presence is not able to enforce the protected area, so has created a void in natural resources management at this point in time (Bahia et al., 2013). Given the current approach by PNSB observed through this study, it is not clear that conservation will be improved in this area, consistent with other studies that suggest alienating a local population can have detrimental impact on resources (Diegues, 1998; Berkes, 2010). PNSB’s heavy-handed entry into the community has reduced economic
opportunities, and the threat of banning fishing activities will exacerbate this issue. It is also important to recognize the growing body of research from the Atlantic Forest arguing that biodiversity conservation and local inhabitation and livelihoods are not incompatible, and that in fact some local practices could benefit biodiversity conservation (Diegues, 1998; Sanches 2001; Thorkildsen, 2014). For example, Sanches (2001) studied a Caçuara community in the Jureia region of the Atlantic Rainforest and found that the biological state of the area after the long history of traditional use indicated that use patterns led to "a sustainable condition" (Sanches, 2001:61). There is growing consensus that alliances would lead to better environmental protection and community wellbeing (Rylands and Brandon, 2005: Adams et al., 2013). Communities need access to this research so that they can use it in their advocacy efforts.

In Brazil, as in many other parts of the world, "the implementation and effective management of protected areas is an enormous challenge" (Silva, 2005:609). And yet, when protected areas are connected to lands and livelihoods of a local community, the motivations overlap to a great extent, as we have seen in the Trindade case. As has been demonstrated in other situations, there are clear opportunities for conservation-oriented economic partnership and culturally focused and validating tourist opportunities (Murray & King, 2012). This type of collaborative relationship could address many of the management challenges associated with protected areas. The community of Trindade has demonstrated great capacity in economic endeavors and many community members were engaged in small-business management. These skills can be an asset to protected area management moving forward. To conclude, we assert that meaningful participation in
natural resources management has not yet been achieved in the process reviewed. The process described is the initial phase of a long-term relationship and changes need to be made so that the desired outcomes for natural resources management are more likely to be achieved.

Evaluating participation is not easy. It requires a comprehensive understanding of the context, and a specific analysis of the four aspects identified in this paper (and perhaps others), communication, opportunity and capacity to participate, representation and decision-making, and conflict. To do so requires ongoing researcher presence and access to information. In the present case, collaborating researchers have had a long-term commitment to action research (Bahia et al, 2013; Araujo, 2014). The trust established through these long-term relationships facilitated researcher access and allowed them to be involved with community members throughout the negotiation process. This commitment to long-term engagement and continuous presence has had an impact in supporting emerging voices and increasing power of community members in their efforts for more just and inclusive conservation practices. The research team has also been active in translating research results into usable information for park authorities and other stakeholders through ‘plain language’ publications, organizing workshops to disseminate information and to dialogue.
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Chapter Three – Using the Capability Approach to analyze Contemporary Environmental Governance challenges in coastal Brazil

Abstract

Conservation and development are often framed as a dichotomy, requiring trade-offs. But trade-offs can be due to the particular political situation and to relationships of domination, and are not necessarily the inevitable result of an intractable situation. Environmental governance in Brazil is in transition, with growing tension between those who seek a social-environmental approach and those who are strictly concerned with preservation. This article applies the capability approach framework to analyze the human development situation in Trindade, Brazil, by answering key questions that are central to this approach (1) What kind of lives are people able to live? Are they able to be or do what they have reason to value? and (2) What is the quality of economic, social and political relations in Trindade? Three main 'shocks' emerge as having major impacts on the way of life of community members: (a) Conflict with external commercial developers, (b) Paving of access road into community, and (c) Enforcement of a Federal Protected Area on historical community land and sea space. Capability priorities were established for women, men, older adults and people with disabilities. The impacts of development and conservation policies are different for the four groups, as are the priorities for capabilities. There is no single capability that is found in the top three priorities across the four groups. The case in Trindade demonstrates that space for public participation is not sufficient to ensure that the people who are trying to improve their wellbeing and be the

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author of their own lives can influence the outcome, and also shows that regular contact
and connection does not necessarily create empathy, as Sen assumed in The Idea of
Justice.

3.1 Introduction

Protected natural areas have existed for millennia in Indigenous and community
controlled lands, through endogenous governance systems, spiritual beliefs, sacred spaces,
and other means. In many parts of the world, this changed through colonisation, and
significant numbers of Indigenous peoples and local communities have been, and
continue to be, displaced in the name of conservation and development (Tauli-Corpuz,
2016). In Brazil, environmental governance is in transition, with growing tension
between those who seek a social-environmental approach and those who are strictly
concerned with conservation. Current policies demonstrate that there has been a shift to
recognize the rights of Indigenous and traditional peoples, but actual practice shows that
the values of economic development takes precedence over other considerations, and that
in many instances conservation is also more highly valued than the wellbeing of
Indigenous and traditional peoples.

This research project applies the capability approach framework to analyze
environmental governance in a coastal community in Brazil. The capability approach is
part of a development-oriented perspective that shifts the focus from people as a means to
development, to having people as the central focus of development. In this approach
human needs and freedoms are given priority, and there is a focus on agency and
wellbeing. As Sen (1999; 2013) argues, people need to be actively involved in planning their future and not be the passive recipients of programs designed by others. The capability approach provides a framework to interpret the ability of a community to adapt to changes and to contextualize environmental conflict (Anand 2007; Griewald and Rauschmayer 2014). It provides a framework "which could help transform or create different social, economic and political arrangements from the ones which deepen inequality, undermine people’s opportunities to live well and destroy the environment" (Deneulin 2014, 3). The approach has also been applied to collective agency and institutions in environmental governance (Lethonen 2004; Pelenc et al. 2013).

In this paper, the capability approach is applied in two ways: to gather information on community-level priorities related to capabilities, and to analyze state-society relations as manifest in conservation and development approaches. We apply the capability approach to analyze human development in the community of Trindade, with a focus on commons governance. In looking at community-level priorities, the framework reveals diversity within marginalized groups. It considers how personal, social and environmental characteristics impact the ways in which capabilities are converted into functionings - how opportunities become achievements (Robeyns 2005).

The capability approach uses a normative language to understand and assess development situations. The approach primarily originates with Sen (1985), and emphasizes the point that economic behavior is not simply a phenomenon of rational individual choice. Rather, it is linked to freedom and constraints of what people value and what they can and cannot
do. The capability approach provides a framework to analyze policy from a human development perspective that focuses on what people are actually able to achieve, and how policies can change towards expanding people's freedoms (Spence and Deneulin 2009). In order to assess if human development is improving, Sen argues that one needs to not only evaluate what people are being and doing, called ‘functionings’ in the language of this approach, but also the real opportunities that they have to achieve a certain kind of life, called ‘capabilities’. According to Sen, “capability reflects a person’s freedom to choose between different ways of living” (1998:44). Unlike capability scholars such as Nussbaum (2000) and Alkire (2002), Sen does not prescribe valuable functionings or capabilities. Rather, Sen believes that capabilities need to be identified through public reasoning, and that they vary across contexts.

3.1.1 The Capability Approach and the Commons

The capability approach, which centers on human development, has enjoyed limited but increasing applications in the environmental area. Rauschmayer and Lessmann (2013:4) raise the question as to how the theoretical framework of the capability approach can be applied in governance towards sustainable development. They suggest that “the work of Elinor Ostrom gives some hints how this can be done on a small scale”. However, there seems to be little in the commons literature that engages with the capability approach. An exception is Jentoft et al. (2010), who use Sen’s (1999) notion of freedom to point out that the ‘tragedy of the commons’ that leads to over-exploitation is not due to unlimited freedom as once commonly believed, but rather due to the restriction of freedom.
In conceptualizing the capability approach, Sen (1985, 1999) was applying the notion of freedom to development in general, but this issue is also a major concern in commons governance. Johnson (2004) has argued that two bodies of thought compete for a voice in the commons literature. One is primarily concerned with collective action, and the other influenced by notions of entitlement (Sen 1981). The latter focuses on the problem of creating resource access for poor and vulnerable segments of society, but both use rules to analyze the dilemma of managing access to natural resources. Johnson (2004: 408) argues that

“They differ, however, in the normative value they ascribe to common property regimes and those whose livelihoods are dependent on resources it provides. Whereas 'collective action scholars' analyze the rules and sanctions that encourage individuals to conserve the commons, 'entitlement scholars' emphasize the historical struggles that determine resource access and entitlement, and the ways in which formal and informal rules create and reinforce unequal access to the commons.”

The Trindade case captures many of these issues. The people of Trindade have struggled to maintain their autonomy and quality of life through many difficult development stages. They are in struggle with Federal Government Parks authorities concerning a protected area that is being enforced on land and marine space that the community has used and managed for centuries. Using the capability approach in a case such as Trindade allows
for assessing the normative framework of the local people, to bring to light the development outcomes that they value, and to expose how the historical context has shaped the rules that are impacting on access to common pool resources for community members.

3.1.2 Parks and People

The governance of protected areas throughout the world is often conflict-ridden. Much of modern conservation thinking viewed nature as either “fuel for modernist economic growth, or as something precious, needing absolute preservation” (Adams and Mulligan 2003, 6). This global conservation governance model included the common practice of preventing access to (or the eviction of) Indigenous peoples from protected areas, in the name of conservation (Spence 1999; Brockington and Igoe 2006; West et al. 2006; Wobse 2008; Agarwal and Redford, 2009). The people-free nature model continues to dominate conservation in many countries, with little evidence of sharing of decision-making power with local communities (Borrini-Feyerabend et al. 2007). Although no definitive alternative model has emerged, it has been largely recognized that the current dominant protectionism of nature approach, which separates people from nature, is neither effective, nor achievable, nor just (Dowie 2009). However, very few papers have systematically examined justice and social equity in protected areas (Timko and Satterfield 2008).

The Brazil case discussed in this paper is not unique, but captures a universal issue in commons governance, whereby the capability approach may prove pertinent and useful.
It involves a protected area case on lands that have been used by the Caiçara people, a mixed-heritage traditional group, for generations. There are many situations where Indigenous and traditional peoples have greatly reduced capabilities, or opportunities to do or be what they have reason to value, due to either resource development, or resource protection, or some combination of the two. At the same time there is a growing movement by Indigenous and traditional people to assert their rights, move to self-determination in development, and expose the disproportionate costs accruing to them in the name of conservation. Conservation and development are still often framed as a dichotomy, requiring trade-offs. But trade-offs can be due to the political situation and to relationships of domination, and are not necessarily the inevitable result of an intractable situation (Valencia 2014).

After providing background and context on Trindade and a description of the methods of study, the paper will focus on two questions that are central to the capability approach (Sen 1985, 1999, 2009; Deneulin 2014): (1) What kind of lives are people able to live? Are they able to be or do what they have reason to value? and (2) What is the quality of social, political and economic relations in Trindade? The focus is at the local level, examining the relationship between the community and community institutions with Brazil's Federal Government, as the protected area in this case is within federal jurisdiction. The questions will be discussed using data from field research. The last two sections will then focus on how to transform, or make 'less unjust', the unjust structures identified.
3.2 Study area context

Located in the region of Paraty, in the southeast coast of the state of Rio de Janeiro, Trindade is situated in what remains of the Atlantic Forest, a highly threatened Brazilian bio-region. The green hills slope down to long stretches of sandy beaches and the inviting blue water of the Atlantic Ocean, with many swimming areas and a popular surfing spot. The term 'resource curse' is often used to describe areas that suffer from intense and competitive exploitation of resources. Trindade may suffer from a resource curse, as well as a 'desirability curse', in that the location and natural beauty make it desirable to more people than it can accommodate. This desirability underlies the history of intense efforts by outsiders to secure land ownership or take over control of natural resources and the likely economic gain from controlling these resources.

The main group of people living in Trindade, a community with a population of about 1,000 people (Bussolotti et al. 2010) or 228 households (Hanazaki et al. 2013), are Caiçaras, a mixed heritage group of Indigenous Peoples, Portuguese, and Africans. They are legally recognized as ‘traditional people’ due to their distinct characteristics, way of life and cultural identity (Brazil 2007), but without the same rights as Indigenous peoples, such as land tenure (although Indigenous peoples have to struggle to actualize these rights). Many of the Caiçara coastal communities were founded as slavery was ending in the middle of the 19th Century (Diegues 2005). The livelihoods of this population over time have primarily been small-scale fishing, agriculture, and agro-forestry with shifting cultivation, mainly for manioc (Fajardo 2005). Present day livelihoods are mixed, but
fishing remains a primary activity in the majority of communities in Paraty and key to food security (Hanazaki et al. 2013).

Over the past fifty years, several significant development shocks have drastically impacted the capabilities of Trindade community members to live the lives they have reason to value, as identified through the research efforts and will be described in detail in subsequent sections. The Caiçaras of Trindade have had to deal with exogenous changes, and they have a history of resistance and adaptation. They are again in a period of resistance and adaptation in response to the enforcement of a Federal protected area on community land and marine space. The protected area was established by the Federal Government in 1971, at a time when Brazil was under military dictatorship. This was also the time period when tourism in the region was growing, and as such land became a valued commodity and land-grabbing for commercial development became a problem for communities along the coast (Teixeira, 2006). Interstate highway and local road access improvement also created major change to the community, as will be discussed.

The protected area was established without any consultation or input from the community, but the rules of the Park were not actually enforced until recent years. The Serra da Bocaina National Park (PNSB) is a protected area that falls under the authority of the Instituto Chico Mendes de Conservação da Biodiversidade (ICMBio) / Chico Mendes Institute for the Conservation of Biodiversity, the administrative unit of the Brazilian Minister of the Environment. The current conservation and development policies require a consultation process to establish a management plan for the protected area. This process
with the community of Trindade began in mid-2012, and is described in detail in Bockstael et al. (2016). The management plan poses critical issues to multiple stakeholders in the community and impacts various types of natural resources. Implementation of the conservation policies requires public participation in the management plan. The public participation process is not fully accessible to the whole community. It is only a consultative process, so community representatives are allowed to provide their views on the management plan and request changes, but they do not have actual power to influence the document; the authorities make all final decisions (Bockstael et al., 2016).

The conservation and development policies in Brazil (SNUC 2000) are having an impact on Caiçaras’ freedom to live the kind of life they have reason to value. As discussed in subsequent sections, the state is limiting livelihood options for Trindadeiros to activities related to tourism, as they see these as complementary to the conservation priorities of the protected area.

3.3 Methods of Study

This study was conducted as interdisciplinary action research, and was part of a five-year team project in Paraty called “Community-based resource management and food security in coastal Brazil”, that took place 2009–2014. For this portion of the research, data were collected through a mixed-methods qualitative approach from February 2013 until December 2014. Data collection included ongoing participant observation during the research period, numerous informal conversations and interactions, semi-structured
interviews with key informants on specific topics, narrative interviews with 33 participants, small group meetings, practical capacity development workshops, and participation/attendance in intra-community, inter-community and community-Parks meetings, and analysis of meeting minutes. The capacity development workshops were developed jointly with community members. They were designed to understand and meet protected area regulations, and to improve participation in the Park negotiation process. Using a variety of research methods allowed for triangulation to make sure local views and priorities were correctly understood.

The research benefitted from close work with a Brazilian field assistant who lived in Trindade before, during and after the research period informing this paper. She provided assistance with language, community contacts and data collection, and she provided insight into the many complexities of community relationships. After spending some time in the community developing relationships and observing community life, the data collection began with narrative interviews broadly inquiring about the impacts of changes to natural resources governance over time. These were completed with a total of 33 people, divided into youth (n=5), adult (n=15), people with disabilities (n=4), and older adults (n=9). A handful of interviews also took place with community leaders who were integral to the community-Parks negotiation process. Data from these interviews provided rich information both for capability assessment and for relationship assessment portions of the study. Analysis was guided by the capability-based evaluation questions constructed by Deneulin (2014), building on the work of Sen (2009) and Dreze and Sen (2013).
To explore the idea of specific capability priorities for different population groups, data were collected in meetings with small groups to establish a basic list of important capabilities, translated as oportunidades (opportunities), and to see what differences, if any, could be identified between groups. Questions were also focused on participants’ particular concerns related to natural resources management. This was done through one small group session with women (n=7), two small group sessions with people with disabilities (n=8 and n=3), and two large group sessions with men (n=29 and n=26) in which the two sessions had nearly the same set of participants. After failed attempts to hold a group session with older adults, information was gathered separately through interviews with five participants. All participants lived in Trindade, with the exception of participants with disabilities. To include more people with disabilities, people from Paraty town and other nearby coastal communities were also included and meetings took place in Paraty town. There have been different attempts to generate capability sets, using surveys, focus groups & interviews (Biggeri et al. 2006; Clark 2003), and deductive reasoning (Nussbaum 2000). This research used the approach of small group meetings and interviews. The research was not designed to determine an exhaustive list of valuable capabilities for the community, but rather to explore the most important capabilities for different social groups.

For the group sessions, discussion was guided by three questions: (1) What are the most important opportunities that a person should have during his/her life? (2) What are the three most important? (3) Do these opportunities exist in Trindade? The first question
was answered with a 'brainstorming' exercise with the men. With the women, it was done by having each participant individually answer the questions and then compiling the answers. In both situations the participants then voted on which were the three most important opportunities, and then discussed if, and to what extent, these opportunities existed in their community. For the people with disabilities, time was spent prompting and probing with each individual, and sharing as a group. The group then discussed to what extent these opportunities existed in their lives, and what was missing, but did not vote on the top three. For the interviews with the older adults, these questions were asked, but there was no 'brainstorming' or sharing activity, nor the opportunity to discuss and prioritize and vote. With the men, women and older adults, specific questions related to natural resources governance were then posed.

All the data collected from the various methods used was used to inform the relationship assessment that demonstrates the complexity of the relationships within the community, and the historical struggles that continue to impact community relations with the state and other external actors. The following section presents the overall findings of the research.

3.4 Findings

3.4.1 Capability Assessment

In this section the focus will be on addressing the question: "What kind of lives are people able to live? Are they able to be or do what they have reason to value?" (Sen 1985; Deneulin 2014). The development narrative that emerges through synthesizing the narratives of people in the community reveals that people are not fully able to live lives
that they have reason to value. This is due to imposed policies and development decisions that have caused expansion and contraction of capabilities.

Three main shocks emerge as having major impact on the way of life of community members: (a) Conflict with external commercial developers, (b) Paving of access road into community, and (c) Enforcement of a Federal Government protected area on historical community land and marine area. These are described as shocks because they happened quickly and were outside the control of community members. The narratives describe these events as things that were not sought by the community, but that had both positive and negative impacts on their agency to pursue goals they have reason to value, on their autonomy and wellbeing in terms of opportunities for valuable beings and doings.

a) Conflict with external commercial developers

The BR 101 (Rio Santos) highway, Brazil's primary coastal highway and part of the Pan-American Highway, opened in the Paraty area in the 1970s. The arrival of this highway is described as the trigger that led to the "land grabbers" (grileiros) coming to Trindade, and the beginning of a protracted and violent conflict with a commercial development conglomerate. Problems for the community began in 1963/1964. A Brazilian businessman and politician 'sold' a nearby community, Laranjeiras, to an outsider, and the new 'owner' claimed he also owned Trindade and tried to get community members to pay a lease for living in Trindade. The lease was to be paid through labour to the owner. The community resisted. In 1970 the owner 'sold' Trindade to a multi-national company called 'Adela-Brascan', referred to as 'the Company' by community members. This led to a
violent conflict that lasted for about ten years. Many of the families sold their land, usually under duress, or fled.

"If we didn’t sell we would lose everything, because the land was theirs and we didn’t have land documents to prove that it wasn’t. But it was our right, we are natives." (man, adult)

Houses were burned, women and men experienced physical violence. Families who refused to leave lived in tents on the beach or sheltered high in the forested hills.

"In March 1973, gunmen invaded Trindade [Brazil was under a dictatorship at this time]…They got here and started burning down the houses and made a lot of other atrocities…In this village nothing remained, it was all cleared!" (man, older adult)

The conflict caused changes to livelihoods. Prior to this time, most men worked in industrial fishing boats outside of the community and would be gone for months at a time. Women were responsible for the farming, but they were not able to continue this activity.

"We lived from fishing and planting, but the farms were destroyed by the gunmen and the men couldn't leave the women here and go out to fish. Trindade was packed with gunmen." (man, older adult)
Ultimately a legal settlement was reached, with some land given to 'the Company', and some to the community. Some families returned, the community reorganized and plots of land were allocated to different families. A long-term community division, still in place, ensued from the conflict and the land redistribution, with concerns about the transparency and equitability of the process and covert personal relationships seeking personal gain by some community members with the 'company'.

How does a community recover from such a traumatic conflict and forced redistribution of land? The conflict has enduring consequences to capabilities. From a negative side, families no longer have as much area for farming. Some community members remain outside of the community. Some who sold their land are unable to return, although some managed to return and were able to secure other land. There is now recognition of the value of land as private property, and different worth of land and norms around land distribution and control.

"…our community had a culture in which I’m not the owner of the land…it was the land that owned us…From the arrival of that company on, this was practically abolished, this culture stopped. We started to value a little piece of land…But this didn’t exist before…there weren’t fences in Trindade. This didn’t exist, only from the arrival of the Company that their eyes were opened, for the land being worth a lot of money. And then our culture was over, the way we thought of living." (man, adult)
Along with the change to the value of land and norms of land ownership, there is a legacy of fear and mistrust that forms part of the community culture, an important element to remember when we discuss the third major shock. Community members have also lost trust in relationships with each other and these divisions flared up when the most recent development pressure was brought to bear. From a positive side, as the conflict came to an end, women in the community formed a 'Resident's Association'. This was started by a small group of women who recognized that the community needed to be more united in their representation, and eventually became an association for all community members. This association provides structure for managing community affairs and space for public reasoning. Trindade has a reputation as being the most difficult community for the authorities to deal with, and their ability and motivation to organize and advocate for their rights may be a legacy of the conflict.

"...Trindade is the community in Paraty that most demands their rights. It has learned from that fight the meaning of being in front, fighting, not keeping quiet...There’s isn’t a community in Paraty that demands as much from the public power as Trindade does." (man, adult)

So on the one hand the conflict fractured community affiliations, changed their relations to the natural resources that they depended on, devolved their land management system, and restricted their livelihood opportunities. On the other hand, they developed ability to organize and fight for their rights, and may have enhanced their sense of agency. Throughout the conflict the community did not receive assistance from authorities, and it
seems the authorities were more supportive of the economic development of the area by the large corporation than in supporting the rights of the traditional population.

b) Paved access road into community

Approximately six km of what was a rough mud tract was paved in 1999/2000. The road was dubbed 'Deus meu livre/God save me' by local residents due to the very steep hill that was often impassable before it was paved. It now provides regular and reasonably easy access into the community from the BR 101 highway. This infrastructure development initiative allowed for a massive increase in the number of tourists accessing Trindade. This change has had a transformative effect on the community that in many ways did enhance the agency and wellbeing of community members, but also has many negative effects.

Although tourism is the main source of income for most community members, there continues to be a mix of livelihood activities. A handful of people exclusively fish and some also continue with small-scale farming. This is due in some cases the seasonality of tourism. The list of problems attributed to the growth of tourism is substantial, including social and environmental issues and issues with infrastructure. Trindade does not have proper water and sanitation infrastructure for its own population, let alone for the massive numbers of tourists who descend on the community during high season. The social issues raised are familiar to other places that experience growth in tourism (Harrison 2001). Parents are concerned for the safety of their children with the number of outsiders and the influx of drugs. They remember the past when everyone in the community was known
and children had more freedom. Parents of older children worry about exposure to drugs, and also worry that if there are no livelihood opportunities they youth may get involved with selling drugs. There are people in the community who visibly struggle with alcohol and drug issues. The amount of vehicular traffic on the small community road and the crowds also restricts peoples' freedom of movement and peacefulness.

Many community members describe that prior to the paved road, they had difficulties with movement in and out of Trindade to buy and sell goods and to access education for their children. The road has facilitated community movement for school, commerce and others, but it also allowed for rapid increase in numbers of tourists. The type of freedom people had has changed, with mixed results. As one older woman stated: "Now it's become easier, but I liked it better before." Two of the major problems that impact the wellbeing of community members, sanitation and water, are being exacerbated by the restrictions placed by Federal authorities, which leads into the third development shock.

c) Enforcement of Protected Area

The conservation and development policies being enforced in Trindade are having a high cost to the local population, in terms of restrictions of capabilities.

In brief, the implementation of the conservation policies involve a series of restrictions and actions that prohibit community members from continuing traditional activities or maintaining income generating activities that developed with and contributed to the growth of tourism. For instance, closing beach side restaurants operated by community
members has meant that many people lost a key livelihood activity, and this has had secondary effects as local fishers have lost customers. Livelihoods of those who work directly with tourists on the beach are also being impacted, for a number of reasons. The Park authorities are preparing to limit the number of tourists who can visit one of the main natural attractions, so the revenue for the associated boat trips will decrease. The protected area will have limited visiting hours, and tourists will have to pay a Park entry fee. Local people who have lived in this area for generations will also have to follow set visiting hours, unless they receive permission for special activities, on a case-by-case basis, and guests of a local community member will have to pay the entry fee (with the exception of immediate family members).

At the same time as restricting the tourism-based livelihoods, the policies are also geared to reducing or preventing traditional activities. Fishing is still a hotly contested issue but the long-term stated goal by Park authorities is to prevent fishing in the adjacent marine area, the main fishing area for the community. On separate occasions, the Park authorities have told community members that they must either choose between continuing with tourist activities or reverting entirely to traditional activities. They have told people that they do not have a choice, they must give up traditional activities, as they no longer need them for their livelihood now that they earn income from tourism.

As mentioned, the large number of tourists have put pressure on the infrastructure and exacerbated waste management issues. There is no sewage treatment facility, and much of the sewage runs untreated into a stream and into the ocean. For many years the
Residents Association has fundraised and planned the construction of a sewage treatment facility. Construction began, and then was halted by the Park authorities, claiming that the land was within the protected area and therefore the construction was illegal. This is a telling policy decision about how serious Park authorities are about ‘conservation’, as it seems they would rather have untreated sewage flowing into the beach and ocean within the protected area than having a treatment facility built within the boundaries. There are also challenges with the volume of garbage and the drinking water supply. Community members are worried about continued access to the water source (a waterfall) as it is considered to be in the protected area and therefore Park authorities could restrict access.

A number of people expressed that it was the community members who have protected the area through their own way of life and initiatives, and now are being treated unfairly.

"It's tough, and what we feel is that, that you are in a territory that you have protected all your life, and you don’t have your name on the land, the land is not yours. The state simply comes and says it is a Park here and you are treated as a criminal, because they created a park on the top of your head." (woman, youth)

While ostensibly focused on conversation, protected area policies also appear to be linked to economic development, as the Park authorities will charge an entry fee to tourists and thus redirect income from the community to the government. Finally, the Park authority is also planning to build a 'Visitor Centre' to receive tourists, which ironically is expected to have a museum about Caiçara people. The location of the entry to the protected area
may also redirect visitors away from the other commercial areas in the community that are outside the protected area, and therefore reduce income generation in these other community spaces.

Examining the first two development shocks, it is evident that there have been both positive and negative outcomes. The third shock, the policy to impose a specific type of protected area that was originally established without consultation, biological study, or concern for local population, however, is causing significant capability deprivation for the local community. This is consistent with how protected areas were established in Brazil through the 1970s and the 1980s. The public participation process in place is still confined to fit within a pre-established set of rules, and the community has no power in decision-making. The policies are diminishing tourist revenue, destroying local business, reducing markets for selling fish, limiting livelihood options, and restricting access to the land and sea for cultural activities. These effects are all negatively impacting the wellbeing and agency of the local community.

Taken together, the three areas of development shocks described in this section have costs and benefits to the local population. Research participants have expressed appreciation for increased economic level and less arduous lifestyle, and more security with diversification of livelihoods. They do weigh this against loss of freedom to take part in decisions about their lives, social issues, environmental issues, loss of self-determination and community control, change of culture and traditions, and ability to choose to continue to live in the community. It is important to recognize that the impacts
of development and conservation policies are varied for different social groups, as are the priorities for capabilities. The remainder of this section is based on data collection focused on the identification of important capabilities, translated into 'opportunidades', or opportunities, for different social groups.

Capability Priorities

The analysis to determine the capability priorities for the different social groups is primarily based on data collected through the small group meetings and individual interviews that were designed to identify and prioritize capabilities. Table 1 provides a summary of the top three priorities of women, men, people with disabilities, and older adults. As there were only three people with disabilities participating in Trindade, additional participants were sought from nearby communities to make up the sample. Interestingly, there is no capability that is found in the 'top three' across the four groups. There is no previous research that desegregates capability priorities across different social groups, and the results indicate that an important consideration in determining development policies would be the difference identified between the social groups in this study, recognizing that the number of participants is small. People with disabilities are also an under-researched cohort, but form a significant population size (1 billion people/1 in 7, WHO, 2011).
Table 6: Capability priorities of different social groups

<table>
<thead>
<tr>
<th>Women (n=7)</th>
<th>Men (n=26)</th>
<th>People with Disabilities (n=11; 9 men &amp; 2 women)</th>
<th>Older Adults (n=5; 3 women &amp; 2 men)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Quality family life</td>
<td>1) Take care of health</td>
<td>1) Access to education</td>
<td>1) Stay in Place (especially for children/grandchildren)</td>
</tr>
<tr>
<td>2) Education/Access to Knowledge</td>
<td>2) Take care of family</td>
<td>2) Job/earn money</td>
<td>2) Access to natural resources</td>
</tr>
<tr>
<td>3) Good health</td>
<td>3) Be happy</td>
<td>3) Security/Dignity</td>
<td>3) Peace</td>
</tr>
</tbody>
</table>

Are the capability priorities identified attainable? The capability to be educated exists at the primary school level within the community. Secondary education is available in the nearby city of Paraty, requiring access to personal or public transport. However, the quality of education is a concern, with the women expressing disappointment in the quality and dissatisfaction that the curriculum does not include their traditions and knowledge. People with disabilities struggle with access to any level of education, with Brazilian schools only recently being mandated to be 'inclusive', but with a lack of teacher training or real knowledge about making schools inclusive for all kinds of ability sets, and many of them have very exclusive infrastructure.

Both women and men felt that there was limited access to health care directly in the community, with a recently established community health post. There did not seem to be a shared understanding about how often a doctor was staffing the health post. For the people with disabilities, there were barriers to the most important capabilities that they identified. A common concern for this population is access to employment, and this is
indeed the case for this group in Paraty. Participants with disabilities value both security and dignity in equal measure, and both are areas of concern. Because they are primarily living in the poorest parts of their communities that are identified as having a lot of criminal activity, they have more concerns for personal security. They also struggle with attitudes of other people and describe being teased and mocked.

Although these capabilities depend on a number of factors, in the Trindade case almost all of the capabilities identified are connected to natural resources and land tenure, raising the possibility of land being a larger social capability, a meta-capability (Holland 2008). The discussions by the women and men related to health, quality family life, taking care of family, and happiness, were discussed in the context of remaining in the community and continuing with the multitude of activities that make up their lifestyles and livelihoods. The capability to achieve good health is based on both having access to health care, but also to living in a healthy place, as Trindade is generally perceived as being. Quality family life and taking care of family, and happiness, were connected to availability of work in the community so that families can stay together, and the enjoyment of working on the beach, fishing, and working collaboratively.

The older adults particularly value secure land tenure and access to the natural resources as a capability, which is also connected to their other top capabilities of being able to stay in place and live in peace. These are all areas of concern linked to conservation policies, and their attainability is linked to these policies. For men, being happy and taking care of family were both linked to their ability to continue to work with tourists on the beach and
with their boats, and to fishing rights. Health concerns are also linked to environmental health with water and sanitation issues as described. In summary, participants value their freedom to pursue the activities that define them as Caiçaras. They value what they are lacking or what they are at risk of losing. Being able to achieve desired outcomes is linked to the quality of relationships and existing power dynamics, and these concerns frame the second question in a capability-based assessment.

3.4.2 Relationship Assessment

Using the capability approach framework, the second question evaluates relationships. Specifically, the question is: What is the quality of economic, social and political relations in Trindade? (Deneulin 2014). The actors in the relationships have changed over time, but the essence of the relationships has been fairly consistent; community members struggling for recognition against external forces imposing change. In the case of the conflict with external commercial developers, the community received no protection or assistance from authorities and suffered greatly. The successive rapid growth in tourism provided many community members with the opportunity to receive economic benefits, but again the community received no assistance from the government to help develop necessary infrastructure, or bring any kind of order to the rapid and overwhelming growth in tourism. In the current situation, the relationship between Park authorities and community members can be characterized as a relationship of domination of subordinates.

The hierarchy of policy priorities in the current phase places conservation at the top, followed by tourist experience, with the wellbeing of the local population in last place.
Policies are based on conservation priorities. Park authorities appear to be struggling to balance conservation with tourist experience, and presumably with the plans for the associated revenue from tourism. The negative impacts of these policies are being borne by the local population, raising issues of distributional justice. There is no sharing of decision-making power, nor any consideration of benefit sharing (Borrini-Feyerabend et al. 2007), despite this being one of the many requests raised by the community through their participation in the public consultation process. In effect, although there are some benefits to the community, it is also the community that bears all the cost. Public reasoning exists on the part of the community to a certain extent, such as in the community associations and in the negotiations with Park authorities, and community members actively participated in the consultation process, but the power imbalance frustrates and limits their efforts. There are even special requirements in policy about the needs and rights of the Caiçara people, but these also contain caveats that ultimately allow Park authorities to make any decision necessary when justified in the name of conservation.

The approach taken by the Park does give reason to question if the policy priorities are really about conservation. The Park authorities did not develop a base of knowledge about the current state of the environment beyond the management plan prepared in 2002, before imposing conservation regulations. So the regulations are not being enforced in direct response to documented issues specific to this location. The direct benefits of the current policies are realized by the government, as the Park authorities will eventually have a new stream of tourist revenue, and they will be able to report an increase in the
percentage of land that is under conservation. In addition to undermining people's wellbeing and agency, these policies may be self-defeating. Conservation benefits are unknown as there have not been baseline studies, or evaluation about the actual impact of traditional activities. For example, preventing community fishing in the adjacent marine area is likely to have limited benefit on fish stocks, as industrial fishing continues near the area and the current state of fish stocks is unknown (Lopes et al. 2013).

Livelihood diversification is promoted in the development literature as a way to meet development objectives (Ellis 1999). But current policies in Trindade constrain livelihoods by focusing on only two activities, tourism and commerce. Community members who are hostile to Park authorities and refusing to recognize their legitimacy may have held a more positive position had the Park approached the community to build a collaborative relationship with concern for wellbeing. Given that the current conservation arrangements have produced neither political nor economic benefits to Trindade (Wright et al. 2015), it might be expected that a community directly adjacent to a protected area and suffers from its existence may not be motivated to assist in protecting that area (Agarwal and Redford 2009).

The direct social relationships between community members and Park authorities seem to follow one of two patterns. There are some community members who have direct and regular interactions with Park authorities, who clearly explain their needs and wants, talk about their issues and concerns, express the importance of their traditional identities and advocate for recognition of these identities and the associated livelihoods. Other
community members refuse to negotiate with the Park, and on one observed occasion prevented a meeting from taking place with the Park authorities in the community. There are ongoing challenges with social relationships within the community between those who favour divergent means to address the challenges and relate to the authorities. People seen as being close to Park authorities risk being accused of colluding with the Park and seeking personal benefit. There is little evidence of empathy being consistently developed by people on either side of the issue, one of the conditions of Sen's approach to making a situation more just (Sen 2009). It raises an interesting question as to whether empathy can develop or be influential in a situation where there is ongoing conflict.

### 3.5 Discussion

The capability approach is useful for the study of commons because of the insights it brings, showing that entitlement thinking can help analyze commons governance, and in particular, issues of resource access and control. Entitlement thinking, showing that historical struggles with external commercial developers have shaped resource access and control, helps provide context. It also helps interpret the ability of the community to adapt to changes and to deal with conflict (Griewald and Rauschmayer 2014). Formal rules of government conservation create and reinforce injustice with respect to access to the commons (Brockington and Igoe 2006; Timko and Satterfield 2008). Does the ‘new’ economy of tourism compensate for reduced access to commons?

The Caiçara people are being treated as though they freely chose to change their traditional way of life. But this is not the case; they lived through and adapted to
incursions and exogenous changes. They are being told that they can no longer maintain traditional livelihood and cultural activities because they are gaining economically from tourism, at the same time as their incomes are reduced due to 'conservation' restrictions. In fact it is ostensibly the focus of 'conservation' by the Brazilian Parks authority, but actions suggest that the focus is more towards capturing tourist revenue for the state, rather than a priority of conservation. Actions certainly demonstrate that 'conservation' is more highly valued than any local concern.

At the same time, Caiçara culture is being promoted as an interesting piece of Brazilian heritage. The website of the Caiçara Museum located in Ubatuba, near Paraty, claims that "As part of the Brazilian coastal cultures, Caiçaras represent a strong link between man and his natural resources, generating a rare example of a harmonious community with its environment. Every day, tourists and adventurers who seek the Southeast coast as shelter for their holiday, come into contact, without knowing, with one of the most beautiful and ancient Brazilian cultures" (Toffoli and Mansur 2015). The protected area authorities also revealed plans to include a Caiçara museum in the eventual Park visitor’s centre (to be built on the beach where the Park tore down all the local restaurants) for the preservation of cultural heritage. It appears that in practice ‘culture’ is valued as a tourist attraction, useful for economic growth, and not as an actual ongoing way of life (Idrobo et al. 2016).

Analyzing the development trajectory and current situation in Trindade using the capability approach reveals that the three development shocks demonstrate a lack of agency freedom, defined as "freedom to achieve whatever the person, as a responsible
agent, decides he or she should achieve” (Sen 1985: 203). Sen has emphasized the responsibility aspect of freedom: "Freedom to choose gives us the opportunity to decide what we should do, but with that opportunity comes the responsibility for what we do -- to the extent that they are chosen actions. Since a capability is the power to do something, the accountability that emanates from that ability -- that power -- is a part of the capability perspective, and this can make room for demands of duty" (Sen 2009: 19). Following this line of argument, a pathway to change would be to increase the agency freedom for both community members, as well as for Brazilian Parks authority staff who are working directly at the community level. Our analysis has been critical of Brazilian conservation priorities, but it must be made clear that staff members operating on the ground are bound by institutional regulations and Federal policies. Institutional culture in Brazil for environmental decision-making is top-down (Lopes et al. 2013). Empowering the staff to make local level decisions may provide the freedom and opportunity to work collaboratively with communities and allow empathetic relationships to develop. It is possible that compassion cannot develop or may be repressed when there is no agency freedom to act on that compassion.

Current conservation policies mandate participation as part of the management process, but a further step is needed to institute a democratic process that gives stronger voice to participants to influence the outcome, to have real power in the decision-making process. Conservation requires awareness on the part of the community of the state of the environment, not only for local needs, but also for national and international objectives. Through public reasoning, shared values may emerge between community members and
staff persons around balancing conservation and livelihoods (Berkes 2007). Although Sen (2009: 336) was referring to the freedom of the press, the following is applicable to a new relationship between authorities and community members in Trindade: "informed and unregimented formation of values requires openness of communication and argument... New standards and priorities...emerge through public discourse, and it is public discussion, again, that spreads the new norms".

These norms and values are far from uniform in any given community. The present project was an exploration into ideas about capabilities of different social groups and implications for environmental governance. There are not enough data to make conclusive comparisons amongst groups but enough to demonstrate interesting differences between them that might have policy implications. The results (Table 1) demonstrate that it is important to identify people's capability priorities and gaps, and that these results are more policy relevant than trying to determine a global list of priorities. The research documents the value of using the capability approach to frame the situation, diagnose injustice, and identify pathways to developing more just arrangements. One of the barriers to finding more just outcomes is the historic context.

Community members have explained how the development shocks described in this paper have caused divisions and prevented unity within the community; absence of collective identity can hamper political mobilization efforts (Valencia 2014). Public reasoning may help community members reconnect to their diminished collective identity by finding other points of similarities and shared values (Sen 2009). Improved space for
public reasoning would also allow for needs of different people to be considered. Shifting livelihoods to depend exclusively on tourism does not allow for recognition of the diverse needs, conditions, and circumstances of individuals and families (Robeyns 2005). Therefore, even though all people may equally lose agency freedom with the imposed livelihood changes, different groups may be differentially impacted, and some may face significantly reduced wellbeing than others.

3.6 Conclusion

Environmental governance in Brazil is in transition, with growing tension between those who seek a balance between conservation and local development, and those who equate conservation with preservation. Current policies demonstrate that there has been a shift to recognize the rights of Indigenous and traditional peoples, but actual practice shows that the values of national level economic development takes precedence over all considerations, and that in many instances conservation is also more highly valued than the wellbeing of Indigenous and traditional peoples.

People of Trindade, as in many other Indigenous and rural communities around the world, are advocating for their resource rights and cultural way of life as traditional people, and are demonstrating pride in and organizing around their cultural identity, valuing identity and rights that are threatened (Tauli-Corpuz 2008; Bambaze 2012). International conservation policy is also moving towards more inclusive and participatory processes (Kothari et al. 2013), and away from a kind of conservation based on the separation of people and nature. With the capability to influence the outcomes of conservation and
development comes increased responsibility, as with capability comes obligation. Many Indigenous and rural peoples around the world have traditionally relied on the natural resource base. With increased knowledge through public participation processes, and through secure land and resource rights, they could be empowered to ensure that local ecosystems continue to be the source of larger social capability, a meta-capability, which they need (Holland 2008). Greater space for people to advance the goals they have reason to value, combined with improved public reasoning (Sen 2009) and participation, may also transform the relationship between authorities and community members into one of non-domination (Forst 2014), and bring about structural changes that allow for shared power in decision-making.

While the findings of the research support the argument proposed by Sen (2009), that reducing injustice can be done by public reasoning and by increasing space for participation in a political process, the research also demonstrates that in certain cases there needs to be a questioning of the distribution of power. The Trindade case demonstrates that merely having space for public participation is not sufficient to ensure that the people who are trying to improve their wellbeing and be the author of their own lives can influence the outcome. It also shows that regular contact (as in the Parks process) does not necessarily create empathy, as Sen assumed in *The Idea of Justice*. In the area of environmental governance, Sen's argument would perhaps hold at the local level with groups that have mutually interdependent needs. But across levels with vast differences in power, there needs to be a plan for power redistribution and arbitration, as the vested interests of the powerful will otherwise likely triumph (Armitage et al. 2007). As the
Trindade case demonstrates in such an emotionally contested area as environmental protection, empathy for the other may not develop.

Policy implications of this paper include giving more agency to local-level staff, supporting capacity development for community members and community institutions, and increased space and support for public reasoning. As action research, the current project demonstrates the possibility of involving a university-based team acting as a ‘third-party’ mediator or bridge between the community and the agency. Research team members and community actors worked together on comprehensive courses that improved participant understanding of the systems that were being imposed on them, and increased their ability to negotiate with authorities (Bockstael, 2017).

At a higher level of governance, one change would be to adjust the Parks regulatory framework to respond to international calls to action. Tauli-Corpuz (2016) pointed out that a ‘new paradigm’ for protected areas has been in the works since the Durban Accord and Action Plan of 2003. The original Plan included provisions for self-governance by Indigenous peoples and local communities, with two relevant calls to action: (1) All existing and future protected areas shall be managed and established in full compliance with the rights of Indigenous peoples, mobile peoples and local communities; and (2) Protected areas shall have representatives chosen by Indigenous peoples and local communities in their management proportionate to their rights and interest. These calls for action have since been confirmed and updated in various international statements and documents, such as the Vision of the Promise of Sidney (IUCN 2014).
These calls provide an opportunity, presumably to be fostered by the Government of Brazil, for local participation in the management, and even control, of the protected area. However, in Brazil as elsewhere, very little progress has been made on moving these actions into practice. The capability approach highlights the need for the local community to be engaged as governing body for the protected area, as they have been the custodians of the biological and cultural diversity to be protected. The key question for Trindade, and other communities in a similar situation, is whether the community has the capability to maintain that biocultural diversity and make it thrive. If not, what are the capacity development needs (Bockstael 2017) to strengthen and support that capability? In parallel, what are the structures impeding these capabilities, and what changes are necessary to provide an enabling environment?

The use of the capability approach to analyze commons governance allows for a more contextualized understanding of the situation and inclusion of local views and values, to understand if people are able to live the lives they have reason to value. In particular, collecting data from different social groups, in separate settings, allows for a more nuanced understanding of the concerns and priorities of these groups and the quality of the economic, social and political relations. Commons research would benefit from more entitlement thinking and use of the capability approach. There are very few examples of trying to identify capability priorities in a participatory manner in developing country contexts, but such information is clearly relevant to commons management with equity and social justice.
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Chapter Four - Critical Capacity Development: An Action Research Approach in Coastal Brazil

Abstract

Capacity development is a development approach and a methodology with origins in colonization that has yet to be decolonized. The underlying assumption for the most part is that there are deficiencies in the abilities of the group in question, and does not question the possibility that the system or structure may be dysfunctional. The ongoing design and implementation of international protected area management systems in general, and the one described in this paper, continue to be based on a foundational assumption of a lack of community capacity for governance of the resources on which they depend, the “deficit” model. Emerging from the context of a community in Trindade, Brazil, the goal of the present project was to support members of a community-based organization in capacity development endeavors for needs they identified. Although the implementation of a series of courses is not a novel approach to capacity development, the commitment to critical pedagogy, the clarity of capacity development of what and for whom that was based on an assumption of capacity, defining the capacities needed and the purpose, and being guided by theory, were perhaps the more novel approaches used in this action research project. The goal of capacity development as attempted in the present research project was not to develop skills so that people may fit into an unjust structure or for ease of social control, but to support the enhancement of

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skills and knowledge to challenge the existing state of affairs. Instead of the insistence on Indigenous Peoples becoming willing partners in flawed governance systems, much work is needed to continue to address these significant flaws and failings, and to critically challenge the status quo.

**Keywords:** Capacity building/development; Natural Resources Management; Environmental Governance; Decolonization; Indigenous Peoples; Brazil

4.1 Introduction

Capacity development is an approach and a methodology that originated in colonization and has yet to be decolonized. It is often premised on the belief that a problem exists, usually in a marginalized group, including Indigenous peoples, and that a response can be designed to address this problem (Tedmanson, 2012). There can be many serious issues with the philosophy or reasoning behind a capacity building approach. The underlying assumption for the most part is that there are deficiencies in the abilities of the group in question, and does not question the possibility that the system or structure may be dysfunctional.

Capacity development has a long history in practice, but less so in academic theory and scholarship. Now considered a field in itself, capacity development originates in the realm of practice, and did not originate in any particular academic discipline (Horton et al., 2003). Correspondingly, “much of the analysis and writing on this subject has been done by individuals associated with development assistance or technical cooperation
agencies” (Horton et al., 2003:34). About 25% of international donor assistance is spent on capacity development initiatives, yet there continues to be limited evaluations on their effectiveness (Lange 2013), As a result, capacity is a vast concept to engage with and a challenging area for theory development. More importantly, there continues to be little critical analysis of the assumptions behind capacity development, and a disconnect between the development literature and the need to decolonize the methodology and practice of Indigenous development (Smith, 2012).

What is the basis of capacity development? Smillie (2001) states that capacity development has been used synonymously with institution building, institutional development, and organizational development. The community development movement of the 1950s and 1960s was “focused on building the self-help capacities within rural communities” (Smillie, 2001:8). As Baser & Morgan (2008) observed, capacity issues effect almost every aspect of development, and capacity development has been an important feature of international development since the late 1980s, “but for most of the 1990s, both capacity as an outcome and capacity development as a process…attracted little in the way of serious research…this pattern began to change in 2001 with a major UNDP initiative [that criticized] the weak contribution of technical assistance to capacity development” (Baser & Morgan, 2008:7). In the major study that these authors carried out, they were surprised to find a common pattern demonstrating that practitioners had virtually no interest in abstract concepts or in theories. In the study, Baser & Morgan (2008:9) endeavoured to focus on both theory and practice, but found this to be difficult for three reasons;
1) The current approach to capacity building is largely focused on the macro and the aggregated levels such as state building, improved governance and democratisation. This perspective can provide strategic guidance but little operational direction.

2) Historically, most capacity analysis has been based on operational experience in project management, therefore much of this analysis is instrumental and concerned with prediction, targeting, control, results and accountability.

3) Practitioners are being required to do more with less and have little time and interest to devote to abstract concepts and theorizing.

Baser & Morgan (2008:13) were unable to find “a set of universal principles that govern all capacity situations and that can be easily stated”. The lack of a clear definition of capacity development or of an agreed upon approach is well-documented (Black, 2003), as is the lack of widespread success. In the field of international development there is disillusionment by many about the realities of capacity building on the ground (Mequanent & Taylor, 2007). For example, Ubels et al. (2010) estimate that hundreds of thousands of people “do” capacity development, but there is little ability to evaluate if it is being done effectively (Ubels et al., 2010:1-2).

Perhaps more importantly than the recognition of the lack of sound theory, are the criticisms raised by authors such as Black (2003), Craig (2007, 2010), and Tedmanson (2012). Tedmanson raises important points about in the use of capacity building with
Indigenous peoples in Australia. Noting the false sense of security of development practitioners and government agents in the superiority of their worldview, Tedmanson describes uncritical use of capacity building as 'epistemological racism', and provides examples grounded in Australian experiences.

Recognizing these challenges, how can capacity development be approached in a research project? This paper will describe a community-based capacity development process in Trindade, Paraty, Brazil, that emerged through a negotiation between a community-based organization and the administrative branch of the Ministry of the Environment regarding protected area boundaries and regulations.

The capacity development process described in this paper was designed after a critical analysis of capacity development initiatives as described in development literature, and after spending significant time in the community in question, and building on the work of Bahia et al. (2013) and Araujo (2014). ‘Critical’ is used in the sense of critical theory, a body of theory concerned with emancipation that challenge social structures and the social order, and raise questions of social justice (Keucheyan, 2010) (see for example Said, 1978; Taylor, 1994; Spivak, 1988; Fraser & Honneth, 2003). Even with a critical approach, the capacity development process described in this paper only went as far as to support development of skills and relationships to better struggle for rights within a structure, and was not designed as a challenge to the structure itself. The structure requires compliance to an externally developed management system that creates disadvantage at the community level. The system in place was developed by the Brazilian
government, but assumptions behind it reflect colonial thinking that excludes and
discredits Indigenous local populations.

The next section of this paper will provide a description of the evolution of community
development and the emergence of capacity building as a part of development
terminology and approach. The subsequent section outlines the main bodies of theory that
have influenced approaches to capacity development, followed by an overview of the
range of ways in which capacity development is conceptualized and addressed in the
natural resources and environmental management literature. Following this, the focus will
be on the research project in Trindade, and the paper concludes with a critical reflection
on how capacity development was approached in this context.

4.2 Community Development to Capacity Building

Ramisch (2009) positions community development as emerging from the practice of rural
development in the 1950s. A great deal of capacity development has of course been
concentrated in urban settings, largely through the public sector or through technical
assistance (more currently called technical cooperation) (Fukuda-Parr et al., 2002). The
focus for this paper is more rural, community-level development and capacity building.
Holdcroft (1978) states that in the developing world, the community development
approaches “had its early roots in a) experiments by the British Colonial Service,
primarily in Asia, b) United States and European voluntary agency activities abroad, and
c) United States and British domestic program in adult education, community
development services, and social welfare” (Holdcroft, 1978:5).
“…community development programs were not intended to, nor did they, affect the basic structural barriers to equity and growth in rural communities. Rather, they accepted the existing local power structure as a given…thus strengthening the economic and social position of the elites. There was little attention given to assuring that benefits from community development programs accrued to the rural poor. Realizing this, the poor majority of the villagers did not respond to the community development approach” (Holdcroft, 1978:19).

There were no widely agreed upon definitions of community development throughout this time period. Community development was seen as a complex, dynamic, context specific approach addressing entire communities, and, as such, a specific definition was deemed to be impossible and undesirable (Holdcroft, 1978). There are very few published materials that document the community development approach of this time period, and a lack of theory or of a “coherent body of knowledge”, which is in part due to the “diverse nature” of community development (Holdcroft, 1978:3).

After the ‘demise’ of the community development approach, as put by Ramisch (2009:344), there were two competing approaches – an emphasis on small-farm growth and agricultural, and ‘integrated rural development (IRD), which emphasized a ‘balanced’ approach through large-scale projects. To take us to the current time frame, the decades from 1950 to 2000 can be summarized, recognizing that this is oversimplified and that
there are not such linear beginning and end dates to the different phases (Ellis & Biggs, 2001:444, Ramisch, 2009:344, Craig, 2007):

- From community development (1950s) to the (1960s) emphasis on small-farm growth, integrated rural development and green revolution.
- Continuing small-farm growth within integrated rural development (1970s);
- From state-led rural development (1970s) to market liberalization (1980s);
- Process, participation, empowerment and actor approaches, rapid rural appraisal (1980s and 1990s);
- Many international organizations and governments ‘rediscovered’ community development, although did not always use that terminology (late 1980s and early 1990s);
- Emergence of sustainable livelihoods as an integrating framework (1990s) and Participatory Rural Appraisal;
- Mainstreaming rural development in poverty reduction strategy (2000s) and growing critiques of participation.

The re-emergence of community development did not appear to build on lessons from the first wave, however. As Craig (2007) argues, in reality, the international and national organizations have not addressed social justice, nor have they paid attention to the needs of the poorest, including their right to participate in decision-making and concerns with equality.
A new ‘branch’ of community development emerged in the late-1990s, called ‘community-capacity building’. The terminology is slightly different, but as an approach it remains difficult to distinguish from community development and it appears that the change in terminology simply allowed governments around the world to implement the same programs and policies under a different name (Craig, 2007). The term ‘capacity-building’ in itself became mainstream in the early 1990s, and has been credited to have emerged in Agenda 21 of the UNCED and the UN Commission on Sustainable Development (Craig, 2007). Linking capacity building with community development happened shortly after. This link stems from the UN admitting that it needed to improve its capacity to interrelate with communities, whereby the discourse shifted to a focus on participation and an acknowledgement of the “links with community development… Capacity-building then evolved in policy discourse into community capacity-building” (Craig, 2007:341).

The use of ‘community capacity-building’ may have some utility in being able to distinguish organizational capacity development from community, but there remains some confusion as “building the capacity of organizations within deprived communities is seen to be a part of CCB [community capacity building]” (Craig, 2007:342). In any case, as Craig (2007:342) observes, the use of simply capacity-building “remains common in the development literature from both North and South”. Ultimately, Craig (2007) and others who have explored this topic conclude that community capacity-building is the same as community development, and that both terms are “arenas for
political contestation” that have been “manipulated by governments to give a false sense of community ownership and control” (Craig, 2007:354).

Simpson et al. (2003:278) summarize the rhetoric of community development as follows:

- Communities should be responsible for their own development;
- They need to be empowered. This is done by enhancing their skills – capacity building – and then they should use these skills towards their development;
- This should be done through a participatory process, and is built on rural traditions of volunteerism and self-sufficiency.

The idea is essentially that community development should be addressed through capacity building, community empowerment, and community decision-making. Simpson et al. (2003) question whether sustainable community development lives up to this rhetoric. Is community development a revolution back to, or a continued means of population control? In the ‘war on terror’ era, are ‘cold war’ era tactics regaining prominence? “…there can be little doubt that the UK government’s understanding of CCB [community capacity building] is linked to its desire to have more stable, organized communities with which it can more easily engage to pursue its own ideas of community cohesion (particularly given the increasingly racialized impacts of the so-called ‘war on terror’)” (Craig, 2007:353).

The ‘self-help’ approach integral to community development that has been widely used and advocated has also been subject to incisive criticism; “Transfers of resources are
degrading, goes the argument, so let’s boost the self-esteem of the poor by ‘letting’ them take care of themselves” (Berner & Phillips, 2005:21). The oft-repeated philosophy of having people as ‘subjects’ and not ‘objects’ seems obvious, but can be oversimplified and disconnected from the structural and political barriers that in fact limit peoples’ agency.

Christenson (1989) reviewed over three hundred articles published in the *Journal of the Community Development Society* from 1970 – 1988, and identified the major themes in community development. ‘Self-help’, described as the assumption that “by working together, people can improve their situation” (Christenson, 1989:32), was the dominant theme, used or advocated in almost all of the articles reviewed. The advantage of the self-help approach is described as being that “the people themselves determine what is to be done; in the process they learn both how to achieve a specific task and how to accomplish future goals” (Christenson, 1989:34). While Christenson (1989:34) clarifies that self-help is a strategy or a philosophy, not a theory, and is lacking in “research-tested, theoretically related ideas”, he does not raise any of the issues that others have criticized about this approach, aptly summarized by Berner & Phillips (2005:20):

Most notably, the community self-help paradigm needs to be refined by a recognition that the poor cannot be self-sufficient in escaping poverty, that ‘communities’ are systems of conflict as well as cooperation, and that the social, political and economic macro-structure cannot be side-stepped.
In summary, capacity development emerged as a part of community development. It is plagued by definitional disagreements and a lack of theory. What is the target and what is the purpose? Is it a means, a process or an end in itself? (Smillie, 2001). Whose capacity needs to be developed, and why? Much of the practice of capacity development have been overly simplistic, unsuccessful, and disconnected from issues of power, structures, and heterogeneity. The following Figure shows the approximate timeline of the shifts in development approaches.

While this paper brings a critical lens to capacity development with a particular focus on the use of this approach with Indigenous Peoples, other authors have focused more broadly on what they consider successful examples of capacity development. Even so, most of the literature about capacity development is focused on defining what capacity development is, how to do it better, and how to evaluate capacity development. This
paper argues that we must go beyond that and challenge the assumptions behind CD. This is aptly stated by the editors of the volume called *Capacity for Development* co-published by the United Nations Development Program, the UN agency with capacity development as its central mandate. After presenting innovations that the authors hope will lead to a new paradigm for capacity development, they state:

“Perhaps the biggest obstacle in developing such innovations lies in the human mind itself, which can remain imprisoned in old assumptions and practices. Institutional innovations will have to be built on new assumptions about the nature of development, effective development cooperation, the aid relationship, capacity development and knowledge. These assumptions have to shift to new assumptions in order to build a new paradigm” (Fukuda-Parr et al., 2002:19).

Although this publication is primarily focused on how to improve capacity development and technical cooperation, it does make these important observations about assumptions that are important to this paper. Fukuda-Parr et al. (2002:5) lists one of the criticisms of technical cooperation as the issue of undermining local capacity; “Rather than helping to build sustainable institutions and other capabilities, technical cooperation tends to displace or inhibit local alternatives”.

Much capacity development still remains at the level of “good intentions” when there is a lack of clarity about why it is being done and the assumptions behind it. There is little academic literature about capacity development that questions the assumptions and
asymmetries in this approach. Much is published in journals such as *Development in Practice* by practitioners and civil servants, such as NGO staff, government employees, and evaluation specialists. There are of course many examples of projects with positive outcomes. “There have been positive micro-improvements, but not the kind of macro-impacts that build and sustain national capacity for development” (Fukuda-Parr et al., 2002:3). In other words, there are examples of success but they do not seem to have lead to social change, especially in the context of Indigenous peoples (Bockstael & Watene, 2016).

If assumptions are not questioned or challenged, then CD efforts may be misdirected, off-target, or harmful. Those providing, directing and funding capacity development are not apolitical or impartial actors, they have their own values and agendas (Hsu et al 2015).

4.3 Trindade Research

4.3.1 Context

The remainder of this paper will describe an action research project that was conducted by a team of researchers in the coastal community of Trindade, Brazil. The project had a multi-phased approach, with capacity development the focus at the latter phase. In essence, there was no predetermined capacity development, this was left to be developed in-situ after months in the field, learning and conducting data collection activities. The issues in Trindade are largely with control over community land and natural resources and access to the waters, for both fishing and community-based tourist operations. The community is also facing challenges in negotiating the rules of use of a
protected area being enforced on community land and sea space. Trindade’s original population group are Caiçara people. The Caiçaras are a mixed heritage group of Indigenous People, Portuguese, and Africans. They are not legally considered Indigenous peoples in Brazil, but maintain an ongoing direct connection with the land and sea and a distinct self-identity, and as such they would meet the international definition of Indigenous peoples as articulated in the International Labour Organization (1989) Convention No. 169. Their legal classification in Brazil is as ‘traditional people’, which ascribes them a specific package of rights that does not include land tenure. The rights ascribed to the Caiçara as 'traditional' people do not secure their land or livelihoods, and there is disagreement over what it means to maintain rights as a 'traditional' person while adapting and changing lifestyles and livelihoods.

There were two parallel consultation processes underway at the time of research. The first was a community-wide consultation process with the government environmental agency ICMBio\(^{13}\), about the management plan for the enforcement of a protected area on community land and marine space (see Bockstael et al., 2016). The second was specifically between ICMBio and the Associação de Barqueiros e Pescadores Tradicionais de Trindade/ Association of Small-scale Fishermen and Boatmen of Trindade (ABAT), regarding licenses for ABAT members to continue to operate small-boat trips with tourists in the protected area. This negotiation brought the need for organizational development for ABAT to the fore, and as part of the process ABAT members were required to participate in a number of courses. ABAT is an important

\(^{13}\) Instituto Chico Mendes de Conservação da Biodiversidade/ Chico Mendes Institute for Conservation and Biodiversity
community-based organization in Trindade, for several reasons. It is a large community-based organization, with approximately 35 members, therefore representing a large proportion of families in Trindade. The organization is made up of people with significant direct interaction with the natural resources, through fishing and through tourism activities.

Over time, members of the research team developed strong relationships with ABAT members, particularly with the President and other leaders. Throughout the research period, researchers consistently explained that the research included an objective to support some form of capacity development, and thus ABAT asked that the research team assist with the delivery of the required courses. ICMBio’s insistence that ABAT take courses fits very well with the criticisms around making people fit into an established structure. As Tedmanson (2012:251) aptly explains, “through ‘building the capacity’ of governing institutions and Indigenous organizations, pressure is exerted for compliance with externally imported logics that replace customary practice”. The park did not recognize the existing capacity and way of working of ABAT, nor did they provide detailed information about what needed to be covered in the courses (five in all, but two technical courses that ABAT sought separate assistance in completing). ICMBio lacked the capacity to implement the prescribed courses, but insisted that ABAT members must figure out how to successfully complete the courses.

As such, through the relationship between ABAT and the research team, it became an opportunity to turn a difficult requirement into a more meaningful experience for ABAT
members. It was decided that as the courses would ensure participation of the majority of ABAT members, they would provide an opportunity to address some organizational challenges that ABAT was facing and an opportunity to really examine the structural, political, and environmental issues impacting on them as members of ABAT and as community members of Trindade. In summary, the challenges faced by Trindade that were explored in this paper revolve around access to and control of natural resources and government policies around implementation of a protected areas and the associated imposed negotiation process (Bockstael et al., 2016).

4.3.2 Action Research: The Process is the Outcome
This was a qualitative, action research project, with participatory methods. Study design was guided by two theoretical areas: popular education (Freire, 1970), and Indigenous development with identity/ self-determined development (Tedmanson, 2005; Makuwira, 2007; Tauli-Corpuz, 2008). These Indigenous led forms of development center on a recognition that capacity exists within Indigenous peoples and communities and that they should determine and direct their own development. Power and worldview are important aspects. The core idea of popular education is conscientisation, translated from a Portuguese term, meaning critical consciousness. To be able to overcome oppression, “people must first critically recognize its causes, so that through transforming action they can create a new situation, one which makes possible the pursuit of a fuller humanity” (Freire, 1970:47). The starting point therefore is to help people critically assess their situation by understanding the forces and drivers of change that are affecting them. As Simpson et al. (2003) suggest, you start with people, not with projects. The starting point
therefore is to help people critically assess their situation by understanding the forces and drivers of change that are affecting them.

Action research mainly occurs when people work together to deal with issues and make changes. Action Research is defined by Reason & Bradbury (2008:4) as “a participatory process concerned with developing practical knowing in the pursuit of worthwhile human purposes”. Action research in its nature is participatory. In fact, it would not be possible to conduct action research without the participation of stakeholders to develop questions and make sense of the status quo, and determine the action. Further, a critical element of action research is that it is “liberating and emancipatory” (Reason & Bradbury, 2008: 4-5), again linking back to Freirean philosophy.

Fieldwork was conducted over approximately 15 months in 2013 and 2014. Interviews, focus groups, and small group meetings were carried out with 75 people, and meetings between community members and government authorities were observed. These formed the basis for the capacity development initiatives. Relationship development was key to being able to identify priority areas for capacity development and to work in a meaningful way with community members. Through these relationships the capacity development design emerged based on demands and identified needs, and the initiatives were enhanced based on researcher knowledge from data collection processes, grounded in the theoretical areas described above.
Organizational development started before the courses. The Research Assistant, Natalia Bahia, who had developed a strong rapport with ABAT leaders, took the lead in facilitating three meetings to guide ABAT through a process of visioning a desired future, assessing the current situation, establishing concrete short-term goals, and organizing working groups with identified leaders. Two courses, for a total of 65 hours, were then implemented with ABAT members. These were designed and implemented through a partnership with the University of Manitoba, The Commons Conservation and Management Group (CGCOMMONS)/University of Campinas, and a Brazilian NGO called the Fisheries and Food Institute (FIFO).

The courses were deemed successful by participants and facilitators, and favorably received by park authorities. The Park dictated the title of the course and three required topics in each course, but the courses were largely designed based on needs expressed by ABAT members and observations and analysis by research team members.

Table 7: Summary of key activities with ABAT

<table>
<thead>
<tr>
<th>Activity</th>
<th>Timeframe</th>
<th>Participants</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational development with ABAT</td>
<td>September 2012 - December 2013</td>
<td>Variable, average of around ten participants in ongoing meetings</td>
<td>Field Assistant led, supported by other members of the research team.</td>
</tr>
<tr>
<td>Course for ABAT - Boas practicas de atendimento ao Visitante / Best practices working with tourists</td>
<td>30 hour course over 6 days in October 2013</td>
<td>34 participants received certificates, all men</td>
<td>Course developed and facilitated by members of the research team and other allied professionals.</td>
</tr>
<tr>
<td>Course for ABAT -</td>
<td>35 hour course over</td>
<td>29 participants</td>
<td>Course developed</td>
</tr>
</tbody>
</table>
A number of sessions were done at the beach where the small-scale tourist boat operation takes place. Participants did role plays, and actually practiced implementing different things they learned with each other and with facilitators, and observed each other as they worked with tourists. They tried out different ways of working, had reflective group sessions, and then decided what to actually implement as part of their organization and regular work. They worked on how to observe each other and practiced how to give feedback in a positive manner.

From the perspective of project participants and research team members, participation in the courses has led to multiple benefits. Outcomes reported by participants included new knowledge and improved unity of the group, which was a big issue they were struggling with prior to the courses. ABAT members wrote the following reflection on the outcome of the courses a few weeks after they were completed:

"The activities realized...had the main outcome of strengthening the Association by adopting a new form of collaborative work. Today, by dividing the amount of revenue collected daily among all those members who have worked, the boatmen work as a real team and give a better reception to tourists. For example, they can explain the history of Trindade or stop to take pictures during the trip, among other changes. The previous way of working led to competition and an individualistic
approach among the members, and diminished tourist service. The work environment has become friendlier, even including the possibility for boatmen to have time for lunch. This was a very important step forward to ensure continuity in the exercise of the activity [the boat trips with tourists] started inside the National Park, and to increase the participation of the community in both work groups and in the council, and furthermore to manage the number of visitors to the Natural Pool of Cachadaço [the main destination of the boat trips].

Besides the adoption of a collaborative way of leading activities and improving work conditions…[the courses] enabled ABAT members to give a better service to tourists, by respecting and acknowledging the value of our culture through community-based tourism. The project also helped increase ABAT's participation in negotiations with the National Park. The boatmen had access to important information during the process, in this way they felt more confident in order to express their demands and points of view. In addition, some members began to get involved and participate in the work group discussions to formalize boat tours, leading to the emergence and training of new leaders inside ABAT."

Researcher observations were consistent with the reflections shared by ABAT. The courses were designed to increase participants' understanding of their current context, and there was evidence of this happening throughout the sessions and in subsequent activities. In a short timeframe, observations of ABAT included greater preparation for meetings with ICMBio staff, and improved group representation at meetings. The improved unity
of ABAT members and their ability to work in an organized and professional manner combined with an understanding of the context and power structures have enhanced the ability of ABAT to negotiate with the Federal Park Authority.

4.4 Reflections for Evaluating the Application of Critical Capacity Development

The ongoing design and implementation of international protected area management systems in general and the one described in this paper continue to be based on a foundational assumption of a lack community capacity for governance of the resources on which they depend, the ‘deficit’ model (Kenny & Clarke, 2010). While there is a growing movement to change this, in the predominant top-down development, little validity is given to local knowledge and endogenous management systems (Berkes, 2015; Walsh, 2014). Emerging from the context of Trindade, the goal of this project was to support members of a community-based organization in capacity development endeavours for needs they identified. Although the implementation of a series of courses is not a novel approach to capacity development, the commitment to critical pedagogy, the clarity of capacity development of what and for whom that was based on an assumption of capacity, defining the capacities needed and for what purpose, and being guided by theory, were perhaps the more novel approaches used in this action research project.

Key factors that led to the positive outcomes reported and observed include respect and trust in the relationships between community members and researchers developed through long-term relationships, shared identification of capacity gaps, determined
leadership in ABAT, and critical pedagogy. This project was designed with the clear understanding that there was a great deal of capacity within the community and participants, there was no assumption that the research team had capacity to share that would be useful to the community, but the gaps and needs were collaboratively established and agreed upon. This was also possible due to the existence of strong leaders in ABAT who were able to identify the value of the courses and determine broader areas of exploration that would be useful for ABAT members.

The relationships with community members and the research team were on a professional level, and in many cases friendships developed. The trust and understanding developed through these relationships were key to the successes achieved and to a concern with ethics in the research process, beyond the protectionist concerns in the academic model (Lincoln & Denzin, 2008). It also allowed for matching the needs identified with the capacity of the outsiders, those offering support. A caution to be offered with advocating the approach of developing trust relationships with community members. Relationships are often described as something that need to be improved so that the powerful group can get what they want; as a means to an end. This is often a clear statement of field research - develop trust to gain access to people and to information. Building relationships and trust need a foundation of honesty. If the relationship is only temporary, for the life of the research project, than this should be clear. Otherwise it is manipulative, and a continuation of exploitative research practices (Smith, 2012).
A key element to the successes achieved links to the critical pedagogy developed by Freire (1970). The course topics were grounded in the realities of peoples' lives, and pedagogical approaches were interactive and experiential. A number of participants came reluctantly to the first day of the first course. Literacy levels varied, and many had little experience with a formal education setting. Fortunately, by the end of the first day participants feedback was that they were comfortable with the materials and approach, and that what they were learning was relevant. Helping people understand the broad, big-picture, outside of their community and the immediate interactions with government authority helped people clarify the issues and understand the structures and policies that are causing oppression and unjust situations. Finally, the learning was multi-directional and could be described in many ways as a capacity sharing project (Tedmanson, 2012), at least between the community participants and the research team.

There were multiple challenges to the conceptualization and implementation of the project, and number of lessons learned throughout the process. Maintaining the focus of capacity development on need for emancipation and on structural changes requires constant effort. It is far easier to focus on technical aspects, to do ‘training’. Facilitation of this type of approach is more demanding. Focusing such long-term and extensive effort with one community group did create some resentment within the community, and this did impact on perception of researchers held by some community members who were then unwilling to participate in other aspects of the research project and at times openly hostile to researchers. There was already a great deal of fear and suspicion around ICMBio authorities motives for changes in protected area management, and being
excluded from the courses seemed to contribute to a misunderstanding of the role of researchers, and in some cases aroused suspicions around the role and relationship of researchers with ICMBio.

4.5 Discussion

In Brazil, the push to implement protected areas have been happening under a new policy that requires public participation. The policy is not sufficient to allow for meaningful participation (Bockstael et al., 2016), however it is a window of opportunity to have more public reasoning and increase awareness of the social impacts of the conservation approach. This paper described a capacity development initiative designed to respond to this opportunity. Based on the pedagogical principles of Paulo Freire, this process increased participants' understanding of their current context, strengthened the unity of the community-based organization, and enhanced their ability to negotiate with the Brazilian environmental authority. In the field of natural resources and environmental management, policy and practice have historically been based on the assumption of a lack of capacity for Indigenous and traditional communities to manage their resources. This case is an example of the opposite, building on existing capacity for empowerment. Capacity development in this case was not about trying to develop skills so that people may fit into an unjust structure or for ease of social control (Craig, 2010, Stoecker, 2010), but support the enhancement of skills and knowledge to challenge the existing state of affairs, to a certain extent. The capacity development approach described in this paper was not radical. One the one hand, researchers did not assume that they automatically held capacity that community members could benefit from and approached the process
with great respect for the existing capacity, and the capacity development put in place responded to an identified need as requested by the participants. On the other hand, it was still ultimately about improving the situation without radically changing the status quo.

Capacity development has a long history as the integral component of community development, and shares many of the criticisms. Conventional capacity development has colonial roots, and for the most part, does not address issues such as redistribution or transfer of resources. It does not address power differentials, colonial structures, and marginalization of different people and groups (Kenny & Clarke, 2010; Ife, 2010). Despite efforts for a more bottom-up approach, it remains predominantly top-down and externally designed, including in the field of environmental governance where there is also great pressures from the profit-driven private sector (Craig, 2010).

The emerging self-determined development literature is concerned with issues of power and structures (Makuwira, 2007), thereby addressing some of the criticisms of the dominant development paradigm. It approaches capacity from a different cultural perspective and asks questions about whether there is really a gap in capacity, or “a question of resistance, disempowerment from hybridity and contestation over strategies for readjustment?” (Tedmanson, 2005:3). Within a capacity building approach, we need to ask ourselves; are we helping people adapt to an imposed system, participate in a system, or take action against an imposed system and possibly change the system? Important questions include “who defines the capacities that communities need and why? What control do local communities exercise over the capacity-building process? And
who defines what a strong community would look like?” (Craig, 2007:354). Ultimately, capacity building “is an approach to development, not something separate from it” (Eade, 1997:24), and the approach is informed by the discipline or body of theory being followed. Table 8 describes some of the bodies of theory that could inform capacity development.

Table 8: Bodies of theory related to capacity development

<table>
<thead>
<tr>
<th>Bodies of theory</th>
<th>Description</th>
<th>Key references</th>
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<tbody>
<tr>
<td>Research Capacity, Participatory Action Research</td>
<td>Focus on enhancing research capacity as part of development; linking theory, action and participation to enhance power and address exploitation of those typically researched.</td>
<td>Fals-Borda, 1987</td>
</tr>
<tr>
<td>Critical pedagogy, Conscientization</td>
<td>People need to understand their oppression and the political forces affecting their lives. Education should be grounded in the reality of participants. Focus on dialogue and praxis (action/reflection).</td>
<td>Freire, 1970</td>
</tr>
<tr>
<td>Development with Identity/ Self-Determined Development</td>
<td>A recognition that capacity exists within Indigenous people and communities and that they should determine and direct their own development. Power and worldview are important aspects.</td>
<td>Tedmanson, 2005; Tauli-Corpuz, 2008</td>
</tr>
<tr>
<td>Human Development and Capability Approach</td>
<td>Expands development beyond a narrow focus on economics; focuses on capabilities (opportunity set, freedom to choose) and functionings (achievements).</td>
<td>Sen, 1993, 1999; Nussbaum &amp; Sen, 1993</td>
</tr>
<tr>
<td>Communicative Action</td>
<td>People maintain and transmit cultural identities, through how they communicate,</td>
<td>Habermas, 1984; Prabhu et al., 2007</td>
</tr>
</tbody>
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through deliberative discourse, and this can lead to action.

<table>
<thead>
<tr>
<th>Radical Community Development</th>
<th>Critical approach; analysis of power and discrimination, focus on the root cause of discrimination; leads to collective action</th>
<th>Ledwith 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformative Learning</td>
<td>Transformative learning theory; how participation can lead to instrumental and communicative learning and ultimately to behaviour change.</td>
<td>Marschke &amp; Sinclair, 2009</td>
</tr>
</tbody>
</table>

The first four bodies of literature in this table were used in the present action research process in Trindade. The other three bodies of theory are also relevant, and there is a fair amount of overlap between the first and second sets. For example, the analysis of power and focus on the root causes of oppression found within radical community development links to critical pedagogy, as does the reflexive element of transformative learning and the deliberative discourse as a part of communicative action. Ideas about collective action permeate many of these bodies of theory. While only four of these theories/frameworks were substantially used for the present project, all of them hold possibilities for developing a stronger theoretical basis for capacity development approaches.

There is very little in the natural resources and environmental management literature in terms of application of the bodies of theory in Table 2. There have been major changes in natural resources and environmental management approaches over the years involving attempts to shift to democratic governance through decentralization reforms and co-management (Berkes, 2015). For much of this period, people were assumed to lack capacity to sustainably manage the resources on which they depend. The current
literature largely refutes these assumptions, and advocates for decentralization of natural resource and environmental governance and recognition of traditional knowledge and community capacities. Pomeroy & Rivera-Guieb (2006) divide capacity development into three levels; individual, organizational and system or enabling environment, that “are nested within each other and there is regular interaction to form a whole” (Pomeroy & Rivera-Guieb, 2006:144). They consider individual capacity development as the most important area, and suggest that this should include “both members and non-members of fisher and other co-management organizations, as well as other beneficiaries of the programme” (Pomeroy & Rivera-Guieb, 2006:145). Regarding protected area conservation, many authors favour participatory conservation (Borrini-Feyerabend et al. 2004) and contend that capacity building is needed on both the part of government authorities and community members (Pomeroy & Berkes, 1997; Rodriguez-Izquiedro et al., 2010). Although not always labelled ‘capacity building’ by the authors, there are a number of examples in the literature that specifically try to develop capacity or that include it as an important element. Based on a wide range of attempts to implement capacity development in environment and resource management, there seems to be no clear and consistent framework or philosophy guiding this approach. The literature is characterized by a lack of questioning of the assumptions behind conventional approaches, and no clear theoretical basis (Table 2) is consistently used for capacity development.

4.6 Conclusion

As Tedmanson (2012:249) states, “modern management itself is a constructed concept predicated on dominant Western cultural values of control and instrumental rationality”.
This is applicable to the global environmental governance system. Although there are growing number of alternative voices (Beck & Nesmith, 2001; Davidson-Hunt, 2006; Berkes, 2012), policy design and implementation continues to be dominated by the Western belief in the ability to manage the environment through reductionist, scientific means, grounded in one worldview. Environmental management and capacity development are both colonial concepts imposed through the dominant governance regime, whether through government policies or by aid and development organizations (Eade, 2010; Tedmanson, 2012; Walsh 2014). The level of discussion and evaluation in the development world has not advanced much in recent times, nor has academic discourse, and there is limited critical writing about capacity development in any field (Kenny & Clarke, 2010). There continues to be a separation between Indigenous and development bodies of literature, and publications on capacity development continue to be dominated by a practitioner focus on evaluation. Tedmanson (2012:250), in the context of the impacts of government policies on Aboriginal Australians, highlights “the irrationality and disorder of those with the power to manufacture the terms of engagement”. Instead of the insistence on Indigenous people mimicking flawed governance systems (Bhabha, 1984), much work needs to be done in the field of environmental governance to continue to address these significant flaws and failings, and to critically challenge the status quo and at the very least shift to critical capacity building (Kenny and Clarke, 2010).

Did the present research project go far enough to avoid replicating the colonial thinking in the capacity building approach, and address many of the criticisms of capacity
development? Probably not. The assumption behind this project was that capacity
development needed to happen with both government agencies and community members.
However, as has been found in other situation with capacity development objectives, a
more critical analysis reveals more about negating existing governance structures, power
dynamics, and linear thinking and worldview, and not about capacity or the needs of the
community (Ife, 2010; Tedmanson 2012). The starting point was the insistence by
ICMBio authorities that ABAT members submit to capacity development to them fit into
the dominant system and that legitimized government authority over the people and area.
Dismissing all achievements in environmental management and community-led
development, the focus was on implementing an externally developed system for
management and regulation (Bockstael et al. 2016).

As observed with regards to Aboriginal people in Australia, “there is no formal
recognition of the urgent need to build the capacity of non-Aboriginal bureaucracies and
governments with a view to better engaging with the depth of Aboriginal knowledge and
the capacity of Aboriginal communities to have profound wisdom about their own futures”
(Tedmanson, 2012:268). This was the case in the Brazilian context described, and this
also applies to academic researchers. To meaningfully engage in decolonizing capacity
development, and perhaps move towards capacity sharing, much capacity development
needs to occur within academia. This may enable researchers to play a role in capacity
development, above and beyond the more obvious research capacity development (Abers,
2007). The goal of capacity development as attempted in the present research project was
not to develop skills so that people may fit into an unjust structure or for ease of social
control, but to support the enhancement of skills and knowledge to challenge the existing state of affairs. Instead of the insistence on Indigenous people becoming willing partners in flawed governance systems, much work is needed to continue to address these significant flaws and failings, and to critically challenge the status quo.

This paper makes multiple contributions to the field of natural resource management and environmental governance, to development more broadly, and specifically to Indigenous development. Although it does not demonstrate a fully decolonized approach, it does provoke academics and practitioners to critically analyze the assumptions underlying the approach.
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Chapter Five – Discussion and Conclusion

5.1 Introduction

Participation in governance, conservation and development, the capability approach, and capacity development, are all broad theoretical areas that have been explored in this thesis. This final chapter links the overall research findings in these areas to broader global literature and to current academic and policy discussions.

This chapter will provide a synopsis of research findings as they align with the three primary research objectives. The next section will discuss at length the three overarching themes identified that connect thesis findings more broadly and will discuss them in the global context. This chapter then concludes with the contributions of the thesis and the contributions regarding policy implications.

5.2 Overview of findings

Rapid and dramatic changes in the areas of development and conservation have taken place in Trindade over the past 50 years. These have led to questions of social and environmental justice, as has been described in other situations; “Human–nature interactions’ however, always entwine questions of social and environmental justice and deeper metaphysical questions of connection and meaning, inevitably giving rise to questions of human rights, Indigenous rights and environmental rights” (Johnson et al., 2015). The governance of these interactions, these relationships, have a legacy of harm, for the most part, in Trindade. Recent policy developments have been positive, but a thorough analysis shows where changes still need to be made, which can inform
conservation and development approaches in other parts of Brazil and the world.

The three findings chapters of this thesis are summarized as follows:

Table 9: Study findings by research objective

<table>
<thead>
<tr>
<th>Research Objectives</th>
<th>Main Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyze how recent changes to natural resources governance, including protected areas, has impacted on women, men, people with disabilities, youth and older adults.</td>
<td>Three main 'shocks' emerge as having major impacts on the way of life of community members: (a) Conflict with external commercial developers, (b) Paving of access road into community, and (c) Enforcement of a Federal Protected Area on historical community land and sea space. Issues with current conservation and development program. Participants argued for traditional rights as precondition to meaningful participation. Key themes were communication disconnect, capacity to participate, representation and conflict.</td>
</tr>
<tr>
<td>Identify current and desired community capabilities and priorities related to participatory natural resources governance.</td>
<td>The impacts of development and conservation policies are different for the five groups, as are the priorities for capabilities. Participants value their freedom to pursue the activities that define them as Caiçaras. They value what they are lacking or what they are at risk of losing. Capability priorities included quality family life, education/access to knowledge, good health, being happy, job/earning money, security, dignity, ability to stay in place, access to natural resources and peace.</td>
</tr>
<tr>
<td>Collaborate with local community members to identify capacity gaps related to natural resource management, and cooperate on capacity development initiatives as appropriate.</td>
<td>Capacity development building on strengths and driven by participants can be a positive approach with immediate and profound outcomes.</td>
</tr>
</tbody>
</table>

These findings of the thesis have relevance to important issues far beyond what is taking place in coastal Brazil. Four cross-cutting themes have been identified that connect to important global issues, and these represent the contributions of the thesis to broader
5.3 Overarching themes

Despite the large body of work, natural resources management remains an incredibly complex field and natural resources and the livelihoods of those who depend on them continue to experience decline and stress. Managing natural resources has been recognized as being about managing complex social and ecological systems; a series of relationships with multiple linkages across vertical and horizontal scales with external drivers of change (Berkes, 2006). Indigenous peoples have often been in a lose-lose situation. When human dependency on nature is denied, there are no limits to destruction and use of the resources; when conservation is seen as imperative, there is no argument stronger than the need for protection. Both arguments lead to destruction or preservation that do not consider the cost to those for whom these resources play a role in their daily lives and wellbeing. In the dominant conservation approach there is the ongoing assumption of superiority of knowledge of the governing class over the ‘other’, and the right to assert control and to govern (Said, 1978). The four overarching themes discussed in this section are (1) Decolonizing conservation and development approaches, (2) From co-management to co-jurisdiction with Indigenous peoples, (3) The nature and context of “meaningful” participation”, and (4) Marine Protected Areas as a form of “Coastal Grabbing”.
Theme 1: Decolonizing conservation and development approaches

There has been important writing in the area of decolonizing research methodologies, exemplified by the important and much referenced work of Linda Tuhiwai Smith (1999, 2012). Smith’s work questions the assumptions of epistemological superiority implicit in Western research paradigms, and reviews how imperialism is entrenched in academic disciplines and ways of knowing. Smith endeavors to deconstruct the colonizing aspects of research, and goes beyond that to examine different approaches that can improve research with and by Indigenous peoples. Smith provides a compelling argument about how decolonizing research is a step towards Indigenous peoples self-determination and to taking back control over their own knowledge, worldviews, and practices.

Beyond the need to both decolonize research approaches, there also is a need to decolonize theory and practice, including within the vast field of environmental governance. This applies to Indigenous and traditional peoples, and can apply to resource dependent local communities. While issues of power and worldview are recognized in the environmental governance literature, there is limited discussion in this literature that explicitly uses the language of decolonization. Adams & Mulligan edited a book on decolonizing nature and conservation, and argued that “the nature conservation movement, in its various manifestations, has reflected the complexity of the overlapping agendas of colonialism and decolonization” (2003:292). In Canada, Stevenson (2004, np) also applies this terminology to co-management arrangements in the north, and states that “In fact, it would be difficult to conceive of a more insidious form of cultural assimilation than co-management as currently practiced in northern Canada”, and explains that
systemic inequities need to be addressed to allow for “the “real” inclusion of Aboriginal peoples and their knowledge and management systems into co-management practice”.

While there have been improvements, for the most part approaches to governance continue to discount Indigenous peoples and local communities use of and role in nature. The dominant culture continues to separate people from nature, destroy nature, and refuse to meaningfully relinquish control and devolve power. Indigenous peoples longstanding roles in managing their land are often denied (Plumwood, 2003; 59), as are the community-based resource management practices of local communities. Conversely, they are often also accused of misusing nature, and therefore must be removed or governed.

Based on these challenges, and often stemming from crisis (Plummer & Fitzgibbon, 2006), new management systems have emerged or been proposed, studied and evaluated. A system that has been widely implemented and researched is called, among other things, co-management (Jentoft, 2000; Berkes, 2009). Co-management basically means bringing together the knowledge and needs of all resource users, rights holders and stakeholders at a local, regional, and national level, to share responsibility and power to manage resources (Berkes, 1994; Castro & Nielsen, 2001; Plummer & Fitzgibbon, 2006). One of the key elements of co-management is also one of the most difficult to achieve – power sharing, and there is disagreement in the literature about how much success has been achieved globally in reaching real co-management arrangements (Pomeroy & Berkes, 1997; Pomeroy et al. 2001; Jentoft et al. 1998; Jentoft, 2007). As Pomeroy and Berkes argued almost 20 years ago, “If co-management initiatives are to be successful, basic issues of government legislation and policy to establish supportive legal rights and
authority frameworks must be addressed. The establishment of an appropriate government administrative structure and an enabling legal environment are essential in efforts to promote and sustain existing local-level fisheries management systems and/or to develop new co-management systems” (Pomeroy & Berkes, 1997:465). This requires a recognition of different laws and legal systems, and of different worldviews. The ensuing 20 years have largely demonstrated the unwillingness or inability of governments to share power and allow Indigenous peoples and other resource dependent communities to make decisions. In Trindade, there was a flawed process to consult on the protected area management plan, and there is no indication of the possibility for co-management of the protected area.

The Brazilian government process towards protected area managed, analyzed and described at length in this thesis, was disempowering to the Caiçaras. Even though the process would barely register on a co-management spectrum, it is consistent with what is found widely in Indigenous participation in co-management, that participation is disempowering and that the processes do not leave space for the “inclusion of their values, understanding, knowledge and institutions” (Stevenson, 2006:172). There is also very little local and bureaucratic capacity to support effective participation and representation (Natcher and Davis, 2005). Co-management thinking, research, and advocacy have challenged the dominant conservation approach. Unfortunately, as Colchester (2004) outlines, the improved approach to conservation has not resulted in widespread changes at field level. For example, Colchester sites case studies of 36 protected areas in Latin America, Africa and Asia, which demonstrate ongoing violation of the rights of
Indigenous peoples.

Co-management is a form of collective governance. The definition often cited for collected governance is by Ansell & Gash (2008:544), “A governing arrangement where one or more public agencies directly engage non-state stakeholders in a collective decision-making process that is formal, consensus-oriented, and deliberative and that aims to make or implement public policy or manage public programs or assets”. This definition assumes that only public agencies can engage other stakeholders. However, if Indigenous peoples and local communities controlled their lands, they could initiate collective governance and engage stakeholders as they saw fit.

In the protected area researched in this thesis, the focus was on implementing an externally developed system for management and regulation, dismissing all achievements in environmental management and community-led development. Co-management initiatives invite people with multiple epistemologies to participate and seeks to have all impacted stakeholders around the same table. This approach represents a major step forward, but the structure tends to be within a management system emerging from a dominant society worldview and rational. While this may be appropriate in some contexts, it should not be assumed to be the only way forward. In many cases it allows for participation, but no real control and no devolution of power. The structures remaining centrally designed and controlled, and usually interact with international conservation bodies and NGOs. Much effort has been made to fight for the recognition of the knowledge held by Indigenous peoples and local communities (Berkes, 2006) but
ultimately conservation and development approaches continue to reflect the ‘persistence of the sort of colonial framework that treats the basic land relationship as one of European center to colonial periphery” (Plumwood, 2003:63) or of rural periphery to urban centers.

Given the state of affairs, there is a point to be made about Indigenous peoples in general. In many countries, Indigenous peoples have jurisdiction over their own land. This gives them a unique position with regards to resource management and negotiating management agreements (Premauer and Berkes, 2015), and raises the possibility of co-jurisdiction.

Theme 2: From co-management to co-jurisdiction with Indigenous Peoples?
Real legal and relationship changes are needed that include recognizing that Indigenous peoples have their own legal systems that govern their relationships with the natural world. Progress has been made in legal arenas in Latin America.

“In Latin America...Most national constitutions now recognize Indigenous peoples and the legislatures have enacted laws that recognize Indigenous peoples’ rights. Although implementation of these laws still leaves a lot to be desired, significant progress has been made. But corresponding reforms of conservation laws and policies lag behind these changes and most examples of Indigenous-owned and run protected areas have been achieved outside the official protected area systems” (Colchester, 2004:149)
With regards to legal systems in Canada, legal scholar Aaron Mills highlights this issue; “Long before early Europeans showed up...the Indigenous peoples of Turtle Island [North America] not only lived in political communities, but did so according to constitutional frameworks reflective of their own ways of being and knowing in the world and of their own conception of value” (Mills, 2015:122), and “that by virtue of its focus on relationships, Anishinaabe natural resource law, as representative of Anishinaabe worldview, is distinct from Canadian natural resource law in significant ways and doesn’t sit comfortably within it” (Mills, 2010:148). Further, related to worldview, Mills explains that “Anishinaabe worldview holds that Anishinaabe is not above or even other-than the environment or the “natural world” for those who find that identifier useful; Anishinaabe is, in an immediate sense, as much a part of the environment as is a stone, gust of wind or lake ripple” (Mills, 2010:148). This worldview is common to many Indigenous groups in Canada and around the world. In the area of conservation and development, the imposed structures of diverse management approaches are based on Western knowledge systems, values, and sense of ability to predict and control (Stevenson, 2006; Tedmanson, 2012), and “Maintaining domination over the land and Indigenous Peoples has characterized the relationship between settler governments, the environment, and Indigenous Nations” (Simpson, 2004:123).

With increased recognition of the legal status of Indigenous peoples, this is an important moment to push for more radical changes to the systems and explore new models where Indigenous people lead, with a focus on relationships and shared values. Indigenous peoples should not be forced to fit into a dominant system, as this is a form of ongoing
colonialism. As such, any move towards co-management needs to start from recognizing these foundational differences and the validity of Indigenous worldviews and legal systems. Mills (2010) contends that the Anishinaabe and Canadian laws for natural resource management need not be irreconcilable; but they cannot be reconciled while maintaining colonial relationships. As Simpson asserts, “issues of environmental protection and the management of natural resources cannot be resolved until the colonial relationship Canada insists on having with Indigenous Peoples is dismantled, and jurisdiction over Indigenous lands is restored to the hands and hearts of Indigenous Peoples” (Simpson, 2004:122). Colchester (2004:150) makes a number of recommendations to change the conservation model in order to secure Indigenous rights. One of these is to “give priority to reforming national laws, policies and conservation programmes so that they respect Indigenous peoples’ rights and allow protected areas to be owned and managed by Indigenous peoples.” This fits with one of two key areas of change needed as part of the process of decolonizing environmental governance. The two key areas are with legal recognition, and with relationships, and these will be discussed in the remainder of this section on this theme.

New, innovative governance arrangements are needed. Colchester (2004:152) aptly summarized the progress and ongoing challenge; “International law recognizes that Indigenous peoples have rights to own, manage and control their lands and conservation policies have accepted this in principle. The challenge is to allow Indigenous peoples to move back into control of their lands”. However, securing land claims does not automatically allow for self-determination and different management systems. Natcher
and Davis (2007:272) found that in the Yukon, land claims settlement and devolution of responsibility for natural resources has “led neither to ideological nor to structural reform…and the management of natural resources continues to represent one of the most pervasive remnants of the colonial experience”.

Over time, First Nations in Yukon have taken greater steps to disentangle their practices from the dominant governmental approach, so that it will not longer be necessary to devote so much time trying to successfully deal with government regulations and policies. Natcher and Davis (2007) document the example of the Northern Tutchone Council (NTC) in the Yukon, which represents three First Nations. The NTC is re-implementing traditional laws around land use, called Doo’Li, that are spiritually driven and that rest in “traditional knowledge, laws and institutions” (274). The approach taken is to work with elders to record traditional codes of conduct and to institutionalize these into management practices and policy. Doo’Li is described as a “means in which social relationships, both human and nonhuman, can be maintained and, in some cases, rebuilt”, and it also “represents a form of resistance against the colonial mind of “managing resources” (Natcher and Davis, 2007: 275).

From this starting point, support can be given to Indigenous peoples to outline their values and their needs, and then resource management plans can be developed based on traditional forms of management, which may take much time and need resources to allow these management systems to be rebuilt (Stevenson, 2006). Support can be provided by governments and other interested parties and stakeholders. Protected area management
plans often “marginalize Indigenous land use and management (Langton, 2003:96). Even with the legal resolutions of land claims, the Canadian state cannot transfer the power to manage the environment to Indigenous people, or to anyone for that matter (Martin, 2016). Most co-management institutions developing from land claims processes leave Indigenous peoples in advisory roles with no final decision-making authority (Bowie, 2013). “This maintenance of the State’s hegemonic position has pushed some Aboriginals to demand a distinct approach, which they call co-jurisdiction” (Martin, 2016:172). This terminology is not widely found in the literature. Martin (1016:172) suggests the following general definition; “A relationship of co-jurisdiction might therefore be a situation in which the various parties have powers or rights defined in legislation that ensures that each party is able to exercise exclusive jurisdiction over some aspect of co-management”. Because co-management encompasses such a wide variety of management arrangements, I would argue that more consistent use of ‘co-jurisdiction’ in situations where land claims have been adjudicated or where other political agreements are in effect would bring more clarity to the literature. Unsurprisingly, Martin (2016:184) has found co-jurisdiction to be the preferred form of management of Indigenous people, because it “creates legal conditions for an egalitarian partnership based on recognition of their land rights and knowledge”.

This type of legal conditions would allow for Indigenous peoples to exert their own laws and traditions in maintaining their relationships with the land. This then connects to other critical areas for Indigenous peoples, such as culture and ability to maintain lifestyles and livelihoods. As Langton (2003:95) explains, “The maintenance of Aboriginal culture,
particularly social relationships with land conceived of in supra-kinship discourse, is held in Aboriginal law to be fundamental to the well-being of human society and non-human society alike – the former bearing a special responsibility for wise and respectful use of the latter”. For many Indigenous peoples, separating laws and relationships would not make sense, as laws govern their relationships with the natural world. As so eloquently expressed by Mills (2015:119), “as folks who were already here, organized in vibrant political communities, Indigenous peoples’ foundational political claim is not to fit in with, or be tolerated by, the rest of Canada, but rather to have our own ways of being—legal, political, economic, social, spiritual, and ecological—stand in the world that gives them life and meaning.” Mills is speaking to Canada but this statement holds true for many parts of the world, where governments needs to provide space for and support to Indigenous and local communities to find their own way of being. For Aboriginals in Australia for example, the primary aspect of their relationship with the natural world is one of “responsibility and stewardship” and these relationships have the “force of jural principles (Langton, 2003:95). Relationships for Indigenous people include relationships with all features of the landscape in which they live, and these relationships place “individual and groups entities and polities in jural relationships (that is, bound by Aboriginal laws) with attendant rights and responsibilities” (Langton, 2003:92). The Western focus on “managing resources” to the exclusion of “managing relationships” is a form of maintaining long-standing relationships between Indigenous peoples and States, and can be harmful to systems of concern (Stevenson, 2006:177). This can be traced to the embedded colonial approaches to relationships that are not consistent with Indigenous approaches. As Mills (2015:121) explains; “Colonialism is not reducible to a historical
process of European settlement and Indigenous displacement. That’s but one phase of what is, properly understood, a mode of relation”. For many Indigenous peoples, land is viewed as something they enter into a relationship with, and do not have dominion over (Langton 2003). In more recent years in the Canadian north, there have been important development in settling land claims and this is changing the dynamics of the relationships. There is growing acceptance of the need to shift power, although many challenges remain.

Indigenous peoples are rights-holders, not stakeholders (Colchester, 2004) whose aspirations are equal to those of settler societies (Langton, 2003), and this understanding gives a new starting point for a relationship of equals. It is time for ethical engagements (Adams and Mulligan, 2003) and recognizing that we are all the ‘other’. Success in these relationships depends upon “highly qualified and experienced collaborators with a high level of commitment to the integrity of Indigenous laws” (Langton, 2003:85). If the focus is shifted from resources to relationships, this may create space for Indigenous peoples worldviews to meaningfully participate in the co-management process (Stevenson, 2004) or to develop alternative forms of management arrangements.

Theme 3: The nature and context of “meaningful” participation

In the development literature, there is a compelling body of work that questions mainstreaming and mandating participation. The oft-discussed concepts of participation have been critically reviewed in this thesis. The participation process in place for the long-term protected area management plan analyzed in this thesis was found to be lacking, and exhibited some of the concerns about meaningless participation summarized
in chapter two. The current conservation policies in Brazil legislate participation as part of the management process, but thesis findings have demonstrated that a further step is needed to introduce a process that gives stronger voice to participants and gives them real power in the decision-making process. As Nadasdy (2007: 223) argues, “the problem is that the equitable treatment of marginalized peoples is simply not a management issue…it is a political issue”.

With so many possible scenarios and arrangements for natural resources management, is it possible to identify standardized participation requirements that would work for them all? For Indigenous peoples, the important question is “how participation in managing protected areas can enable Aboriginals to create a form of development that better corresponds with their worldview” (Martin, 2016:168). Three overlapping areas that consider these questions and that connect thesis research and the broader literature are that participation needs to be empowered, that there is a need to focus on representation, and that participation must be inclusive.

Empowered participation must also be representative. Given the consequences of colonialism on traditional governance, representation is a challenge. Pomeroy & Berkes (1997) explained that “Not all groups of fishers have appropriate local institutions; in such cases, any co-management initiative will necessarily start with institution-building” (Pomeroy & Berkes, 1997:468). Self-governance is re-emerging in Indigenous communities, and Bowie (2013) sees this as enabling more coordination between Indigenous peoples and other interests outside of government, and stronger positioning
with state governments. Further, Bowie (2013:93) states that reestablishment of self-governance is essential to “clarifying Indigenous priorities, setting strategic plans, and ensuring that participation in environmental management processes reflects community values”. In order to reflect community values, though, self-governance institutions and processes must actually represent the community. This means that a multitude of interests have to be taken into account.

If participants in co-management arrangements are not actually representing the people they are accountable for, then this is also not meaningful participation. Poor participation can contribute to ineffectual co-management that can lead to loss of both cultural and biological diversity, and can also lead to various forms of resistance and to conflict at different scales, including at community level (Cundill et al., 2013). “Resistance may be manifested within Aboriginal communities by the development of local factions that oppose engagement with the state over valued resources solely on its terms and conditions – a process that may exacerbate existing social divisions and tensions” (Stevenson, 2006: 174). This exact form or resistance occurred in Trindade. In Trindade, there was no support provided to the community for structured representation, and research interviews and observations revealed that as many people knew very little about the process, there was definitely a big gap in representation. Some people with knowledge of the process also did not feel represented. While there was fairly equal participation at the negotiation table with women and men, it cannot be said that the men and women at the table represented the multitude of voices of the people of Trindade as there was no processes or structures in place to do so. There was no representative
participation by older adults, and no people with disabilities. The process exacerbated social divisions and tensions, as discussed in previous chapters.

As explained by Berkes (2006) “community in community-based resource management is a gloss for a complex phenomenon, and may hide a great deal of complexity. Communities are not always simple; they often show characteristics of a complex system” (Berkes, 2006:4). Defining the community in many cases is difficult and it is clear that communities are diverse, diversified and can be sites of conflict. Community level conflict is a concern in other parts of the world as well. Cundill et al. (2013) reviewed protected area co-management agreements emerging from land claims in four different cases in South Africa. Interestingly, the struggle in the land claims process united communities, but the lack of materialization of benefits has led to conflicts amongst claimants and crisis in leadership. Stronger self-governance is definitely needed, and capacity development support for this form of development is necessary. As Cundill et al. (2013:174) explains, the unfounded claims of expansive economic benefits primarily from tourism potential in the protected areas “has strongly inflated pre-settlement negotiations, and the almost universal failure of such benefits to materialize post land claim has had cascading effects on ‘communities’ who struggle with internal divisions and a jostling of leadership structures that attempt to access these benefits”. In all of the co-management agreements, Cundill et al. found that the communities did not seem to be able to impact the decision-making, and most of them found that they were more excluded from the protected area than before settling the land claim and entering into co-management agreements, leading to conflicts. This issue reinforces the need for the
revitalization of community governance processes, particularly as this not only improves community decision-making processes but it also provides a structure for managing relationships with others (Bowie, 2013).

This leads to the final point about the need for participation to be inclusive. To avoid reinforcing power differentials, participation in governance should also be inclusive of all members of society who depend on the resources, including more marginalized members of society (Agarwal, 2001). Representation means that someone is speaking on your behalf, inclusion means you have the opportunity to sit at the table and speak for yourself. Although not the case in the thesis research, the input of elders is recognized in much of the Canadian literature. Women have some mention, but what about other social groups? For example, given that people with disabilities form significant portions of all populations, and that there is a higher than average rate of disability in Indigenous groups, this is an important social group to consider. The large body of literature on natural resources almost never recognizes or acknowledges the involvement or particular needs of people with disabilities. The absence of disabled people from the natural resources and environmental management literature is not surprising as literature in the field of disability geography demonstrates the lack of expectations around the presence and participation of disabled people (Hansen & Philo, 2007; Kitchin, 1998). In Brazil this was very much the case, and this is why the voices of disabled people do not feature as prominently as planned in this thesis and is a limitation. People with disabilities should have equal participation and representation in all development initiatives. To achieve this, greater support must at times be given to people with disabilities. As Fisher (2005)
explains, “equal access and equality of opportunity do not mean that everyone must be treated exactly the same, as some people may need something different or extra”.

Greater space for all people to advance the goals they have reason to value, combined with improved public reasoning and participation, may bring important political issues to light, and may also transform the relationship between authorities and community members into one of non-domination (Forst 2014). This in turn may bring about structural changes that allow for shared power in decision-making, a key gap in the current policy system in Brazil and in many countries around the world. Beyond having contributed to the argument that resource management needs meaningful public participation (Premauer, 2013; Trimble & Berkes, 2015), this research also highlights that these processes need evaluation, and the evaluation of the Trindade process makes concrete suggestions that are widely applicable. Participation needs to start with a shared vision and plan based on the actual local context. Successful participation requires developing relationships from the outset, through reciprocal processes. These can be applied in many contexts faced with conservation and development priorities. Capacity development is needed on numerous fronts to make participation meaningful, and perhaps to allow for new leaders to direct how management should be done and what arrangements should be in place. In the area of protected area management specifically, a primary area that needs consideration is with relationships. In the synthesis chapter to an edited volume on adaptive co-management, Berkes et al. (2007:310) reinforce this point, “With the accumulation of experiences and cases…it is now clear that the success of co-management ultimately depends on the development of human relationships and
institutional arrangements”. With the complexity of human relationships, the wicked problems of environmental governance, the amount of stakeholders, the dominant capitalist system and the legacy of harm from colonial practices, challenges remain formidable.

Theme 4: Marine Protected Areas as form of “Coastal Grabbing”
Coastal zones are considered complex commons (Mahon et al., 2008). Coastal resources, particularly fisheries, are one of the most difficult common-pool resources to manage. They are affected by human activity, climate, pollution, deforestation and a host of other factors, and the fish stocks are highly mobile. Approximately 44% of the world’s population lives in coastal zones, within 150 kilometers of the sea (UN Atlas, 2010). Fisheries have specific characteristics “that distinguish them from other kinds of resources: (a) the difficulty of exclusion, that is, the control of access to the resource; and (b) subtractability, that is, the capability of each user of subtracting from the welfare of others.” (Pomeroy & Berkes, 1997:466).

It is estimated that about one quarter of the population of Brazil lives in the coastal zone (Winter, 2009). In the past logging was a primary activity, and while this type of deforestation continues it has decreased and there is more diversification of activities, many of which also impact on land and marine use. These include tourism, real estate speculation and a lack of urban planning, mining, petroleum industry, various industrial activities, transportation services, aquaculture and fishing (Winter, 2009). Interestingly, Winter does not include the establishment of Protected Areas as an important form of
land and marine use in coastal Brazil. In establishing the development shocks in Trindade, we see that transportation access, tourism, Protected Areas, and real estate speculations have been and continue to be key activities.

Protected area establishment almost always means impact on a local population. In Latin America, for example, it is estimated that 85% of protected areas are inhabited (Colchester, 2004). The situation in Paraty is very much a microcosm of what is happening globally with MPAs and other developments. Bennett et al. (2015) suggested analyzing whether a conservation or development action is actually a form of ocean grabbing, or if it is a more legitimate activity. They propose the following definition (62);

Ocean grabbing refers to dispossession or appropriation of use, control or access to ocean space or resources from prior resource users, rights holders or inhabitants. Ocean grabbing occurs through inappropriate governance processes and might employ acts that undermine human security or livelihoods or produce impacts that impair social–ecological well-being. Ocean grabbing can be perpetrated by public institutions or private interests.

They suggest the following three considerations to evaluate whether or not a situation is in fact ‘ocean grabbing’, or what may be more appropriately termed ‘coastal grabbing’ in the case of Trindade; (1) The quality of governance, (2) Actions that undermine human security and livelihoods, and (3) Negative impacts on social-ecological well-being. A list of measures is provided to evaluate the three considerations. Using this list against the
situation in Trindade, the conclusion would be that the development and conservation approaches used would indeed constitute a form of ‘coastal grabbing’.

In coming decades many more MPAs will be established in Brazil and around the world. In November 2014, at the IUCN World Parks Congress, Brazil pledged to protect five percent of its marine waters (IISD, 2014). In Canada, the north is an area of emphasis for the establishment of new protected areas in the form of parks, mainly because of low population density and because of the vulnerability to climate change (Martin, 2016). As the vast majority of coastal areas around the world are inhabited and/or used, the expansion and enforcement of MPAs will either be sites of conflict or opportunities for real collaborative management done in a relational manner that prioritize human development. How do we build global capacity to achieve the more positive scenario?

Bennett et al. (2015:65) suggest that the negative ‘grabbing’ initiatives could be prevented through approaches that are respectfully implemented, “that do not undermine human security and if they produce favorable social-ecological outcomes”. With the huge increase in the number of Marine Protected Areas (MPAs) recently established and projected over the coming decades (De Santo, 2013), it is critical that they are respectfully implemented and do not cause harm. As De Santo (2013:144) summarizes, “Short-term gains from closing off huge areas to meet international protected area targets do not equate with long-term enforceability or environmental sustainability, particularly for populations dependent on subsistence fishing for their livelihood”. While this specifically refers to large MPAs, the statement would be applicable to smaller-scale
Underlying the establishment and enforcement of MPAs is the need for appropriate assessment that includes social scientists. In managing MPAs, we are managing the behavior of humans, we are not in fact managing the environment. Social scientists have largely been excluded from the decision-making process pertaining to MPAs (De Santo, 2013). As was discussed for the case of the protected area establishment in Trindade, the conservation benefits are unknown as there have not been baseline studies about the state of the environment, as mentioned, or about the actual impact of traditional activities. Social impacts were not considered from the outset. The capability framework is a possible approach to complement a more biological focused assessment, as discussed in chapter three. As well as revealing diversity amongst groups, the capability approach provides a framework to analyze policy from a human development perspective, that focuses on what people are actually able to achieve, and how policies can change towards expanding people's freedoms (Spence and Deneulin 2009). This would put the emphasis on human development, and for an analysis of the relationships and power dynamics at play. This is particularly important when Indigenous or local communities do not have legal grounds for co-jurisdiction arrangements and where relationship negotiation is more critical.

This also raises the issue once again of who should be managing the resources, and for what. Berkes (2015:35) summarizes the challenge with conventional resource management; “Conventional resource management that aims to reduce natural variation
in an effort to make ecosystems more controllable, predictable and productive damages the very process that maintains resilience in a system”. Can the same be said for human systems? There is growing evidence that the more diverse the group involved in problem solving, the better the outcome. For example, the Harvard Business Review recently reported on research into collective intelligence that found “little correlation between a group’s collective intelligence and the IQs of its individual members. But if a group includes more women, its collective intelligence rises” (Woolley and Malone, 2011). Interestingly, study authors also shared that their ongoing research “suggests that teams need a moderate level of cognitive diversity for effectiveness. Extremely homogeneous or extremely diverse groups aren’t as intelligent.” Conventional resource management was designed by men, mostly western born and/or trained. Women, people from the developing world, disabled people, Indigenous peoples, and other marginalized groups did not have a hand in developing these conventional systems. Would more natural variation in the decision-making groups improve the outcome?

More exploration is needed on this topic. In the case of Brazil, the institutional side of the process examined was dominated by men, and while the community-level had more powerful female leadership, the overall process was dominated by non-disabled adult males. Commitment to social justice means a commitment to including a multitude of voices and perspectives. Rather than seeing this need for diversity as a burden, supporting diversity could be valued and seen as an opportunity for more effective collaboration leading to better outcomes.
5.4 Main Scholarly Contributions of the Thesis

In the context of the themes discussed, the thesis makes various scholarly contributions. The situation in Trindade provides a “sneak preview” and insights as to what coastal management conflicts may look like as MPAs expand and are enforced around the world, and this thesis also suggests how these can be approached. As MPA establishment and enforcement continues at a rapid pace, this thesis provides insights into what can go wrong. It does not reveal solutions, but provides a framework through using the capability approach to guide assessment and social considerations, and by making suggestions as to how to approach relationship development. This provides a simple model of what participation could look like as MPAs develop in other parts of the worlds. It is simple enough for it to be tested, adapted, and elaborated.

In the area of the capability approach, there is a gap in that literature in applying this framework to environmental governance, and in community-based research eliciting capability lists from different social groups. This project was an exploration into ideas about capabilities of different social groups, and the implications for environmental governance. Environmental governance impacts on many different people in many different ways. There is very limited research that looks at these impacts across social groups, and there is a major gap in knowledge about how marginalized community members such as people with disabilities and women are involved in governance. By recognizing the diverse needs of different social groups and the value of all perspectives, capability priorities were established for women, men, older adults and people with disabilities. There is not enough data to make conclusive comparisons, but enough to
demonstrate interesting differences between the groups that would have policy implications. The impacts of development and conservation policies are different for the four groups, as are the priorities for capabilities, and this is important information that needs to form the basis of policy and of development decisions. The results of identifying the capability priorities of the different groups participating demonstrate that it is important to identify people's capability priorities and gaps and that these results are more policy relevant than trying to determine a globally representative list. This research has demonstrated the value of using the capability approach to frame the situation, diagnose the injustice, and identify the pathway to developing more just arrangements.

Findings also demonstrate the need to move away from a simplistic understanding of participation and of capacity development. The use of action research for capacity development has not been discussed in the literature, and the capacity development efforts, though not fully decolonized, did not aim to unquestioningly teach people to fit into an imposed structure, but also questioned the structures of Brazil’s coastal and environmental management and protected area policies and supported community members in their struggle to organize and claim their rights. If Brazil is serious about SNUC policy they have to make room for livelihoods and knowledge of traditional and Indigenous peoples, and resource dependent communities. While important steps to more inclusive processes have been made in Brazil through leadership of activists like Chico Mendes and through policies such as the SNUC policy, numerous issues remain. The process described in Trindade is not co-management, and there are no processes in place
to build relationships and work towards co-management of the protected area once the management plan is in place.

5.4.1 Contributions Regarding Policy Implications

As discussed, the policy environment in Brazil leading up to the time of the thesis research had created more possibility for real changes in management systems, particularly around participation. Consider that the federal authority for protected area management in Brazil, ICMBio, is named after Chico Medes. Mendes was a grassroots activist who was murdered in 1988 due to his opposition to destructive development and land grabbing in the Amazon. Mendes led the fight for the rights of Indigenous and traditional communities to continue their livelihood practices, particularly for rubber-tappers in the Amazon. At the moment it is ironic that ICMBio takes the name of the grassroots activist, Chico Mendes. It seems, however, that ICMBio took his name, but policies and practices are not in line with his vision. If they truly admire this leader, they need to transform their approach. Following the lead of current day Indigenous activists, ICMBio could engage with the experiences of communities directly and empower those communities, and position themselves as allies to communities in their quest for balanced development in a healthy environment.

Thesis themes coalesce into an argument for an ongoing commitment to social and environmental justice. As Langton (2003:90) states, there is growing awareness by western researchers of the “dilemmas for Indigenous peoples; and, yet, considerations of equity and justice remain peripheral in the delivery of national and regional conservation
programmes and resources”. This is also linked to ongoing prioritization of economic development over ecological concerns (Figuereido, 2009), and over human development. Policies need to be based on more complete information and should unequivocally prioritize human development. This research has demonstrated the value of using the capability approach to frame the situation, diagnose the injustice, and identify the pathway to developing more just arrangements.

This research also emphasizes that social justice requires inclusive processes, and that the needs of various groups should be recognized and taken into account. This means more information is needed specifically about different social groups and underscores the need for more inclusive research and policy making. These findings are consistent with what is happening on a global scale. For example, the UN recognizes that the lack of disaggregated data, particularly for disabled people, produces obstacles to development planning and policy decisions. For example, under goal 17 of the newly launched Sustainable Development Goals (SDGs), one target is to “increase significantly the availability of high-quality, timely and reliable data disaggregated by disability”14. These global development goals were conceived with recognition of this information gap, and were designed to be more inclusive. Inclusive research in environmental governance is needed to make sure that better data is used for decision-making that considers the interests of all social groups, and particularly those who have been the most marginalized, such as disabled people, and those who hold particular rights, as do Indigenous peoples.

With increasing global advocacy and activism by Indigenous peoples combined with growing recognition of Indigenous peoples legal rights through UN declarations and court cases, against a backdrop of growing realization of the coming impacts of climate change, there is a window of opportunity for real change. Given the global track record to date, we will need a strong collective push to get through that window. What are we afraid of? It is not the Indigenous peoples and local resource users of the world who have wreaked large-scale destruction on the ecosystem’s of the world; “The biological integrity of the Indigenous domain has suffered considerably less than that of the lands which have been radically altered to suit the imported management systems and understandings of the settler society” (Langton, 2003:84). As such, capacity development efforts need to target government departments and NGOs, to prepare them for changing roles. Capacity development will likely be needed with Indigenous peoples and local communities as they reclaim and redevelop their laws and systems, adapting them to current realities. Policies must no longer be built on the assumptions of lack of capacity of direct resource users, but on lack of capacity of governments to meaningfully collaborate. Capacity gaps of dominant institutions include “lack of knowledge, understanding, skills, and competence in basic issues of social science, cultural awareness, and locally contextualized knowledge” (Howitt et al., 2013:313)

Finally, although not specifically considered in this thesis, concerns exist that the academic system will not accommodate more critical and decolonized approaches, such as a grounded critical capacity development project, due to the length of time, costs, and other factors. The relational approach may not lead to as many publications and other
valued measures for job security and advancement (Castleden et al., 2015). Within academia, there is concern that non-traditional forms of research will impede ability to secure positions, to advance, and to secure grants. This should not deter academics from using these approaches, but highlights the need for changes in the academic and funding institutions.
References


http://www.oceansatlas.org/servlet/CDSServlet?status=ND0xODc3JjY9ZW4mNTU9MSYzMz0qJnNob3dDaGlsZHZIbj10c1IjM3PWtvcw~~#relateds


APPENDIX A – Narrative Interview Guide [English and Portuguese]

Narratives/Narrativas

Name/Nome:
Gender/Sexo:
Age/Idade:
Community/Comunidade:
Marital Status/Estado civil:
Number of children/Número de filhos:
Place of origin/Origem:
Education/Escolaridade:

Member of group, project, association, or council? / Você participa de grupos, projetos, associações ou conselhos?

Date/Data:

Objective 1: Analyze how recent changes to natural resources governance, including protected areas, has impacted on women, men, people with disabilities, youth and older adults. / Objetivo 1: Coletar narrativas sobre como as recentes mudanças na gestão dos recursos naturais, incluindo áreas protegidas, tem impactado mulheres, homens, pessoas com deficiência, jovens e idosos.

1) Exploring natural resource management / Explorando gestão dos recursos naturais

A) What natural resources are important to you in Trindade? Quais recursos naturais são importantes para você em Trindade?
B) How would you describe natural resource management in Trindade? Como você descreve a gestão dos recursos naturais em Trindade?

C) How do you think this management has changed over time? Como você acha que a gestão tem mudado ao longo do tempo?

D) What do you think caused these changes? O que você acha que causou essas mudanças?

E) How have you been affected by these changes? Como você vem sendo afetado por essas mudanças?

F) How do you and your household cope with the changes? Como você e sua família lidam com essas mudanças?

G) How do these coping strategies affect your lives? Como as estratégias adotadas afetam suas vidas?

2. Exploring institutions/ Explorando instituições:

A) Are you involved in natural resources management in your day to day life? Você está envolvido na gestão dos recursos naturais no seu dia-a-dia? Como? Quais recursos?
B) Individually, as part of a group or as part of a formal organization? Individualmente, como parte de um grupo ou como parte de uma organização formal?

C) Who makes decisions about natural resource governance? Quem toma as decisões sobre a gestão dos recursos naturais?

D) What are the norms and rules about natural resources that affect you? Quais normas e regras sobre os recursos naturais afetam você?

E) Who makes these rules? Quem cria essas regras?

F) Are there any groups, organizations, relationships, or individuals that represent you in negotiations about natural resource management? Existem grupos, organizações, relações ou indivíduos que representam você nas negociações sobre a gestão dos recursos naturais?

G) Do you feel that you have any control or influence over natural resources management? Você sente que tem qualquer controle ou influência sobre a gestão de recursos naturais?

3. Exploring participation/ Explorando a participação:
A) Are some people/groups left out of society, or looked down upon or excluded from active participation in natural resource governance? Algumas pessoas ou grupos são deixados de lado, menosprezados ou excluídos da participação ativa na gestão dos recursos naturais?

B) Are there differences in participation in natural resource management between native and non-native Trindaderos? Há diferença entre a participação ativa na gestão dos recursos naturais dos nativos e não nativos?

*If yes, continue with the following questions. If no, jump to the next section.*

continue com as questões a seguir. Se não, pule para a próxima seção.

B) Who gets left out, and on what basis? Why? Quem está sendo deixado de lado? Em que situação? Por que?

C) What is the impact of such exclusion or being left out? Qual é o impacto da exclusão ou de ser deixado de lado?

D) Is it possible for those excluded to ever become included? How? Existe a possibilidade de que os excluídos em algum momento sejam incluídos na gestão dos recursos naturais? Como?
E) Are there differences in power between those included and excluded? Há diferença de poder entre quem é incluído e excluído?

F) What makes some people powerful and others not? O que torna algumas pessoas poderosas e outras não?

(mais ouvidas ou com mais peso na tomada de decisão)

-----------------------------------------

If they answer no to question 3-A, proceed with the following questions: / Se respondeu não a pergunta 3-A, prossiga com as seguintes perguntas:

4)

A) Do some people/groups have more power in natural resources management? Algumas pessoas ou grupos tem mais poder na gestão dos recursos naturais do que outros?

B) What makes some people powerful and others not? O que torna algumas pessoas poderosas e outras não?

C) What are the impacts of these differences? Quais são os impactos dessa diferença?

D) Is it possible for those without power to become powerful? How? Existe a possibilidade de que pessoas sem poder em algum momento o adquiram? Como?
E) Is it possible for all people/groups to have equal power in managing natural resources?

É possível que todas as pessoas e/ou grupos tenham o mesmo poder na gestão de recursos naturais?

-----------------------------------------------

This section is for everyone:

5) Relationship between the community and PNSB. / Relação entre a comunidade e o Serra da Bocaina National Park (PNSB)

A) How would you describe the relationship between the community and PNSB? Como você descreve a relação entre a comunidade e o PNSB?

B) How would you describe the balance of power between the community and PNSB? Como você descreve o balanço de poder entre a comunidade e o PNSB?

C) Are you aware of the negotiations happening right now with the park? (Meio beach occupation, activities of ABAT ...). Você está ciente das negociações que estão acontecendo agora com o PNSB (por exemplo, ocupação da Praia do Meio e atividade embarcada da ABAT)?

D) What outcome do you expect from this negotiation? Do you think it will bring positive or negative consequence for your daily life? Quais resultados você espera
dessas negociações? Você acha que isso pode trazer consequências positivas e/ou negativas no seu dia-a-dia?

Final question: Are there any topics or skill areas related to natural resources management that you would be interested in learning about, or that you think are important to develop within the community?

OBS: Habilidades para a participação da gestão de recursos naturais que você gostaria de melhorar.
APPENDIX B – Questions to Identify Capabilities and Priorities
[English and Portuguese]

Questions to Identify Capabilities and Priorities
/Questões para identificar capacidades e prioridades

Identifying Capabilities (capabilities are defined as opportunities and abilities)
/Identificando as capacidades (capacidades são definidas como oportunidades e habilidades)

1) What are the most important opportunities that a person should have during his/her life? (brainstorm) Quais são as oportunidades mais importantes que uma pessoa deveria ter durante sua vida? (chuva de ideias)

2) What are the three most important? Quais são as três mais importantes?

3) Do these opportunities exist in Trindade? Essas oportunidades existem em Trindade?

Prioritization (Prioritization of problems related to natural resource governance, in terms of the most pressing needs of the different groups). / Priorização (Priorização dos problemas relacionados à governança de recursos naturais, em termos das necessidades mais urgentes dos diferentes grupos).

A) What are the biggest problems related to natural resources management? (brainstorm and then put in order). Quais são os maiores problemas relacionados à gestão dos recursos naturais? (chuva de ideias e então colocar em ordem).
B) Have these problems changed over the years or have they remained the same? Esses problemas têm mudado ao longo dos anos ou eles permaneceram os mesmos? (um por um).

C) What are people’s hopes/wishes and fears for the future? Quais são os desejos e os medos das pessoas para o futuro? (Dividir em dois flips).

D) What existing capabilities are most relevant for addressing these problems and achieving people’s hopes? Quais as capacidades/aptidões existentes são mais relevantes para (1) resolver esses problemas e (2) alcançar o esperado? (D e E trabalhar com dois flips lado a lado).

E) What capabilities are missing? Quais capacidades/aptidões estão faltando?

F) What capacity development is required to strengthen these capabilities or address the gaps? Qual capacitação é necessária para fortalecer essas aptidões/capacidades ou preencher as lacunas?
APPENDIX C - Course Descriptions/Outlines

Course 1 - [English] - Best practices working with tourists

1. Description:
This course is designed as both a theoretical and practical course (35 hours), in which the participants (i) will acquire a better understanding of the relationship between tourism and conservation, (ii) may develop their own rules and guidelines on how members of the Association of Small-scale Fishermen and Boatmen of Trindade (ABAT) should represent themselves, communicate, and interact with tourists, and (iii) understand how to receive and provide feedback and constructive criticism.

2. Methodology:
Different methods will be used throughout the course, such as lectures, group work, discussions in small and large groups, role plays, observations and feedback. The proposed activities will use teaching methods and tools appropriate to the participants, and will be based on the work and lived realities of ABAT members.

3. Expected results:
Theoretical and experiential learning to (i) improve the quality of services provided to tourists, (ii) improve collaboration among members of ABAT, and (iii) enhance organizational performance and ability to adapt to change.

4. Course Schedule:
The course will be held October 7, 8, 9, 10, 18 & 22, 2013.
### Day 1: Monday, October 7, 2013

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 - 11:00</td>
<td>Introduction</td>
<td>a) Overview of course description and programming.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) Welcome activities.</td>
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<tr>
<td></td>
<td></td>
<td>c) ABAT - Strengths of members and identity.</td>
</tr>
<tr>
<td>11:00 - 13:00</td>
<td>Session 1: The Tourist</td>
<td>a) How to prepare for, welcome, and guide tourists.</td>
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<td></td>
<td></td>
<td>b) Tourism concepts.</td>
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<tr>
<td></td>
<td></td>
<td>c) Interests and motivations of tourists; types of guided trips.</td>
</tr>
<tr>
<td>13:00 - 14:00</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>14:00 - 15:00</td>
<td>Session 2: Image of ABAT</td>
<td>a) The first part of the tourist experience with ABAT - what does the tourist observe?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) Uniform, hygiene, routine.</td>
</tr>
<tr>
<td>15:00 - 16:30</td>
<td>Session 3: Development of standards for ABAT members related to interactions with tourists</td>
<td>a) Communication, language and approach.</td>
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</table>

### Day 2: Tuesday, October 8

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Activities</th>
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</thead>
<tbody>
<tr>
<td>9:00-10:30</td>
<td>Session 4: Boats and marine mammals</td>
<td>a) Aspects of the biology and ecology of marine mammals found in the region.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) Measures to be taken when encountering marine mammals during navigation.</td>
</tr>
<tr>
<td>10:30 - 13:00</td>
<td>Session 5: Responding to Customer Complaints and Compliments</td>
<td>a) Role Plays of situations that ABAT members deal with in their daily work with tourists.</td>
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<tr>
<td></td>
<td></td>
<td>b) What are the qualities of a good driver?</td>
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<tr>
<td>13:00 - 14:00</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Session 6: Practical activities</td>
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<tr>
<td>14:00-17:00</td>
<td>Observation on the job: Participants, divided into two groups, will observe each other while working with tourists, and take notes. Course facilitators will participate in the observations.</td>
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**Day 3: Wednesday, October 9**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 6 (continued): Practical activities</th>
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</thead>
<tbody>
<tr>
<td>10:00 - 14:00</td>
<td>Observation on the job: Participants, divided into two groups, will observe each other while working with tourists, and take notes. Course facilitators will participate in the observations.</td>
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**Day 4: Thursday, October 10**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 6 (continued): Practical activities</th>
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<tbody>
<tr>
<td>9:30 - 12:00</td>
<td>Participants will provide feedback to one another and discuss their observations of the activities working with tourists from the previous day.</td>
</tr>
<tr>
<td>18:00 - 19:30</td>
<td>a) Based on the information learned during this course, a &quot;Code of Conduct&quot; will be developed for ABAT members for appropriate conduct when working with tourists in the Protected Area/Conservation Unit.</td>
</tr>
</tbody>
</table>
| 19:30 - 20:30| a) Final discussion: Course review and final discussion on best practices to work with tourists in the future.  
               b) Participant Evaluation: Participants should attend all sessions, participate in activities and discussions and complete the practical exercise to receive the certificate issued by FIFO (Fisheries and Food Institute). In addition, participants will be asked to provide comments on the content of the course and on facilitation methods. |
**Day 5: Friday, October 18**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 8: Local Ecology and Conservation</th>
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<tbody>
<tr>
<td>9:30 - 12:30</td>
<td>a) Ecological aspects of local marine species and the economic impacts of fishing that demonstrate the importance of tourism activities in the region. This session will include information on breeding and lifecycle of local fish that can transmitted by ABAT members to tourists as part of the guided activities offered by ABAT. This session will also address how best to share knowledge and information with tourists about fishing in Trindade.</td>
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**Day 6: Tuesday, October 22**

<table>
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<tr>
<th>Time</th>
<th>Session 9: Discussion Circle</th>
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<tr>
<td>9:30 – 11:30</td>
<td>Participants will review what they have learned throughout the course, discuss how this has influenced their work practices, and contribute ideas and suggestions of needs and interests to guide facilitators in preparing for a subsequent course related to tourism.</td>
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<tr>
<td>and</td>
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<tr>
<td>18:00-20:30</td>
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</table>

### 5. References:


### 6. Instructors and Supervisors:
• Luciana Gomes de Araujo, PhD student in the Environment and Society Program, NEPAM / UNICAMP.

• Dr. Mariana Clauzet, Biologist, Fisheries and Food Institute (FIFO), University of Santa Cecilia (UNISANTA).

• Natalia Bahia, Biologist, Master in Ecology from UNICAMP, Commons Conservation and Management Research Group (CGCommons).

• Mariana Benchimol, has worked with the Brazilian Institute of Education in Sustainable Business (IBENS), Environmental Interaction, Projeto Bagagem, and in the development of courses with the BioAtlantic Institute. Mariana also helped to develop the "Caiçara Manual of Community-Based Ecotourism".

• Giulia Melis, Communication Specialist.

• Erika Bockstael, Doctoral Candidate in Natural Resources and Environmental Management, University of Manitoba, Canada.

• Dr. Alpina Begossi, Researcher at CAPESCA-PREAC-UNICAMP, and Executive Director of the Fisheries and Food Institute (FIFO).

• Dr. Cristiana Simão Seixas, Environmental Studies and Research Centre (NEPAM), the State University at Campinas (UNICAMP).

7. Institution:

Fisheries and Food Institute (FIFO), or the Institute for Fisheries, Diversity and Food Security was founded on June 1, 2006. FIFO aims to support and develop actions for the protection, improvement, and maintenance of the quality of life of people and of their environment, through research and education activities, promoting and conducting
research on topics such as "diversity and food for the future" and "fishing and food security". http://www.fisheriesandfood.org
Course 1 – [Portuguese] - Curso de Boas Práticas de Atendimento ao Visitante

1. Proposta:

A proposta é de um curso teórico/prático (30 horas/aula), no qual os participantes (i) irão adquirir um melhor entendimento das relações entre turismo e conservação; (ii) poderão desenvolver suas próprias regras e diretrizes sobre como os membros da Associação de Barqueiros e Pequenos Pescadores de Trindade (ABAT) devem apresentar-se, comunicar-se e interagir com os turistas e (iii) aprenderão a lidar com as experiências e comentários positivos e negativos sobre a atividade.

2. Metodologia:

Ao longo do curso serão utilizados diferentes métodos, tais como aula expositiva, trabalho em grupo, discussões em pequenos e grandes grupos, dramatizações, observações e devolutivas. As atividades propostas utilizarão didática direcionada ao público alvo e serão fundamentadas nas realidades de trabalho e de vida dos membros da ABAT.

3. Resultados esperados:

Aprendizado teórico e prático dos membros da ABAT envolvidos no treinamento para melhorar a qualidade dos serviços prestados aos turistas, melhorar a colaboração entre os membros dessa associação e reforçar o desempenho organizacional para atender as mudanças.
## 4. Programação do Curso:

O curso será realizado na semana de 7 a 10 de outubro de 2013.

### Dia 1: Segunda, outubro 7

<table>
<thead>
<tr>
<th>Horário</th>
<th>Atividades</th>
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| 9:30 - 11:00  | d) Distribuição e revisão da descrição do curso e programação  
e) Atividades de boas vindas  
f) ABAT - Pontos fortes dos membros e identidade |
| Introdução    |                                                                                                                                              |
| 11:00 - 13:00 | d) Conceitos de turismo  
e) Condições para receber turistas  
f) Motivos e tipos de viagens |
| Sessão 1: O Turista |                                                                                                                                              |
| 13:00 - 14:00 | Almoço                                                                                                                                       |
| 14:00 - 15:00 | c) A primeira parte da experiência do turista com ABAT - o que o turista observa?  
d) Uniforme, higiene, padrão |
| Sessão 2: Apresentação |                                                                                                                                              |
| 15:00 - 16:30 | b) Comunicação, linguagem e abordagem                                                                                                    |
| Sessão 3: Desenvolvimento de padrões para os membros da ABAT relacionados às interações com os turistas |                                                                                                                                              |

### Dia 2, Terça, outubro 8

<table>
<thead>
<tr>
<th>Horário</th>
<th>Atividades</th>
</tr>
</thead>
</table>
| 9:00-10:30    | c) Aspectos da biologia e ecologia dos mamíferos marinhos encontrados na região  
d) Medidas a serem tomadas ao encontrar mamíferos |
<p>| Sessão 4: Embarcações e mamíferos marinhos |                                                                                                                                              |</p>
<table>
<thead>
<tr>
<th>Horário</th>
<th>Atividade</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30 - 13:00</td>
<td>Sessão 5: Atitudes em relação a reclamações e elogios dos clientes</td>
</tr>
<tr>
<td></td>
<td>c) Dramatização de situações que os membros da ABAT lidam no dia-a-dia do trabalho com os turistas</td>
</tr>
<tr>
<td></td>
<td>d) Quais as qualidades de um bom condutor?</td>
</tr>
<tr>
<td>13:00 - 14:00</td>
<td>Almoço</td>
</tr>
<tr>
<td>14:00-17:00</td>
<td>Sessão 6: Exercícios práticos</td>
</tr>
<tr>
<td></td>
<td>Observação do trabalho: os participantes, dividido em dois grupos, observarão os outros em seu trabalho com os turistas e tomarão notas. Os facilitadores do curso participarão das observações.</td>
</tr>
</tbody>
</table>

**Dia 3, Quarta, outubro 9**

<table>
<thead>
<tr>
<th>Horário</th>
<th>Atividade</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00 - 14:00</td>
<td>Sessão 6: Continuação - Exercícios práticos</td>
</tr>
<tr>
<td></td>
<td>Observação do trabalho: os participantes, dividido em dois grupos, observarão os outros em seu trabalho com os turistas e tomarão notas. Os facilitadores do curso participarão das observações.</td>
</tr>
</tbody>
</table>

**Dia 4, Quinta, outubro 10**

<table>
<thead>
<tr>
<th>Horário</th>
<th>Atividade</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 - 12:00</td>
<td>Sessão 6: Continuação</td>
</tr>
<tr>
<td></td>
<td>Os participantes discutirão as observações das atividades feitas no dia anterior.</td>
</tr>
<tr>
<td>18:00 - 19:30</td>
<td>Sessão 7: Revisão e atualização das regras do estatuto da ABAT referente ao atendimento ao visitante/turista</td>
</tr>
<tr>
<td></td>
<td>b) Baseadas nas informações aprendidas ao longo desse curso, um “código de conduta” será desenvolvido para as atividades da ABAT referente aos padrões adequados de comportamento quando se trabalha com turistas em unidade de conservação de proteção integral.</td>
</tr>
</tbody>
</table>
### Dia 5, Sexta, outubro 18

<table>
<thead>
<tr>
<th>9:30 - 12:30</th>
<th>Sessão 8: Ecologia e Conservação local</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Aspectos ecológicos das espécies marinhas locais e os resultados econômicos das pesca, os quais mostram a importância das novas atividades de turismo na localidade. Esta sessão incluirá alguns aspectos da reprodução e alimentação de peixes locais que podem ser compreendidos e transmitidos pelos pescadores para turistas locais durante as visitas. Esta sessão abordará ainda, como esse conhecimento e as informações sobre a pesca em Trindade podem ser transmitidas e compreendidas pelo turista durante sua visita.</td>
<td></td>
</tr>
</tbody>
</table>

### Dia 6, Terça, outubro 22

<table>
<thead>
<tr>
<th>9:30 – 11:30 e 18:00-20:30</th>
<th>Sessão 9: Roda de conversa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Os participantes irão rever o que aprenderam nos 4 dias do curso, discutir como isso tem influenciado suas práticas de trabalho, e contribuir com ideias e sugestões de demandas e interesses para o segundo curso relacionado ao turismo a ser planejado.</td>
<td></td>
</tr>
</tbody>
</table>
5. Referências:


6. Instrutores e supervisores:

- Luciana Gomes de Araujo, Doutoranda do Programa Ambiente e Sociedade, NEPAM/UNICAMP.

- Dra. Mariana Clauzet, Bióloga, Fisheries and Food Institute (FIFO), Universidade Santa Cecilia (UNISANTA).

- Natalia Bahia, Bióloga, Mestre em Ecologia pela UNICAMP, Grupo de Pesquisa em Conservação e Gestão Participativa de Recursos de Uso Comum.

- Mariana Benchimol, tem trabalhado com Instituto Brasileiro de Educação em Negócios Sustentáveis (IBENS), Interação Ambiental, Projeto Bagagem, e no desenvolvimento de cursos com o Instituto BioAtlântica. Mariana também ajudou a desenvolver o “Manual Caiçara de Ecoturismo de Base Comunitária”.

- Giulia Melis, Especialista em Comunicação.
7. Instituição:

Fisheries and Food Institute (FIFO) ou o Instituto para a Pesca, Diversidade e Segurança Alimentar foi fundado em 1 de junho de 2006. FIFO tem por finalidade apoiar e desenvolver ações para a defesa, elevação e manutenção da qualidade de vida do ser humano e do seu ambiente, através das atividades de pesquisa e educação promovendo e realizando pesquisas em temas como “diversidade e alimento para o futuro” e “pesca e segurança alimentar”. http://www.fisheriesandfood.org
Course 2 – [English] - Guiding Tourists

1. Description:
This course is designed as both a theoretical and practical course (35 hours), in which the participants will be able to (i) improve the understanding of the roles and responsibilities of both guides and tourists, expanding on the experience acquired in the first course (on best practices working with tourists); (ii) improve communication with tourists, especially with regards to security issues and; (iii) increase the skills of ABAT members to cooperate with ICMBio to achieve shared goals of social and natural sustainability, and of providing excellent services to tourists.

2. Methodology:
Different methods will be used throughout the course, such as lectures, group work, discussions in small and large groups, role plays, observations and feedback. The proposed activities will use teaching methods and tools appropriate to the participants, and will be based on the work and way of life of ABAT members.

3. Expected results:
Theoretical and experiential learning to (i) improve communication with tourists and ICMBio, (ii) enable participants to work in partnership with ICMBio, thus contributing to the management of natural resources in Trindade, and (iii) to increase professionalism and collaboration among members of ABAT.
4. Course Schedule:

The course will be held on November 4, 5, 6, 7, 11 and 21, 2013.

**Day 1: November, 4, 2013**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 9:00 - 10:30  | Introduction A) Distribution of materials, review of course description and agenda.  
                  B) Welcome activity. 
                  C) Discussion about opportunities in Trindade (specific to research project). |
| 10:30 - 12:30| Session 1: The Atlantic Forest  
                  a) Biodiversity and Conservation. 
                  b) Flora and Fauna of the Atlantic Forest. 
                  c) Geography of the Atlantic Forest (past and present). |
| 12:30 - 13:30| Lunch                                                                    |
| 13:30 - 16:30| Session 2: Ecotourism  
                  A) Principles of ecotourism. 
                  B) Who is an ecotourist? 
                  C) Ecotourism products. 
                  D) Main impacts of ecotourism - environmental, economic, and socio-cultural aspects. 
                  E) Criteria for developing ecotourism. |

**Day 2: November 5, 2013**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 9:00 - 11:00  | Session 3: Responsibilities and obligations of the guides and tourists.  
                  A) Group leadership techniques. 
                  B) Organizational development for ABAT - Alternative operational structures. 
                  C) Carrying capacity of the Natural Pool and impacts. |
| 11:00 - 16:00| Session 4: Practical Exercices  
                  Activity observation: participants (divided into four groups) will experience different ways of organizing themselves on the beach and in the Natural Pool.  
                  Participants will observe others work and take notes. 
                  Course facilitators will also participate in the observations. |
## Day 3: November 6, 2013

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 - 11:30</td>
<td>Session 4 (continued): Practical Exercises</td>
</tr>
<tr>
<td></td>
<td>Participants will discuss their observations of activities, with a focus on the best organizational system and structure.</td>
</tr>
<tr>
<td>11:30 - 13:00</td>
<td>Session 5: Responsibilities and obligations of the guides and tourists.</td>
</tr>
<tr>
<td></td>
<td>A) Management of tourists in natural areas.</td>
</tr>
<tr>
<td></td>
<td>B) Appropriate behaviour in natural environments.</td>
</tr>
<tr>
<td></td>
<td>C) Role plays.</td>
</tr>
<tr>
<td>13:00 - 14:00</td>
<td>Lunch</td>
</tr>
<tr>
<td>14:00 - 15:30</td>
<td>Session 6: Basic Principles of Individual and Collective Safety</td>
</tr>
<tr>
<td></td>
<td>How to communicate with visitors about safety, the natural attractions, and appropriate behavior.</td>
</tr>
<tr>
<td>15:30 - 17:30</td>
<td>Session 7: Use of safety equipment and compliance with standards</td>
</tr>
<tr>
<td></td>
<td>A) Role plays of situations in which ABAT members can politely request that tourists use safety equipment and comply with the rules of ICMBio and ABAT.</td>
</tr>
<tr>
<td></td>
<td>b) Develop symbols / images that boaters can use to communicate with tourists who speak different languages.</td>
</tr>
</tbody>
</table>

## Day 4: November 7, 2013

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30-12:30</td>
<td>Session 8: Participation and Partnerships in Natural Resource Management</td>
</tr>
<tr>
<td></td>
<td>a) Presentation on management and co-management of natural resources.</td>
</tr>
<tr>
<td></td>
<td>b) What is a ‘Conservation Unit’?</td>
</tr>
<tr>
<td></td>
<td>c) What are the different categories of ‘Conservation Units’ in Brazil?</td>
</tr>
<tr>
<td>12:30 - 13:30</td>
<td>Lunch</td>
</tr>
<tr>
<td>13:30-16:00</td>
<td>Session 8 (continued):</td>
</tr>
<tr>
<td></td>
<td>a) Representation: the role of the ABAT representative on the PNSB Advisory Board.</td>
</tr>
</tbody>
</table>
### Participation and Partnerships in Natural Resource Management

b) Principles of negotiation.
c) How to seek partnerships with environmental agencies?
d) Examples of different partnerships between local communities and Conservation Units in Brazil and in other countries.

| 16:00-17:00 Final Activities | Course review and final discussion. |

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**Day 5: November 11, 2013**

| 13:00 - 16:30 Session 9: Community-Based Tourism | A) Community-based ecotourism.  
B) Examples of potential activities. |

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**Day 6: November 21, 2013**

| 9:00 - 13:30 Session 9: Discussion Circle | Participants will review what they learned from the five days of the course. They will discuss how this has influenced their work practices, and reflect and agree upon needed improvements. |

---

### 5. References:

Realização: Instituto BioAtlantica.

Brasília, maio de 2005.

6. Instructors and supervisors:

- Luciana Gomes de Araujo, PhD student in the Environment and Society Program, NEPAM / UNICAMP.

- Mariana Benchimol, has worked with the Brazilian Institute of Education in Sustainable Business (IBENS), Environmental Interaction, Projeto Bagagem, and in the development of courses with the BioAtlantic Institute. Mariana also helped to develop the "Caiçara Manual of Community-Based Ecotourism".

- Natalia Bahia, Biologist, Master in Ecology from UNICAMP, Commons Conservation and Management Research Group (CGCommons).

- Deborah Santos Prado, Biologist, Master in Ecology from UNICAMP, Commons Conservation and Management Research Group (CGCommons).

- Erika Bockstael, Doctoral Candidate in Natural Resources and Environmental Management, University of Manitoba, Canada

- Dr. Alpina Begossi, Researcher at CAPESCA-PREAC-UNICAMP, and Executive Director of the Fisheries and Food Institute (FIFO).

- Dr. Cristiana Simão Seixas, Environmental Studies and Research Centre (NEPAM), the State University at Campinas (UNICAMP).

7. Institution:

Fisheries and Food Institute (FIFO), or the Institute for Fisheries, Diversity and Food Security was founded on June 1, 2006. FIFO aims to support and develop actions for the protection, improvement, and maintenance of the quality of life of people and of their
environment, through research and education activities, promoting and conducting research on topics such as "diversity and food for the future" and "fishing and food security". http://www.fisheriesandfood.org
Course 2 – [Portuguese] - Curso sobre Condução de Visitantes

1. Proposta:
A proposta é de um curso teórico/prático (35 horas/aula), no qual os participantes poderão (i) aprimorar o entendimento do papel e das responsabilidades tanto dos condutores como de turistas a partir da experiência adquirida no primeiro curso (sobre boas práticas de atendimento aos visitantes); (ii) melhorar a comunicação com os turistas, especialmente no que diz respeito às questões de segurança e; (iii) aumentar as habilidades dos membros da ABAT de cooperar com ICMBio para alcançar os objetivos comuns de sustentabilidade social e natural, proporcionando excelentes serviços aos turistas.

2. Metodologia:
Ao longo do curso serão utilizados diferentes métodos, tais como aula expositiva, trabalho em grupo, discussões em pequenos e grandes grupos, dramatizações, observações e devolutivas. As atividades propostas utilizarão didática direcionada ao público alvo e serão fundamentadas nas realidades de trabalho e de vida dos membros da ABAT.

3. Resultados esperados:
Aprendizado teórico e prático dos membros da ABAT envolvidos no treinamento para (i) melhorar a comunicação institucional, com os turistas e ICMBio; (ii) capacitar os participantes para trabalhar em parceria com ICMBio, contribuindo assim na gestão dos
recursos naturais em Trindade; e (iii) aumentar o professionalismo e a colaboração entre os membros dessa associação.

4. Programação do Curso:

O curso será realizado nos dias 4, 5, 6, 7, 11 e 21 de novembro de 2013.

1º Dia: 04/novembro/2013

<table>
<thead>
<tr>
<th>Horário</th>
<th>Programa</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 - 10:30</td>
<td>a) Distribuição, revisão da descrição do curso e programação. b) Atividade de boas vindas. c) Discussão sobre as oportunidades em Trindade.</td>
</tr>
<tr>
<td>10:30 - 12:30</td>
<td>a) Biodiversidade e conservação. b) Flora e Fauna da Mata Atlântica. c) Geografia da Mata Atlântica (passado e presente).</td>
</tr>
<tr>
<td>12:30 - 13:30</td>
<td>Almoço</td>
</tr>
</tbody>
</table>

2º Dia: 05/novembro/2013

<table>
<thead>
<tr>
<th>Horário</th>
<th>Programa</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 - 11:00</td>
<td>a) Técnicas de condução de grupos. b) Diferentes métodos possíveis de operações de organização na praia e na Piscina Natural. c) Capacidade de carga e impactos.</td>
</tr>
</tbody>
</table>
11:00 - 16:00  Sessão 4: Exercícios Práticos

Observação do trabalho: os participantes (divididos em quatro grupos) experimentarão diferentes maneiras de organizarem-se na praia e na Piscina Natural. Os participantes observarão os outros durante o trabalho e tomarão notas. Os facilitadores do curso também participarão das observações.

---

**3º Dia: 06/novembro/2013**

<table>
<thead>
<tr>
<th>9:30 - 11:30</th>
<th>11:30 - 13:00</th>
</tr>
</thead>
</table>
| Sessão 4 (continuação): Exercícios práticos | a) Gestão de turistas em áreas naturais.  
b) Conduta consciente em ambientes naturais.  
c) Operacionalização de roteiros. |

<table>
<thead>
<tr>
<th>13:00 - 14:00</th>
<th>14:00 - 15:30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almoço</td>
<td>Sessão 6: Princípios básicos de segurança individual e coletiva</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>15:30 - 17:30</th>
<th></th>
</tr>
</thead>
</table>
| Sessão 7: Uso do Equipamentos de segurança e cumprimento às normas | a) Dramatização de situações em que os membros da ABAT podem exigir educadamente que os turistas utilizem os equipamentos de segurança e cumpram as regras do ICMBio e da própria instituição.  
b) Elaborar símbolos/imagens que os barqueiros possam usar com turistas que falam diferentes idiomas. |
### 4º Dia: 07/novembro/2013

<table>
<thead>
<tr>
<th>Horário</th>
<th>Atividade</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30-12:30</td>
<td>a) Apresentação sobre gestão e co-gestão de recursos naturais.</td>
</tr>
<tr>
<td></td>
<td>b) O que é uma unidade de conservação?</td>
</tr>
<tr>
<td></td>
<td>c) Quais as diferentes categorias de Unidades de Conservação no Brasil.</td>
</tr>
<tr>
<td>12:30-13:30</td>
<td>Almoço</td>
</tr>
<tr>
<td>13:30-16:00</td>
<td>a) Representação: o papel do representante da ABAT no Conselho Consultivo do PNSB.</td>
</tr>
<tr>
<td></td>
<td>b) Princípios da negociação.</td>
</tr>
<tr>
<td></td>
<td>c) Como buscar parcerias com órgãos ambientais?</td>
</tr>
<tr>
<td></td>
<td>d) Exemplos de diferentes parcerias entre a comunidade local e unidades de conservação no Brasil e em outros países.</td>
</tr>
<tr>
<td>16:00-17:00</td>
<td>Atividades finais</td>
</tr>
<tr>
<td></td>
<td>Resumo do curso e discussão final.</td>
</tr>
</tbody>
</table>

### 5º Dia: 11/novembro/2013

<table>
<thead>
<tr>
<th>Horário</th>
<th>Atividade</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:00 - 16:30</td>
<td>a) Ecoturismo de base comunitária.</td>
</tr>
<tr>
<td></td>
<td>b) Exemplos de atividades a serem desenvolvida.</td>
</tr>
</tbody>
</table>

### 6º Dia: 21/novembro/2013

<table>
<thead>
<tr>
<th>Horário</th>
<th>Atividade</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 - 13:30</td>
<td>Os participantes irão rever o que aprenderam nos 4 dias do curso, discutir como isso tem influenciado suas práticas de trabalho e refletir e acordar melhorias necessárias.</td>
</tr>
</tbody>
</table>

5. Referências:

Realização: Instituto BioAtlantica.

2) Ministério do Meio Ambiente, Secretaria de Políticas para o Desenvolvimento 
Sustentável. Cartilha: Noções Básicas para a Condução de Visitantes em Áreas Naturais. 
Brasília, maio de 2005.

EcoBrasil. Brasília, MMA

6. Instrutores e supervisores:

- Luciana Gomes de Araujo, Doutoranda do Programa Ambiente e Sociedade, 
NEPAM/UNICAMP.

- Mariana Benchimol, tem trabalhado com Instituto Brasileiro de Educação em 
Negócios Sustentáveis (IBENS), Interação Ambiental, Projeto Bagagem, e no 
developimento de cursos com o Instituto BioAtlântica. Mariana também ajudou 
a desenvolver o “Manual Caiçara de Ecoturismo de Base Comunitária”.

- Natalia Bahia, Bióloga, Mestre em Ecologia pela UNICAMP, Grupo de Pesquisa 
em Conservação e Gestão Participativa de Recursos de Uso Comum.

- Deborah Santos Prado, Bióloga, Mestre em Ecologia pela UNICAMP, Grupo de 
Pesquisa em Conservação e Gestão Participativa de Recursos de Uso Comum.

- Erika Bockstael, Doutoranda do Programa Recursos Naturais e Gestão Ambiental, 
Universidade de Manitoba, Canada.

• Dra. Cristiana Simão Seixas, Núcleo de Estudos e Pesquisas Ambientais/NEPAM, Universidade Estadual de Campinas.

7. Instituição:

Fisheries and Food Institute (FIFO) ou o Instituto para a Pesca, Diversidade e Segurança Alimentar foi fundado em 1 de junho de 2006. FIFO tem por finalidade apoiar e desenvolver ações para a defesa, elevação e manutenção da qualidade de vida do ser humano e do seu ambiente, através das atividades de pesquisa e educação promovendo e realizando pesquisas em temas como “diversidade e alimento para o futuro” e “pesca e segurança alimentar”.

http://www.fisheriesandfood.org
APPENDIX D – Course Photos
**APPENDIX E - Consent Form [English]**

<table>
<thead>
<tr>
<th>Natural Resources Institute</th>
</tr>
</thead>
<tbody>
<tr>
<td>70 Dysart Rd,</td>
</tr>
<tr>
<td>Winnipeg, Manitoba</td>
</tr>
<tr>
<td>Canada  R3T 2N2</td>
</tr>
<tr>
<td>General Office (204) 474-7170</td>
</tr>
<tr>
<td>Fax: (204) 261-0038</td>
</tr>
<tr>
<td><a href="http://www.umanitoba.ca/academic/institutes/natural_resources">http://www.umanitoba.ca/academic/institutes/natural_resources</a></td>
</tr>
</tbody>
</table>

### Consent Form

Research Project Title: Capacity Development for inclusive and participatory governance of coastal resources in Paraty, Brazil

Principal Investigator and contact information: Erika Bockstael, ebockstael@yahoo.ca

Research Supervisor (if applicable) and contact information:

Dr. Fikret Berkes
University of Manitoba
berkes@cc.umanitoba.ca
+1-204-474-7170

Project Funding: Canada Research Chair in Community-based natural resource management; International Development Research Centre
This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to listen carefully and to understand any accompanying information.

I am in the process of conducting research for my PhD. The purpose of this research is to add to our understanding about how community members can work together to manage their natural resources, and how government and communities can cooperate. The purpose is also to help community members to understand their own capacities in resource management, and to develop further skills in this area. The research is also focused on understanding the participation of people with disabilities in particular. Participation involves about 1-2 hours in an interview, and then a group workshop of about 2-3 hours. Subsequent workshops will be offered on a variety of topics, over a ten month period, and you may choose to participate in all, some, or none of the workshops. With your permission, the interviews will be tape recorded, but the workshops will not be recorded other than through note-taking.

Benefits – The overall research may help to develop skills and understanding within the communities in the area of natural resource management, and may support the community to negotiate with the government about resource governance.
Potential risks – Governing natural resources that people depend on can be sensitive, and people don’t always agree on rules of use, for example. Risks involved with participation in the interviews is negligible as the information will be confidential. Risks in participating in the broader groups sessions may lead to some conflicts between community members if different points of views are shared.

Your responses to questions during the several sessions of the research will be documented in a notebook, and tape recorded if you provide permission. However, your names will not be recorded with the responses to ensure that your identity remains confidential. Information collected will be securely stored in Brazil, and then will be brought back to Canada upon my departure. Information will only be accessible to me.

After completion of the overall research project, findings will be shared with the community in the form of an oral presentation in a community meeting open to all. No information will be shared that can be directly linked to an informant, unless they specifically grant permission. Participants will also receive a short summary of the results, via email or by mail.

There will be a group meeting organized towards the end of the research where I will verify all the information collected during the research process. You will have an option to disagree to any such information, in which case, the information would be suitably modified with your input.
The data provided by you will be used to complete progress reports, my doctoral thesis, and will potentially be published in an academic journal(s) and presented at various conferences. You will not be identified by name in any such publications.

You will not receive any remuneration for your participation. You are free to decline to participate in this research, withdraw from the study at any time, and/or choose not to answer any questions you may not be comfortable with. If you do decline to participate in the study or answer any questions, you will not face any negative consequences. If I have not explained the study clearly, please feel free to ask for clarification or additional information at any time throughout your participation.

Confidential data will be destroyed 5 years after completion of the research project.

Do you understand and agree to the terms described here?

Your signature on this form or verbal consent indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and/or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial
consent, so you should feel free to ask for clarification or new information throughout your participation.

This research has been approved by the Joint-Faculty Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Coordinator (HEC) at 474-7122. A copy of this consent form has been given to you to keep for your records and reference.

Participant’s Signature _____________________________    Date ____________

Researcher and/or Delegate’s Signature __________________    Date ____________
APPENDIX F – Consent Form [Portuguese]

Termo de Consentimento

Título do Projeto de Pesquisa: Capacitação para governança inclusiva e participativa de recursos costeiros em Paraty, Brasil

Pesquisadora e informações para contato: Erika Bockstael, ebockstael@yahoo.ca, número de telefone (Paraty): 24 9989-4409

Supervisor da pesquisa (se aplicável) e informações para contato:

Dr. Fikret Berkes

University of Manitoba

berkes@cc.umanitoba.ca
+1-204-474-7170

Financiamentos do projeto: Canada Research Chair in Community-based natural resource management; International Development Research Centre (IDRC)
Esse termo de consentimento é apenas uma parte do processo de consentimento informado. Uma cópia desse documento será entregue a você para seu registro e referência. Ele deve mostrar qual o objetivo principal da pesquisa e no que implicará a sua participação. Sinta-se à vontade para perguntar mais detalhes sobre qualquer informação contida ou não neste documento.

Eu estou realizando uma pesquisa relacionada ao meu doutorado. O propósito dessa pesquisa é melhorar o entendimento sobre como os membros da comunidade podem trabalhar juntos para gerir seus recursos naturais, e como o governo e as comunidades podem cooperar. A intenção é também ajudar os membros da comunidade a entender suas próprias capacidades em gestão de recursos e desenvolver mais habilidades nessa área. Além disso, a pesquisa foca o entendimento da participação de pessoas com deficiências. A participação nesse estudo envolve uma entrevista com aproximadamente 1 a 2 horas de duração, e, em outro momento, uma oficina em grupo de aproximadamente 2 a 3 horas. Oficinas sobre diversos tópicos serão posteriormente oferecidas ao longo de 10 meses, e você poderá escolher participar de todas, algumas ou nenhuma delas. As entrevistas serão gravadas (apenas áudio) com a sua permissão, já as oficinas não serão gravadas e sim feitas anotações.

Benefícios: A pesquisa pode ajudar a desenvolver habilidades e compreensão nas comunidades sobre a gestão de recursos naturais. Ela pode também apoiar a comunidade em negociações com o governo sobre a governança dos recursos.
Riscos potenciais: Não há riscos envolvendo a participação em entrevistas, uma vez que as informações registradas são confidenciais. Gerir recursos naturais dos quais as pessoas dependem pode ser delicado, por exemplo, as pessoas nem sempre concordam com as regras de uso. Caso diferentes pontos de vistas sejam compartilhados nas oficinas em grupo, há o risco de que isso possa levar a alguns conflitos entre membros da comunidade.

Suas respostas para as questões durante as várias sessões de pesquisa serão documentadas em um caderno de anotações e gravadas se você permitir. Mas seu nome não será registrado com as respostas para garantir que sua identidade permaneça confidencial. As informações coletadas serão armazenadas em segurança no Brasil, e então levadas ao Canadá quando eu partir. Essas informações serão acessadas apenas por mim, pela assistente de pesquisa que participou da entrevista e, possivelmente, alguém que nos ajudará com a tradução e a transcrição das entrevistas. Estes indivíduos irão assinar acordos de confidencialidade.

Após a conclusão do projeto de pesquisa, os resultados serão compartilhados com a comunidade através de uma apresentação oral em uma reunião aberta a todos, na própria comunidade. Nenhuma informação ligada diretamente a um participante da pesquisa será compartilhada, a menos que ele conceda essa permissão específica. Os participantes também receberão um breve resumo dos resultados por email ou pelo correio.

Ao final da pesquisa, será realizada uma reunião com o grupo para validar todas as informações coletadas ao longo do trabalho. Você poderá discordar de tais informações e,
nesse caso, a informação será devidamente modificada com a sua contribuição. Os dados fornecidos por você serão usados para elaborar relatórios, minha tese de doutorado e potencialmente trabalhos publicados em revista(s) acadêmica(s) e apresentados em diversas conferências. Sua identidade não será revelada em nenhuma dessas publicações.

Você não irá receber nenhuma remuneração por sua participação. Você está livre para recusar-se a participar dessa pesquisa, retirar-se desse estudo a qualquer momento, e/ou não responder a qualquer questão com que não se sinta confortável. Se você se recusar a participar da pesquisa ou a responder qualquer questão, não enfrentará nenhuma consequência negativa. Além disso, se eu não tiver explicado o projeto de pesquisa com clareza, por favor, sinta-se à vontade para pedir esclarecimentos e informações adicionais a qualquer momento.

Os dados confidenciais serão destruídos cinco anos após a conclusão da pesquisa.

Você compreendeu e concorda com os termos aqui descritos?

**Sua assinatura neste documento ou seu consentimento verbal indica que você compreendeu satisfatoriamente as informações relacionadas à participação no projeto de pesquisa e concorda em participar. De maneira alguma isso renuncia seus direitos legais, nem isenta os pesquisadores, financiadores ou as instituições envolvidas das responsabilidades legais e profissionais. Você está livre para retirar-se do estudo a qualquer momento, e/ou abster-se de responder qualquer questão que prefira se omitir, sem discriminação ou consequências. Sua participação contínua deve ser informada, assim como o seu consentimento inicial. Por isso, você deve**
sentir-se à vontade para pedir esclarecimentos ou novas informações sobre sua participação.

Essa pesquisa foi aprovada pelo Conselho de Ética em Pesquisas do Corpo Docente da Universidade de Manitoba. Se você tiver qualquer preocupação ou reclamação sobre esse projeto você poderá contatar qualquer uma das pessoas mencionadas acima ou o Coordenador de Ética Humana (HEC) no telefone (204) 474-7122 (Canadá). Uma cópia deste termo de consentimento será entregue a você para seu registro e informação.

Assinatura do Participante ____________________________ Data ____________

Assinatura do pesquisador ou representante _________________ Data ________