Innovations for institutional change towards adaptive co-management of human inhabited National Park in Mozambique

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Abstract: Protected area management has been an area of inquiry where institutional innovations are being continually attempted, particularly when the challenge of reconciling conservation goals and human livelihood needs are beyond the scope of existing management regimes, institutions and mindsets. Limpopo National Park (LNP) in Mozambique as part of a Transfrontier Conservation Area presents a classic case seeking systemic transformation to fulfill its mandate. LNP's buffer zone hosts about 35000 people clustered into 44 communities. Rain-fed farming systems constrained by cyclical droughts and wildlife encroachment make the communities' livelihoods vulnerable. This situation combined with poor performance of the park management in providing for previously agreed livelihood needs has contributed to poor relationship between park management and communities. A series of iterative workshops made up the core of the systemic action research approach taken for the project. These were undertaken at district, park, and community levels as ways of creating space for all relevant actors to share their perceptions and worldviews of the situation, allowing mutual learning to occur and new forms of interaction and communication to emerge. The process to date has consisted of two streams of inquiry. The first is working towards capacity development of park staff through experiential and social learning to build on knowledge and professional competences needed for supporting institutional innovations. The second consists of engaging community, park and other actors in facilitated communication and deliberative processes towards institutionalizing innovations for adaptive co-management as a long term possibility. This paper reflects on the process of building capacity, creating spaces, and making opportunities for greater engagement between park management and communities as aspects of a multi-level innovation platform and its potential as driver for institutional change towards adaptive co-management and farming systems transformation.

Keywords: Protected area management, institutional change, community engagement, Limpopo National Park, Systemic action research

Introduction

Protected area management has been an area of inquiry where innovation and change to existing norms, management regimes, mindsets and institutions are seen as necessary, particularly when the challenge of reconciling conservation goals and human livelihood needs are beyond the scope of current practices. The Limpopo National Park (LNP) in Mozambique as part of a Transfrontier Conservation Area presents a classic case seeking systemic transformation to fulfill its mandate. The interaction between LNP management and the buffer zone communities is characterized by a conflicting relationship mainly due to contradictions between conservation objectives and communities' livelihood needs, induced by weak communication, misinformation and unshared perspectives and worldviews. LNP is 11.233km2 in extent and bridges Kruger National Park in

South Africa and Gonarezhou National Park in Zimbabwe, to make the Great Limpopo Transfrontier Park. About 21% of the park corresponds to the buffer zone with 35,000 people clustered in 44 communities live with a livelihood reliant on natural resources use (Ministry of Tourism, 2003). Despite the park's position which acknowledges people's existence and its intention towards an integrated management approach, the practice for past 10 years of its existence has been to follow the classical top down approach. Promises of improving their wellbeing through livelihood diversification, jobs and other local development have not been met yet. People's livelihoods have deteriorated over time due to wildlife encroachment and harsh climate conditions (Givá & Sriskandarajah, 2012). As a result, park-community relationship has seen increasing tension in the absence of a dialogue about shared issues, or a coherent and effective communication strategy, with little space for collaboration between relevant actors in the process. Previous studies of engaging communities in participatory decision-making processes highlighted the legacy of an autocratic political regime on people's attitude while enacting participation (Milgroom, 2012). The present project attempts to address this problematique and reconcile conservation goals and human livelihood needs through new forms of interactions, at different levels. ,

This paper reflects on the systemic action research process in place as intervention for systemic change, and the creation of learning spaces as multi-level innovation platforms and the drivers of institutional innovation and change. Section 2 overviews literature on institutional innovations and adaptive co-management, Section 3 a brief description of the methodology, Section 4 with selected findings presented along the three main episodes of the workshop approach, and section 5 discussing what is to be undertaken as next phase of research to sustain the change process through implementation of collectively made decisions.

Theoretical Considerations

Innovations, Institutions and Platforms

Innovation can be taken to go beyond the commonly understood meaning of it such as in reference to a technological artifact or a method, and to include what is emergent due to complex set of processes at play when attempting to set up a new social or an institutional arrangement. From the Innovation Systems perspective, especially as adopted for discussion within the agricultural extension field, innovation is seen as involving the 'contextual reordering of relations and institutions in multiple social networks' (Hounkonnou et al., 2012). While the term 'institution' continues to be used in two main senses in the literature contributing to a confusion, we use it in the sense of Edquist and Johnson (1997) to refer to sets of routines, rules or practices that regulate the interactions between individuals, and in our case between and within groups and organizations.

The multitude of interacting institutions combined with the unpredictable nature of human behavior induces the complexity of social systems, and an understanding of institutions constitutes the major step to grasping the complexity and dynamics of social change (Woodhill, 2010). This author proposed four critical capacity areas for institutional innovation, namely, navigating complexity, learning collaboratively, engaging politically and being self-reflective. By navigating complexity he meant a capacity to operate within the inherent complexity and unpredictability of social systems. Stakeholder engagement and collaborative learning are necessary for institutional innovations to emerge, and the more effective the collaborative learning could be, greater will be the capacity for institutional innovation. For Woodhill (2010) institutional innovation requires investing in capacities of the actors to be self-reflective, and providing the actors time and space to develop themselves and their self-understanding to discuss their feelings and emotions, and to

make those spaces 'safe' environments for those concerned. These very spaces have been called platforms by others according to the following three main principles with group of users (i) working collectively towards an understanding of the resource base (ii) cooperating in solving social dilemmas attached to collective use, and (iii) undertaking joint action with respect to perceived problems (Röling, 1994 ; Steins & Edwards, 1999).

Adaptive co-management of Protected Areas

Co-management presupposes that all interested parties have 'formally or semi-formally agreed on the process for sharing management rights and responsibilities' (Berkes, 2009). However, co-management should not be seen as end-point process, but as an evolving process where relationships among the parties are continuously changing (Pinkerton, 1992). In turn, adaptive co-management gives special attention to the learning (experiential and experimental) and vertical and horizontal collaboration as functions relevant to improve the understanding of and ability to respond to complex social-ecological systems (Armitage et al., 2008b). Adaptive co-management emphasizes the potential of connecting heterogeneous actors through a process of social learning whereby institutional arrangements can emerge and be developed (Armitage et al., 2008b). This process offers a platform where relevant actors share their interests; enter into a dialogue to exchange their worldviews and reflecting about intentions, values and goals (Armitage et al., 2008a).

Innovation Platforms as drivers for Adaptive co-management

Platforms can take various shapes (as space, arenas, event, network, or communication mode) to drive institutional change to bypass or remove institutional barriers or to create new institutions towards systems transformation. A platform is a space where humans interact and through it create meaning and interpret and build new knowledge (Steyaert et al., 2007). The rationale of such innovation platforms is to maximize the variety of contributions and worldviews stemming from a multicolored knowledge base while maintaining coherence and minimum level of hierarchy (Consoli & Patrucco, 2008). The multi-stakeholder platform as space for social learning where such interactions can develop is an important initial step, but needs to be complemented by trust building and legitimacy of the process (Tyler, 2008). Another important element of innovation platforms is the innovation intermediary or broker, which can be an organization or individual who facilitates innovation process between involved parts. Such an intermediary helps provide information about potential collaborators, act as mediator and facilitate open exchange of information, knowledge and experiences, link bodies or organizations that are already collaborating, bring support in terms of advice, funding or other kinds (Klerkx & Leeuwis, 2009).

Methodology

Study area

LNP in Southern Mozambique has as its borders Kruger National Park on the East, Limpopo River on the northwest and Elephants River and Massingir dam in the South. Located in the semi-arid area of Northwest Gaza Province, LNP comprises 3 districts, Massingir in South, Mabalane in the center and Chicualacuala in the northern part of the park. This work focused in Massingir district with the detailed study undertaken in Macaringue village (531 households), the largest of 10 villages in the southern part of LNP buffer zone.

Approach and methods

Systemic Action Research is the chosen approach for this work, guided by the need to engage and empower park officials, residents and other actors, in order for them to be involved in bringing about change (action) and improving or building knowledge (research) through rational reflection

on personal and/or collective experience (Packham & Sriskandarajah, 2005). The interplay of people's livelihoods and wildlife conservation has been the concern of the present study, and the approach consisted of two distinct phases. Phase 1 consisted of the baseline research undertaken in 2008-09 to gain an understanding of the interplay of wildlife conservation, people's livelihoods and climate factors, the strategies adopted by the community to overcome livelihood vulnerability through climate effects and wildlife encroachment, as well as identifying the involved actors, their perceptions and concerns. Building on that knowledge, Phase 2 became the intervention research phase commencing in 2012, with active engagement of all relevant actors, providing the ground for sharing of perceptions, information, knowledge and experience among them, and through this interactive process promote social learning and seek meaningful adaptive co-management opportunities.

The second phase of action research has been characterized by two streams of inquiry marked by a series of three workshops, each workshop becoming the core event in an action research cycle. The first stream of inquiry consists of engaging community, park and other actors in facilitated communication and deliberative processes. Information from the baseline study and the trust built between main researcher and actors involved in the first phase of research served as pre-established conditions for the beginning of this intervention phase, which culminated in the first workshop. The second stream of inquiry is working towards capacity development of park staff through experiential and community interaction possibilities, to build on knowledge and profes-sional competences needed for supporting institutional change. The third workshop, a conse-quence of the first two, and a bridge between the two streams, explored the 20% park annual rev-enue. According to Mozambican Law 10/99 of Forest and Wildlife, 20% of all rates or fees from parks, reserves or other kind of Natural Resources exploitation should be allocated to local com-munity. They must then be responsible for managing the 20% annual funds, through creation of Committees for Natural Resources Management (CNRM). Different research methods and tools were applied in between workshops to learn more about the emergent issue on debate. Review of park's plans, strategies and reports, national policy and regulation framework documents were also undertaken; individual interviews and focus group discussions with community and CNRM members, local leadership, park staff, government authorities were conducted to learn about ac-tors' knowledge, information, skills, competences, perceptions and interpretations about issues related to the debated theme.

Table 1 presents the objectives, process, methods and tools used in each workshop, details of the participants and the main outcomes. The three workshop events and activities around each of them made up one iteration of the action research cycle, with the enacted workshops themselves serving as spaces for deliberation and learning at the respective level (district, park, and/or com-munity), and together constituting an innovation platform for institutional change. After each workshop, the researchers reflected on the objectives of the workshop, the process, appropriate-ness of tools and techniques used the outputs and outcomes including the emergent themes.

Table 1 Workshops' objectives, process and respective outcomes

Aim and Objectives	Participants	Methods and Tools	Outcomes
Workshop 1: 20-21 March 2013 "Inhabited conservation areas: are there alternatives? The case of LNP in Mozambique (District level)			
Aim: Initiate steps towards actors engagement; share and discuss perceptions and worldviews towards seeking alternatives for co-existence of humans in-habitations at LNP Objectives: Share preliminary results of communities' livelihood dynamics in LNP's buffer zone and alternatives for improvement; Start a dialogue process with all relevant actors in searching alternatives Create space for different perspectives to be surfaced;	Total 24 participants 05 community members 04 District government officials including District Administrator 08 park staff including Park Manager 01 representative of Peace Park Foundation 03 NGOs' representative 02 researchers at LNP	1.5 day workshop Soft System Methodology as planning tool Tools Baseline research Presentations, Pair and Group discussion; Group exercise, Photo exercise, Historical Timeline, Ranking through voting	For the first time actors' shared perceptions and concerns discussed at LNP; Awareness raised about the complexity at the livelihood - conservation interface; Actors acknowledged the need for wider participation in establishment of norms and regulations of NR use; Communication, collaboration among actors and participation in management decision processes chosen as main issues to be addressed;
Workshop 2: 6 ˉ9 August 2013 " Communication for Conservation: A professional development for LNP's Park staff" (Park and community level)			
Aim: Professional development of park staff through direct experience from the field; Objectives: Capacity building of LNP´s staff in communication and participator processes; Enacting communication through field experience where tools and techniques to recognize relevant issues, each others' worldviews as well as the other actors worldviews were experimented;	Total 11 park staff 06 from Community Department including the head of department 05 from Protection Department including the head of department 13 villagers members	4 days training workshop; Kolb's learning framework as planning tool 2 days in class room Tools: World café, Group exercises, Discussions 2 days in the field (Macaringue village) Tools: Free transects in 3 groups; Conversation with Local community; Mind mapping; Dialogue process and active listening; Groups reflections about the process.	Elevated the importance of distinction between persuasive and interactive communication; Acknowledged the value of working with community as way of trust building and reducing misinformation ; Dialogue process pointed as useful tool to reduce conflict; Appropriate structure and mechanism to engage community in participative process and ongoing capacity building in dialogue process ranked as main issue to follow up;
Workshop 3: 5 December 2013 " Reflection about the allocation and utilization of 20% LNP's revenue" (at Community and District level)			
Aim: Re-engage actors in interactive and more collaborative ways of working together towards improved	Total 38 participants 01 Provincial Tourism	1 day workshop Tools: CNRM and 20% study presentations; Pair	Information about current procedures and practices related to 20% manage-

current 20% allocation and utilization practices Objectives: Share the study's results of current practice of allocation and application of 20% LNP's revenue; Initiate discussion about how to improve these practices towards more effective and interactive management of the 20%;	Department Representative of District administrator (opening) Deputy Manager of LNP (opening) 04 chefs of locality; 02 chefs of administrative post 11 community leaders; 10 committee members, 05 PNL staff; 2 government officials; 2 ONGs representatives	wise and group discussions; Ranking exercise.	ment shared by all actors; Ways to improve functionality of the 20% discussed and proposed; Acknowledged the need of all stakeholders' involvement in the process; Role of different actors discussed and clarified; Changing committee members, formulating internal regulation, and improving communication and coordination among actors ranked as priority issues to be followed up; 3 working groups were created to address the above priorities;

Findings
The three iterations of the second phase of this research form the core of the innovation being attempted at LNP. Spaces that were created during each iteration particularly in the manner the workshops were enacted, whereby multiple actors came together for interactive, facilitated and mutual processes of social learning, could thus be viewed as constituting the innovation platform. As in any systemic action research process, the outcomes and decisions of one workshop made up the next set of actions, and while the three cycles and respective workshops were aimed at culti-vating the necessary conditions for stimulating an overall ethos of institutional innovation, each one also focused on building a specific capacity at its own level. Below the outcomes of three iterative cycles are discussed in terms of what was achieved, whether those can be institutional-ized and how they contribute in the long term towards adaptive co-management as a park man-agement goal.

Innovation Spaces as drivers for institutional change: our attempts and responses
The District Administrator of Massingir and other District government authorities, Park's di-rective board and relevant staff, NGOs, researchers, community members and their respective leaders gathered for the first time in March 2013. The objective was to initiate a dialogue across their different perspectives, worldviews and concerns regarding human inhabited conservation areas in general, and to discuss alternatives that could accommodate both the communities' live-lihood and conservations needs at LNP. Participants not only discussed the issues of conservation and development dilemmas based on general debates and their implications at global, regional and national levels, but also local matters to do with community livelihood dynamics and LNP conservation interfaces in the village of Macaringue. This interaction revealed that the actors did not carry the same information about the park's objectives, benefits and the current management practices.

As a result of this workshop, participants appeared to have gained a newer and greater awareness of the complexity of combining conservation and development needs of local people living with-in a conservation area, they called to attention the importance of establishing norms and regula-tions that regulate the use of Natural Resources (NR) for sustainable management, and expressed their recognition of the potential that existed for collaboration across different interests. The rap-port that had been built among different actors through this process enabled them to surface the differences in perspectives in constructive ways. For instance, park staff argued that these norms and regulations were well established and institutionalized in the Park's Management Plan, and to them the constraint seemed to be in its effective implementation. They also pointed at the lack of collaboration and a lack of ownership of the Management Plan on the community's part. Com-munity members reacted to this by explaining that they were never involved in the consultation, discussion or decision process about the norms established in the Management Plan, and there-fore claimed that they were not well informed about the content of the Plan, did not want to acknowledge it and demanded a more participative process to develop the Management Plan. District government representatives expressed their claim for more effective communication structures to be adopted by the Park to include all actors in order to share common information and greater levels of collaboration. Despite the mix of feelings of anger and disappointment, all actors were keen to share their respective perceptions and worldviews of the situation, and partic-ipants managed to freely express their concerns while still allowing space for clarification or mis-information to be sorted out.

The facilitator's role in this situation became crucial not only to keep a balance and to engage all actors but also to allow the dialogue to flow, emergent properties to surface without loss of direc-tion and also be prepared to allow the process to take its own path without losing the essence of it (Gray, 2009).

This new form of interaction and communication opened new chances for rebuilding relationship, especially between community members and the park, an important initial step for institutional change (Steyaert et al., 2007 ; Tyler, 2008 ; Berkes, 2009 ; Woodhill, 2010). It also opens opportunities for new attitudes and mindsets that help to navigate within the LNP conservation livelihood complex and allows new organizational cultures, management strategies and individual competences to be built (Woodhill, 2010).

Post-workshop reflections with the Park Manager (PM) and staff revealed their appreciation of the process, especially the opportunity to bring them and the community together as stated by the PM. They were enthusiastic about building on and following up the process "while the fire was still on" (words of PM); however, they were also concerned about their skill base and lack of competence to conduct the process by themselves. As a result, two lines of intervention were designed to tackle both the capacity building of park staff and the reinforcement of actors' engagement platform, as described in the next sections.

Multi-level Innovation platforms in Protected Area Management
Dealing with complexity while tackling change processes and creating mechanisms for bottom-up governance require multi-level capacity development in order to distribute understanding, improve feedback linkages and enhance capacities for adapting to change. In this regard, this work unfolded through three levels. Apart from a main platform that brings all relevant actors (community, park, district government, NGO and researchers) together as illustrated above, other spaces of interaction also opened up among groups of actors concerning specific issues.

At the community level, community members including the leaders were engaged in learning and understanding their real situation, develop self-reflective capacity (Woodhill, 2010) and seek alternatives for improving their condition. Issues such as drought/floods and elephant crop raiding, strategies to overcome the elephant threat, livelihood and income diversity possibilities for community members, and benefit sharing of the 20% LNP annual income have dominated discussion in these forums. The interaction at this level raised the principle of sharing risk and responsibility. For instance, the shifting from a setting of individually managed and dispersed plots to a more concentrated and expanded cropped areas due to more water availability (floods) demanded new alternative and more effective protection strategies against crop raiding, beyond the previous individual efforts (Givá & Sriskandarajah, 2012). Thus, members of the community reacted by crafting existing social relationships and responded in flexible ways that highlighted the inherent strength of organizational and coordination capacity among the villagers. This emergent property is particularly underlined here as an important trigger to depart from and sustain ways of exploring other forms of interaction, networking and trust building between communities and park authorities (Plummer & FitzGibbon, 2006).

Moving towards bridging community and park relationships, another level of capacity building emerged as necessary. The community affairs department of LNP is composed of seven staff members diverse in their background, literacy, training and experience. Despite their primary mandate of dealing with communities, they had no previous training in any participatory processes or community engagement techniques. The LNP had acknowledged its fragility in communicating and interacting not only with communities but also with other actors and had ordered a communication strategy plan from a consultant. This strategy remained ineffective or unimplemented three years after its delivery way back in 2010. This indicates that having strategy documents is not enough if the structure and appropriate capacity is not in place. On this basis, yet another space for interaction and learning was created for the benefit of park staff in the form of a four days experiential 'communication for conservation' training workshop. Workshop structure was such that on the first two days of class room interaction where training content was introduced according to gaps identified throughout the process. The interaction started with a world café session where participants were encouraged to discuss their experience in the park, and per-

ceptions about LNP communication internally, at district, community and external levels. The debate was summarized by them in the form of three main outcomes: (1) deficit in information flow between departments and park staff, (2) lack of regular structure and means to share information, knowledge and experience among park staff; (3) need to improve internal communication to allow space for improvements at other levels of change. Ways to tackle these concerns proposed by them included regular meetings, information system manager, and more collaborative work between head of divisions and departments. The main reflection on this exercise was the insight about the complexity involved in communicating balanced messages related to NR conservation and NR exploitation for sustaining people's livelihood needs. This was used to emphasize the difference between persuasive communication (William, 1996) of the kind adopted within the LNP, and a more interactive communication which would take into consideration local needs and experiences, allowing knowledge co-production through social interaction (Steyaert et al., 2007) to be explored. Skills needed for such interactions were discussed and enacted in the field in the other two days of the workshop.

The two days field workshop consisted of free transects and informal conversation in groups of four with the objective of building socio-economic, cultural and biophysical understanding of the village context and present it through a rich picture. Each group then selected a trigger issue and planned a dialogue process to be carried out with members of the community the following day. The dialogue process was intended not just as a training exercise for the park staff, but also a way to build on the park-community engagement process that was in place. Thirteen community members took part in the dialogue with park staff. The elevated reflections pointed as the outcome of the dialogue exercise were (1) acknowledgement of the complex though important need for communicating interactively with actors (community) as they faced a community with distorted, incorrect and insufficient information related to the park management issues; (2) park staff realizing that mutual learning occurred while interacting during a dialogue process; (3) the satisfaction expressed by the community members sparked recognition that it was not necessary for "big" actions to happen in order to make difference (as stated by the park staff). In the post-workshop reflective process, park staff recognized the advantage of working more collaboratively and indicated their willingness to engage in more interactive approach. However, on-going capacity building was demanded as a basic condition. Nevertheless, they committed themselves to work collaboratively in the next intervention towards understanding the current interpretation, practices and regulations about the 20% allocation of park's annual revenue allocation, since it was ranked as priority concern by community members.

The process of allocation, use and management of 20% of the benefits involve procedures that are not being observed due to various constraints related to knowledge, information gaps, self-organization capacity and the capacity for planning and coordinating among and between CNRM and other key actors. Although the CNRM was created within LNP in 2003, it was only in 2008 that they started allocating the 20% of the revenue annually to the committees. Consequently, the whole process was not working well at present and the 20% was not producing the desired impact.

This issue itself gained the interests of the communities, park and government authorities, and we saw this as a potential catalyst for the next level of engagement and the key features of which are summarized in the Box bellow.

Box 1: Innovation Platform in Action over a selected issue of concern

Interaction occurred at two levels facilitated by the researcher with participation of a park staff member. The first level consisted of dialogue with groups of people representing different interests. Separate group conversations were held with community members, CNRM members, and park staff. In addition, interviews with community leaders, NGO staff, district government staff and President of CNRM were conducted. All information, interpretation and concerns from all different groups of actors was compiled and presented in a one-day workshop, which corresponded to the second level interaction space. Together, participants processed and discussed each other's perspective and concerted actions were proposed and agreed upon. Improving communication and coordination among them as well as incentivizing participation of all in the process of 20% allocation and application was ranked as a priority. Related to this, they also discussed and clarified the role of each other in the process, outcome of which is presented in Figure 1. Revitalizing the NR committees by changing the members, formulating new membership requirements and institutionalizing mechanism for improving monitoring, account-ability and transparency were other agreed action to be taken.

Figure 1: Main Actors' role on the 20% park revenue management
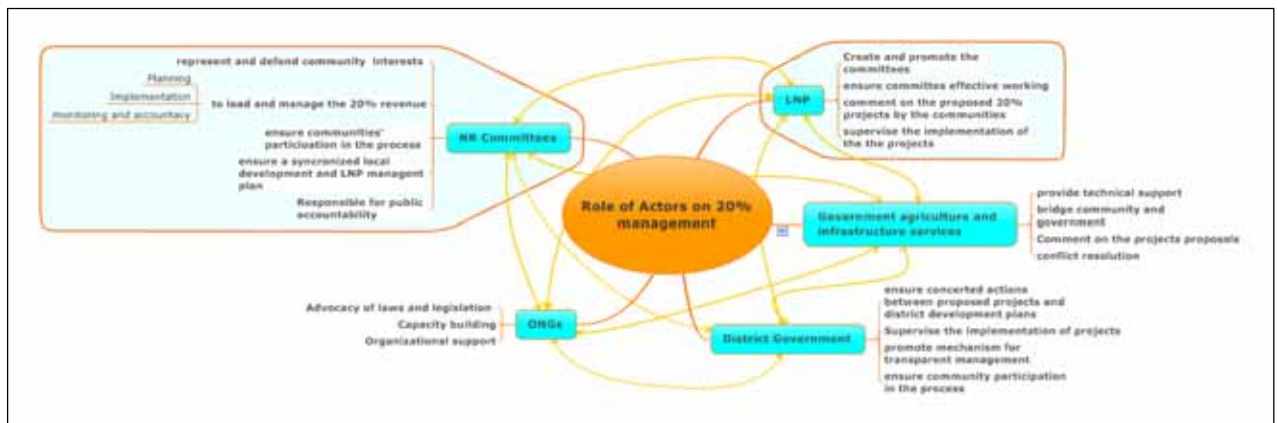
The different levels of interactions and their respective outcomes are tangible results from the nominally established innovation platform within LNP in this study. However, as argued by Klerkx (2013) in the context of agricultural innovation systems, for an innovation to survive, it should be seen as negotiation and as part of an institutional change process in which technological changes co-evolve with social and institutional change beyond farmer level. In this study, the comparable process of consolidating and institutionalizing the emergent institutional innovations for the long term presents itself with a set of well known challenges as well as opportunities worth pursuing.

Discussion and Conclusions

The streams of inquiry pursued within an action research framework in this study have clearly enabled the opening up of a space for actors concerned with the LNP's management to interact in meaningful ways, participate in discussions about matters that affect their life and initiate processes of negotiating important management decisions. This in itself can be considered as a large step in institutional innovation with potential for change in practice and movement towards co-adaptive management. However, the top-down management approach adopted by the LNP is not consistent with its current reality and expressed desire to integrate people in their management approach. The structure and organizational culture in place allow little and very weak contact with communities and other actors. Park priorities and working strategies at present are driven by donors' agenda rather than the ideals of co-management; therefore park staff faces the challenge of dealing with unclear working goals and objectives, ad hoc working plans and fuzzy roles and responsibilities. The unclear strategy for seeking a balance between wildlife conservation and LNP inhabitants' livelihood needs also bears some costs in terms of the instability of management structure which might be a threat for the whole process of institutional innovation being attempted.

In addition to the features inherent in the park as an organization, the degree of power asymmetry among the actors engaged in the platform should also be discussed here as impacting on the viability of the innovation and indeed the platform. The diversity of backgrounds in terms of literacy, language skills, and social status among and between park employees and community members had to be taken into account when designing processes for engagement. For instance, most community members are illiterate and only speak the local language; therefore workshop sessions enabling communication in both the local Shangane and the official Portuguese languages despite the costs in additional time needed for translation. Though not as pronounced as in other platforms connected with natural resource contexts such as the water management cases discussed by Faysse (2006) and by Cullen et al. (2013), in this study the main power differential between community members and park management had to be counted in when designing workshop and other interactive processes to boost the local communities' negotiation skills, lobbying abilities, capacity to self-mobilize and the ability to bear own cost of participation.

In his power cube framework in participatory governance, Gaventa (2006) refers to three types of 'spaces' of power: provided, invited or claimed. The dialogue space that was created in our workshop settings did not fall exactly within these three types of spaces. What has been enabled, influenced and gradually established by us as outsiders in the LNP context could be described as a fourth category of 'mediated' space of power and an arena of mutual learning. In our view, referring to such a learning space as a 'community agora' would better serve to recognize the inevitability of power differences in these situations and indicate the potential for deliberative processes in cultivating the 'commons', instead of the term platform which would simply imply a level playing field (Faysse, 2006). The significance of the external researcher in the setting up of the innovation platform, the need for continued presence, on-going support and efforts for facilitating further evolution of the newborn innovation platform, capacity building for the different actors, and transforming the organizational structure and tradition of a National Park are crucial factors to be considered here.

The example of the 20% park's revenue case illustrates very well the opportunities existing for the 'platform' approach to innovation, particularly in terms of its potential to deliver institutional change through collective and consensual decision making, across institutional limitations, knowledge gaps, communication deficits and power differentials. It is also equally pertinent to recognize that this was brought about by the choice of an interactive, systemic and cyclical research approach, and through the close presence of an intervening inquirer-facilitator armed with a range of relevant processes and a reflective practice. The likelihood of tangible outcomes in the form of clearer lines of decision making and fund flows on the matter of 20% benefit sharing between the park and the buffer zone community, a matter which had lingered on for close to a decade, would be seen as a breakthrough among all actors. But to what extent the collaborative processes innovated now would require the time, resource and intensive presence of the external facilitator for those to be institutionalized is still a question.

The next phase of this study will focus on the internal capacity of the park's staff for community relations to take a greater facilitation role. The facilitator's position in supporting weaker actors and handling difficult situations, while also maintaining the degree of neutrality demanded in multi-actor contexts, requires sophisticated skills and an ethically sound standpoint (Checkland & Poulter, 2006 ; Gray, 2009), not the sort of competences expected to be found within public authorities such as LNP at present. The extensive literature on innovation systems approach and the role of platforms in agricultural research for development is reflective of the optimism there is for obtaining this capacity within farming systems research-extension nexus, especially where technologic innovations and production interventions are prime. Whether the same could be hoped for in nature conservation and natural resource management contexts, with less concrete and more process oriented innovations, remains to be established.

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