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Interface between Local Actors, Livelihoods and Conservation around the Kivu Lake Watershed in the African Great Lakes Region

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Abstract: This paper sets out to portray the complexity of stakeholders, the views associated with them, and the tensions between livelihoods and conservation interests in the Africa Great lakes region. Through an exploratory study and field visits carried out between 2006 and 2012, this study analyses the various socio-economic and politico-institutional arenas impacting on the Kivu Lake watershed with the objective of identifying a win-win scenario for conservation and livelihoods. Drawing on the institutional theory, emphasis was laid on analysing the structure and forms of institutions, the existing arrangements, and the ways in which these shape access to, use and management of resources. It depicts institutions as social networks (endowment, capability and entitlement) using the case of HELPAGE and the HIMO approach. Overall, this study has demonstrated how many happenings (resource characteristic, political and social processes and various institutional arrangements) contribute to the tensions between conservation and livelihoods. It has also shown that although field efforts try to set a balance between the two processes, for instance through the agroforestry project, many other agendas undermine these efforts such as the scattered and uncoordinated actions of field actors and the multiplicity of resource users' group. This paper has proposed some guiding rules emanating from the implementation of the HIMO program that if applied, will reduce conflicts between communities and projects.

Keywords: Africa Great Lakes region; Arena; Conservation; Institutions; Livelihoods; local.

1. Introduction

Bureaucratic processes are “those formalised arrangements based on explicit organisational structures, contracts and legal rights often introduced by governments or development agencies”, while socially embedded processes are “those based on culture, social organisation and daily practice commonly, but erroneously, referred to as informal” (Cleaver, 2002). Referring to the concepts of ‘bureaucratic’ and ‘socially embedded’ processes aforementioned, there is a need to interrogate the various institutional, political and social arenas that may undermine and/or contribute to a more sustainable (and equitable) resource management and use. This study thus, sets out to explore challenges affecting institutional processes in the management and use of the Kivu Lake watershed resources while characterising the interplay between various socio-economic and political arenas.

Benjaminsen and Lund (2002), Cleaver (2002) and Bastiaensen *et al.* (2006) argue that the challenges in the natural resource use practices and management arrangements are shaped by multiple and diverse processes of social and political friction and negotiation/contention and harmony taking place in a hazy atmosphere of legal pluralism. Such processes, and the arenas in which they occur, are influenced by classification dichotomies of traditional/modern, formal/informal and legal/illegal debates at the local and global levels. Despite such influences, a satisfactory middle ground between conservation and livelihoods has yet to be achieved but they have raised awareness about the complexity involved in natural resource development planning. These complexities include the interdependence of connected livelihoods and difficulties to reconcile contradictory interests; multi-actor arenas and transboundary and intra-boundary issues.

Using De Herdt *et al.* (2004) description of natural resources, the Kivu Lake watershed is a pluriform social landscape whose dynamics are co-determined by interdependent but autonomous actors of different kinds, situated at multiple levels and with a diversity of interests and worldviews. Consequently, its management and use faces many challenges, including bringing together different interest groups, arriving at compromises that reduce friction among

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groups, stopping the decline in resources, and implementing complex institutional interventions. The inability to address these challenges has led to a decline in the quality of watershed functions, which in turn has led to increased competition and conflict. The extent to which these pressures have affected environmental quality in the Kivu Lake watershed is illustrated by the decline in forested land of the Nyungwe forest reserve, which has reduced from 114.000 ha in 1960 to 63.400 ha in 2001 (IFDC/HELPAGE, 2006).

As Kerr (2007) notes managing systems like the Kivu Lake watershed is difficult because watershed systems have multiple and conflicting uses. Consequently, any given approach will spread benefits and costs unevenly among users. Therefore, technical actions implemented to address ecosystem quality concerns need to be accompanied by socio-political investigations and policy reforms appropriate to the local context. It will provide directions that could help to identify pathways for developing improved management strategies for the watershed and guidance on the types of restoration approaches that could be adopted. However, this requires a thorough breakdown of the interaction between stakeholders (their structure and organisations, roles, tensions and compromises) and rules (state and non-state laws; written laws and laws in practice; social relation and social capital) that determine access to and use of resources in the Kivu Lake watershed. Planning discourse and actions related to conservation and livelihoods will be accentuated since they convey most of the tensions, compromises, and interests of stakeholders around the watershed.

This paper sets out to portray the complexity of stakeholders, the views associated with them, and the tensions between livelihoods and conservation interests. Using an exploratory study, it analyses the various socio-economic and politico-institutional arenas impacting Kivu Lake watershed with the objective of identifying a win-win scenario for conservation and livelihoods. Study results will be used to propose key guidelines for the development of a management strategy and direction on types of restoration to be adopted. This will contribute toward improving the overall management plan for ameliorating watershed functions.

To understand the interconnectedness of bureaucratic and socially embedded processes, the existing institutional arrangements, various arenas and prevailing management dynamics will be interrogated using the institutional theory (Cleaver, 2002;2007) and interrogating the intervention of HELPAGE (Programme de Gestion des Ressources Naturelles pour la Paix et la Stabilité Socio-économique des Populations des Grands Lacs) and those of international organisations within the Kivu Lake watershed (HELPAGE, 2007). One principal activity of HELPAGE to be analysed will be the HIMO (Haute Intensité de Main-d'Oeuvre (Labour-Intensive Public Works)) approach. This has been used as a development tool in areas with high labour and less jobs and infrastructure like in post conflict environments like DRC, Rwanda and Burundi.

Drawing on institutional theory, emphasis is laid on analysing the structure and forms of institutions and existing arrangements, and the ways in which these shape access to, use and management of natural resources. In order to portray the relationship between the communities and the watershed functions, we will illustrate the patterns of distribution and use of resources by analysing the nature and aim of watershed projects (IUCN, 2006). The socio-economic conditions of the population and main challenges for conservation and livelihoods will be stressed. Finally, we use concepts and theories in natural resource management like the social embeddedness of natural resource management (Cleaver, 2002), common property theory (Kerr, 2007) and political arenas around access to land (Bastiaensen *et al.*, 2006) to analyse on-going management and restoration processes and difficulties encountered in order to identify weaknesses that impede effective application of some of the practices. By showing how these weaknesses are linked to the overall socio-economic situation and prevailing institutional arrangements, we identify main points of imbalances and make suggestions for coordination and improvement.

2. Findings and Discussion

2.1. Institutions as Social Networks (Endowment, Capability and Entitlement)

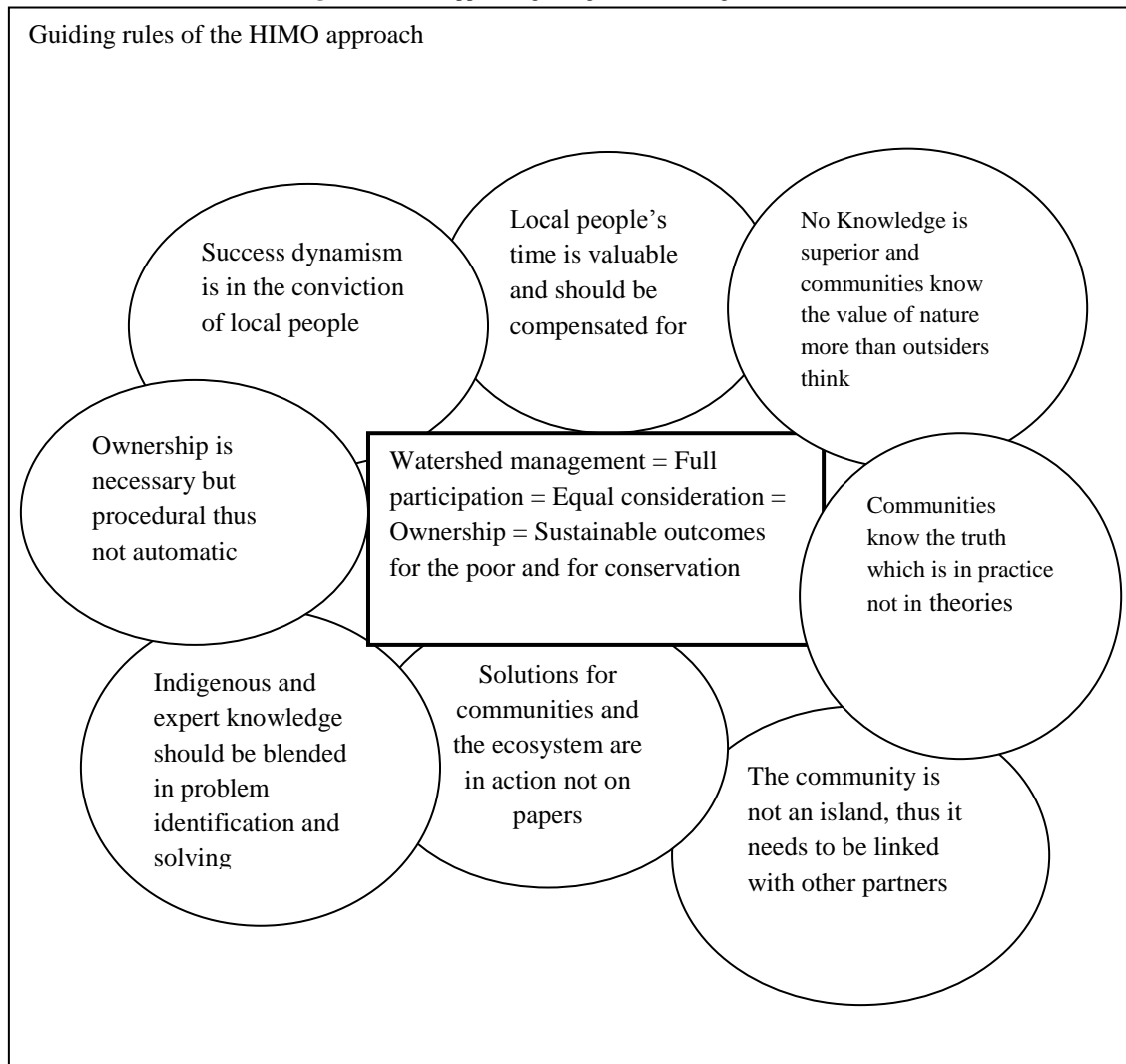
HELPAGE program is a key organisation that plays an interface between local actors and livelihoods systems like local job creation and income generation through the HIMO approach. HELPAGE helps in linking a number of actors at different levels, leading to the linking and bridging of social capital (Woolcock and Narayan, 2000) which is generated through various processes of social interaction (Collier, 2002) at different levels. Although such interactions may destroy local livelihoods strategies, other opportunities have been created for local people's participation. For instance, the indigenes participate in the HIMO process and obtain free trees to plant on their fields through the agroforestry project. This leads to the creation of social capital (Woolcock and Narayan, 2000) and reduce the potential damaging effects that may exist (Collier, 2002). The guarantee of group protection and self-confidence creates the likelihood for the rise of a strong internal unison with impermeable boundaries which may make it difficult for outsiders to get involved in the internal affairs of the insiders. In this way, insiders may develop some stereotyped ideas that maybe a threat to development intervention. This could in turn slow down the rise of relational agency which has been proved fundamental in ensuring sustainable development (Long, 2001). However, a mitigation measure could be to neatly weave in the efforts of HELPAGE with those of other field partners to expand and diverse livelihoods systems and conservation strategies simultaneously.

The many forms and dimensions of poverty affecting the study area include food shortages, poverty as mental and psychological torture resulting from the effects of war (shame, fear, insecurity and uncertainty) and income poverty. Building from Sen (1999) capability approach, these forms of poverty together with the difficult natural environment leads to capability deprivation meaning that the rights, freedoms and opportunities obtainable by this population is restricted and thus their realised wellbeing is much lower than fair. In trying to address this, while

materialising the agro-forestry and disenclavement projects, HELPAGE has embarked on a labour intensive strategy called the HIMO approach.

This approach seeks to use simple but verified technologies that could lead to local capacity building, empowerment, revenue creation and the valorisation of local materials in the execution of field activities. Using field data and explanations given by project staff, local people participating in the HIMO approach, local authorities and other people in the community, the HIMO approach could be summarised using eight guiding rules following societal realities as on Figure 1. These realities suggest that real participation and successful outcomes for watershed management require: complementarity between traditional and expert knowledge, the conviction of local people, emphasis on ownership as being procedural; community linkages; payment for local people’s time and/or knowledge; engagement in simple, practical and visible activities that can generated sustainable outcomes for the poor and the ecosystem.

Figure-1. HIMO approach guiding rules following societal realities



2.1.1. How Does the HIMO Approach Operate in Practice?

HIMO is an approach to poverty reduction and is practiced in a context where unemployment is significant and income levels are very low. As such, it tries to replace machinery and fuel by physical labour and human strength thereby promoting mass recruitment and group work with complicated arrangements at multiple levels. Here, labour recruitment is negotiated between projects (HELPAGE for example), the local authorities and the population; and is based on criteria like vulnerability to poverty, proximity to working sites and gender balance. The selection which starts from the smallest socio-politico-economic unit of the society (villages in the case of Rwanda and DRC) goes through the administrative ladder (cells and sectors) as it is being combined with other units to the Districts (Rwanda) and provinces (DRC).

Before the selection starts, various sensitization and planning meetings are organised with local authorities and community members to inform them of the project, the intended activity and to enhance the participation of all people. However, there is the likelihood for the exclusion of some community members due unequal access to information and physical disability (embodiment). This concept of embodiment has been discussed by Cleaver (2007) in understanding the agency of collective action. Here, she notes that physical capabilities as embodiment are basic determinants of public participation. Therefore embodiment affects participation directly (being sick yourself)

and indirectly (having to take care of a sick relative). No special efforts were made to capture such people but also the people talked to did not see the exclusion of some people as a problem probably because some parents could be registered in their absences and some parents could be represented by their children.

For administrative reasons and to ensure coordination; the list of workers is finally assembled at the level of the district (Rwanda) or province (DRC) i.e. the unit where development intervention take place, institutions are evaluated and main links between projects and local administrators are enforced. Finally, depending on the number of workers needed per activity and site, the institutions (HELPAGE for example) do the final recruitment following other judgements like family size, former involvement in armed groups and seriously affected victims of conflicts within the household. Some people may be further excluded due to subjectivity of the selection team. Overall, people who finally participate in the HIMO process are provided with a monthly compensation calculated on a daily basis. This compensation in cash for participating in project activities hovers around 1.42 USD per day, 28.30USD per month and 339.62 USD per year. This is higher than the upper limit of the poverty line meaning that if the worker was to be alone, then s/he will be able to meet up with his/her basic needs with less stress. However, considering that the household size is often large, this income has to be spread across many people including some relatives and friends.

Irrespective of this, the use of physical labour helps in job creation; promotes on-the-job training and perfection; reduce social discrimination; improve money circulation at the local level; help in the reintegration of some ex-soldiers and encourage distressed local people to take part in local arenas. It therefore motivate interest, improve local responsibility in project activities and help in building ownership of activities over time since the local people are motivated to take part in project implementation and have built the technical knowledge required for its follow-up and maintenance. Participation over time helps to create commitment and affinity for the projects established and the income gained if properly managed could help the workers to set up other livelihoods systems at the end of the activity. This will help create stability and reduce tensions.

2.1.2. Linking the HIMO Approach to Capabilities

The local people have knowledge, physical labour and time to work (endowment) and through HIMO, they are provided the work to do (entitlement). By working, they are able to gain income (means to realised wellbeing) that can be transformed into set of vectors of potential functioning (capability). These capabilities help to improve individual decision making, build self-confidence and moral stability and willingness (incentive) to promote unwavering society for better wellbeing. Although most donors and writers in natural resources often see the local people as the final beneficiaries of development projects, and therefore suggest that their knowledge, labour and time should serve as their own contribution to project activities (Brett, 2003), literature on free-riding and opportunistic behaviours in collective action has proved this wrong (Bastiaensen *et al.*, 2006). Such writers often argue that if labour is paid for; it can reduce and destroy local willingness to engage in collective action (and labour) necessary to safeguard natural resources and public infrastructure in which perspective, the payments (an external incentive) can become a destructive substitute for real local collective action (based on intrinsic incentives). However, other writers like Cardenas *et al.* (2000) and Somik *et al.* (2004) have demonstrated how individual interest and motivations lead to more unfair and opportunistic behaviours in collective action using the theory of the Nash equilibrium and the balance between self-interested and others-regarding behaviours. These affirmations have nothing to do with the payment or non-payment for the labour of local people.

According to the guiding rules of HIMO, ownership is necessary but procedural thus not automatic. Therefore, local people need incentives to keep them focus on the project, learn how to deal with the project complexities, design alternative coping strategies for their livelihoods and also learn ways of maintaining and managing the project. Such strategies can only be built over time and be effective if full participation is ensured in practical terms. Therefore, HIMO guiding rules emphasises on knowledge sharing, equality, actions and practice to ensure this. Linking the HIMO approach to Sen (1999) concept on capabilities between means and effective functioning, this approach generates means to realised wellbeing that could be exploited by the community for interpersonal development. Although this has produced visible outcomes for the community and forest landscape restoration activities (like the afforested areas), outcomes for individuals depend on their personal ability and choices to transform resources obtained into tangible impacts on their wellbeing. However, since there has been no study to qualify and measure these outcomes in neither Rwanda nor DRC, it is difficult to conclude on it with certainty. None the less, from expert judgement on the field, and taking the case of the agroforestry project, while the workers involved in the HIMO labour force have benefitted monetary income, the knowledge generated in tree planting helps in the management of these plantations and in planting other trees locally.

Naturally one will expect problems of free-riding within the groups participating in the HIMO approach. However, no such incidences were reported. From discussions, they think groups members were drilled at the beginning of the task and each member fear to loss his/her position. In addition, group members have developed inter and intra group supportive spirit and aim at a village success rather than an individual one. It could be interesting to observe more closely how these groups are able to overcome problems of free-riding and opportunistic behaviours in collective action. This could not have been done during this study since it doesn't fall within its objectives.

2.2. Institutions as ‘Rules of the Game’

HELPAGE’s work is linked to a variety of ‘rules of the game’. Starting with international conventions, HELPAGE works on wetlands, forest areas and protected areas. Although many international conventions related to these resources exist, HELPAGE emphasizes the Ramsar Convention, the Kyoto Protocol and the Convention on Biological Diversity. This is mainly through actions on wetland management, tree planting, agroforestry and the promotion and protection of natural habitats. With respect to State’s laws and policies, HELPAGE promotes the organic laws pertaining to land resources, forestry, agriculture and water resources; the environment policy, the poverty reduction (PRSP) and decentralisation processes in Rwanda and DRC together with many related presidential and ministerial orders and decrees. Other rules of the game include social practices such as the signing of performance contracts with a variety of organisations, technical ministries, local governments and community groups (Civil Society Organisations (CSO) and Community Based Organisations (CBO)), and the signing of various partnership agreements with these organisations and across boundary mainly in promoting the terms of the Great Lakes country committees (Comité des Pays de Grand Lacs (CPGL)) policy. Disciplinary structures recognised and promoted by HELPAGE include the ‘Abunzi’ which is a local conflict resolution body in Rwanda, the court, the public security and national defence forces, although their use is less frequent. General decision making concerning daily functioning is made by the coordinators and administrative staff of HELPAGE together with the steering committees at various administrative levels while strategic decisions are made by the HELPAGE board of directors with other necessary partners. Physical artefacts that justify field actions and partners’ relationships are the numerous technical and financial reports, letters and agendas; pictures posted on the information board in each office and field signboards indicating on-going activities. Finally, staff and other institutions in working with HELPAGE sign various short, medium and long term contracts which guide the terms of their relationship.

However, considering the social dimension of HELPAGE’s institutional processes, these physical artefacts and visual materials are not given the same importance as actual needs and outcomes of real implementation making this institution to focus more on field realities rather than paper work. For example, HELPAGE project vehicles do not carry the logo of the institution and field activities are somehow discrete because rules like signposts indicating field activities are those imposed by the State or the local government and not of HELPAGE’s invention. Even though this may portray some seriousness and sincerity in field implementation, it also poses a problem of identity as the same activity may carry multiple identities behind the scene. In addition, passers-by may not from first sight know where to get advice in case they want to get engaged in similar endeavours. However, it is not altogether negative because most development projects have of late turned to substitute signposts for actual field implementations which are contributing in building and reinforcing the conflicts between communities and development projects. This is substantiated by Figure 2 and box 1.

Figure-2. Prominent signpost with uncompleted water harvesting project in the Kibumba community (Pictures by Ngome P., 2008)



Box-1. Community perception about signposts and projects in the Kibumba community in DRC

Question

Madam, we need to emphasis this even though we know you are accompanied by a park manager... If people are to come and plant signboards and start off ghost projects in our community, then we shall start revolting against projects and will destroy all these signboards. Look at this point... how many signboards are there? Ten – and this is because there is no space here again – all the road sides are full of signboards... What is the community benefiting from all these signboards? Look at this one (the signboard for the water harvesting project), you need to visit the project site... one organisation came and made people to waste their time and energy working for free and for years now, our labour has not been paid for, the land owner has not been paid, the project is uncompleted and the land cannot be used for something else. Today we still have the same water problems we had in the past, in addition our time was wasted and one of our brother’s is deprived of his land. But when a stranger passes here, and seeing all these signboards, they will think we have a lot of benefits from projects whereas it is not true.

Question: Do you people know the role of some of the organisations represented by the other signboards?

Answer: *Apart of Actionaid and FAO - who use to provide food and other assistance during the war, the other organisations just come here to tell us stories so we cannot say concretely what they stand for – maybe for talking. And of course Institut Congolais pour la conservation de la Nature (ICCN) is for the park...*

Source: Field interviews date

From this testimony, it can be noticed that the population bothers less about park managers and penalties. In addition physical artefacts as signpost do often bring field realities to the stage but may instead help to justify offstage actions. This justifies one of the guiding roles of HIMO that community members believe in the practice rather than theory. Then, the HIMO approach is good but projects should make sure that community members are compensated as stipulated on the contracts to reduce conflicts. Inferring from the context following expert judgement... 'ICCN is for the park' means the people care less about the rules of conservation and madam signifies an outburst of open defiance, meaning that in as much as community members may respect project ideas; it is reaching a stage where they are willing to go into open confrontation with project members if their needs are not addressed properly. This open confrontation is highly probable for the Virunga national park and other incoming projects especially as no appropriate and functional mediating structures and institutional frameworks exist for managing conflicts between projects and communities.

2.3. Strengths and Weaknesses of HELPAGE as an Organisation

Although HELPAGE has some strong qualities, it also presents a number of weaknesses. First, HELPAGE in the implementation of its field activities presents a strong sense of transparency which supposes that they could be some understandable degree of accountability. This can be demonstrated by the publishing of each activity and the corresponding budget on the notice board in the regional and field offices. Also outsiders have easy access to all project documents of the institution including funded projects, the full budgets and other administrative and technical letters, contracts and memorandum of understanding. This helps outsiders to understand easily how HELPAGE functions, its sphere of influence and also encourages partnership and strong participation. This could also be a danger in case such documents are not in multiple copies because some external people could easily go away with the documentation and it will be difficult to trace. This danger is a real threat added to the fact that HELPAGE documentation system is not strong and is less organised.

The little use of signpost to indicate HELPAGE's field accomplishments although has been described above as a strength, could be potentially be a way to promote misuse of project funds by some project leaders and government officials. This is because some of these field activities could carry multiple identities and other people could as well use them to justify their interest without the knowledge of HELPAGE itself. In addition most of the population will hardly be able to differentiate between HELPAGE vehicles and other vehicles since they do not have a logo on them. Next, from the analysis of HELPAGE as an organisation, no knowledge sharing frameworks (spaces for sharing knowledge through publications, on-the-job training of field staff and, participation in conferences and seminars) were identified. This means that most field working methods are hardly updated and on-the-field lessons learnt are not documented properly to contribute to science and other literature on natural resource development even though such data is strongly desired today to foster development agendas in many countries.

Finally as demonstrated by the community in Kibumba, the HIMO approach is good when it is properly applied and the terms of the contract are respected. However, in cases of failures in meeting up with some of the clauses of the contract, it could result to an undesired effect for project leaders and sometimes the communities (like hounding outsiders and diminishing opportunities of developing relational agency of the community). In any case, this is good because it shows that the community knows their rights and can fight for it. Such situations also expose some of the hidden practices (exploitative behaviours adopted by some project leaders) during the implementation of field activities in the pretext that communities were the beneficiaries of projects and therefore needed to contribute for free.

The weaknesses presented are in line with that of Cleaver (2002) of institutional bricolage – 'do it yourself bricoleurs' wherein HELPAGE in the implementation of their field activities try to be more focused on output rather than on methodological approaches. In so doing, they are unable to capture details. On the other hand, IUCN is renowned for its roles as a federator and ability to pay attention to details and high capacity to summarise large information and filter irrelevant facts (IUCN, 2006). Therefore, HELPAGE in working with IUCN could mutually benefit in that while HELPAGE has the institutional arrangements in place, IUCN will bring in an added value in their activities in making them more visible on the field. For instance, IUCN will pay more attention to the proper use of sign post, more organized way of dealing with documentation and improved communication strategies with the outside world as well as the local community. Finally, this collaboration will strengthen the bonding, bridging and linking social capital by the generation and execution of more actions using the HIMO approach and will extend HELPAGE's sphere of intervention.

2.4. International Institutions and International Arenas at the Local Level

Conventional international development agendas like the Millennium Development Goals (MDG) and other interventional conventions are diluted in the local government development plan. Field experts interviewed and local authorities are particularly conscious of the Kyoto protocol on climate change and its consequence for their locality. Thus activities in line with the Lake water level, soil erosion, reforestation and degraded land are particularly supported at the local level by international agendas. Although the Rwandan government has signed the convention on wetlands, it has not yet ratified to it. Still, they have active wetland management programs around the Kivu Lake watershed mainly in managing the marsh land and swampy areas.

Another international agenda and important power pool highly reinforced at the local level is the Church. Although many churches are represented at the local level, the case of the Catholic Church will be analysed since it is the most common. This church serves as a mediator in most development interventions, a medium of information

transfer, a peace maker, a crowd puller and a development agent. Tools used in carrying out these functions include its weekly masses, prayer sessions, choir and prayer groups, church committees, solidarity work groups, occasional gatherings and other evangelical activities.

Apart from these traditional duties of the church and the fact that it helps to create a strong group cohesion among the community members, the Catholic Church owns and provides a number of social amenities at the local level:

- Clean water supply, wells and water harvesting projects;
- Schools;
- Training on various crafts for women and children;
- Sports and recreation facilities;
- Transportation (in the Kibumba community for example, the car of the priest was attested to be important in local transportation occasionally and in times of problems) ;
- Health centre;
- Guest houses and;
- Agricultural activities

Through these activities, the church creates employment at the local level. It enhances social relations with the externalities of social capital formation through specific relationships with visiting priests, nuns and other clergy men who sometimes adopt children in the communities and establish special relationships with some families. It is also a strategic platform for building the bonding, linking and bridging of social capital at the local level. Finally, the church plays the role of development broker at the local level especially in linking the local community with other communities in the North through their missionary work and other projects either developed by the church or initiated by community members or church groups. For example, many water harvesting projects reported in many communities in Rwanda are initiated and funded by the church and its related institutions.

3. Conclusion and Recommendations

HIMO can be used to reduce conflicts between communities and projects, and guide against opportunistic and self-seeking behaviour and free-riding in collective action. Therefore, development planners should think of incorporating and effectively applying the guiding rules of the HIMO approach as developed in this paper. The analysis demonstrates that effective policies to guide management and restoration processes need to focus on people and institutions. Focusing on people will lead to improving performance, efficiency and effectiveness; people's ways of doing things, their mentality and perceptions which in turn could help in rebuilding and replenishing the scarce and degrading natural resources. As such, the changing forms of poverty need to be addressed more critically with emphasis on poverty as mental and psychological torture in order to change peoples' perception about livelihoods and natural resources. Irrespective of the solutions that may be proposed for management and restoration, the political atmosphere needs to be revolutionized for it to be able to push forward other agendas to sustain conservation and livelihood concerns more effectively.

Social capital seems to be an important driving force behind community development around the Kivu Lake watershed. It will be exiting to study the creation, use and durability of social capital in these communities and especially to see at what stage social capital may become damaging. In so doing, the role of HELPAGE and all the other international institutions especially the church should be examined more closely. HIMO seems to be a suitable approach to solving problems of free-riding and opportunistic behaviour in collective action. However, its effectiveness and potential risks are not known at the moment this study was being carried out. It would therefore be important to verify this assertion in bringing out the potentials and constraints of the HIMO approach more systematically. Successful development in this area needs a more detail study on poverty as mental and psychological torture resulting from the effects of war (shame, fear, insecurity and uncertainty). It may be important to analyse these forms of poverty more closely and make proposal on poverty reduction strategies that may address them directly.

References

- Bastiaansen, J., D'Exelle, B. and Famerée, C. (2006). Political arenas around access to land: a diagnosis of property rights practices in the Nicaraguan Interior. Discussion Paper 2006.08. University of Antwerp, IOB. 48.
- Benjaminsen, T. and Lund, C. (2002). Formalisation and informalisation of Land and water Rights in Africa: An introduction. *European Journal of Development Research* 14(2): 1-10.
- Brett, E. A. (2003). Participation and accountability in development management. *The Journal of Development Studies*, London, Frank Cass, 40(2): 1-29
- Cardenas, J. C., Stranlund, J. and Willis, C. (2000). Local environmental control and institutional crowding-out. *World Development*. London, Pergamon Press, 28(10): 1719-34.
- Cleaver, F. (2002). Reinventing institutions and the social embeddedness of natural resource management. *European Journal of Development Research*, 14: 11-30. Available: <http://www.palgrave-journals.com/ejdr/journal/v14/n2/abs/ejdr200217a.html>
- Cleaver, F. (2007). Local institutional and participatory development. *Sustaining livelihoods in Sub Sahara Africa, Khanya-African Institute for Community Driven Development*, (18): 34.

- Collier, P. (2002). *Social capital and poverty: a micro-economic perspective.* in *The role of Social Capital in Development: An empirical assessment*. Ed. C. Grootaert & T. Van Bastelaer. Cambridge University Press: Cambridge. 19-41.
- De Herdt, T., Bastiaensen, J. and D'Exelle, B. (2004). Towards a local socio-institutional analysis of anti-poverty interventions: A critical review of methods and researchers. IDPM - UA discussion paper. 56.
- HELPAGE (2007). Programme de développement économique durable dans les province du Nord et de l'Ouest. Phase II de l'approche HIMO SIG et PRP. Document Technique. Version Définitive. 57.
- IFDC/HELPAGE (2006). Programme des gestions des ressources naturelles transfrontalier par l'approche HIMO pour la paix et la stabilité socio-économique des populations dans les pays des grandes lacs (République Démocratique du Congo, de Rwanda et du Burundi). 55.
- IUCN (2006). Livihoods and Landscape Strategy. Better forests, better lives. Forest conservation program. Project document.
- Kerr, J. (2007). Watershed Management: Lessons from common property theory. *International Journal of the Commons*, 1(1): 89-109.
- Long, N. (2001). The case for an actor-oriented sociology of development. *Development Sociology: Actor Perspectives*. London, Routledge, 9-29. Available: <http://readinglists.ucl.ac.uk/items/D4F36B8B-4FE9-5E64-B688-DD9B04C3DC8F.html>
- Sen, A. K. (1999). Freedom and the foundations of justice. *Sen, A.K. Development as Freedom Oxford, Oxford University Press*: 54-86.
- Somik, V. L., Deichmann, U., Mathais, K. A. L. and Nazmil, C. (2004). Tenure, diversity and commitment: Community participation for urban service provision. *Journal of Development Studies*, 40(3): 1-26.
- Woolcock, M. and Narayan, D. (2000). Social Capital: implications for development theory, research, and policy. *The World Bank Research Observer*, 15(2): 225-49.