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Transfrontier Conservation Governance, Communal People's Rights and Value Discourses: Whose Resources and Who Governs?

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Abstract:

This paper is based on a thesis literature section of a doctoral research undertaken in Sengwe and Makuleke communities in Zimbabwe and South Africa respectively. The study was done from 2010 to 2012. The two communities are integral to a transfrontier/transboundary conservation initiative known as the Great Limpopo Transfrontier Park. The paper examines complexities of natural resource rights in order to understand various community resource claims as they relate to competing multi-level institutional resource governance and stakeholder interests. It is imperative to underscore that transfrontier conservation in Southern Africa instituted fundamental changes on natural resource accessibility and utilization of the same resources by surrounding communities. An observation was made that the ownership structure created by transfrontier multiscale conservation processes, are clearly state-centric and favour private ownership as opposed to reposing tenurial rights and power manage the resources in the hands of communities adjacent to these natural resources. This has put resource claims by the local people on a collision path with governmental and other conservation experts. Communal ownership that exist at the local level as mechanisms o mediate human-environment relationships, have were substituted by private and state ownership. Thus, undermining local collaboration in conservation management and natural resource governance at the local level. Communal ownership is viewed pejoratively, and at worst, blamed for overexploitation of resources arising out of Garret Hardin's "the tragedy of the commons" theory (1968). This paper also assets that the process of governance and exclusionary processes, have also disenfranchises communities in what is claimed as 'tragedy of the common man' as opposed to Hardin's theory. From transfrontier conservation ideological manifestations to practical application, communal ownership in the African setting has been treated as synonymous with "open access," to resources, which it is not by all its definitions. This paper argues that transfrontier conservation redefinition of property rights, apart from being exclusionary, poses challenges of sidestepping local claims by reposing conservation responsibilities on private ownership and the state as the viable options. This overlooks the role played by communities to contribute meaningfully towards conservation. Through the lens of the positivist, classical liberal theory and utilitarian theory, analysis of psychological mapping of human behaviour regarding natural resource rights and claims using the Don Beck's Spiral Dynamics, the paper evaluates and validates local claims against hypothetical considerations.

1. Introduction

Local people in many Southern African communities where natural resources are found in abundance, find it difficult to voice their concerns about natural resource ownership, access rights and utilisation. The environment and issues of sustainability are convoluted in power relations involving ambiguous 'rights over resources' and ownership processes to the extent that this has created misunderstanding and worse, conflicts between natural resource managers and communities adjacent to these resource. The loss of biological diversity and diminishing ecosystems across boundaries of sovereign states is partly the manifestation and function of disenfranchisement of local communities' usufruct, which if guaranteed, could provide motivation toward sustainable conservation, utilization and management of resources. In fact, what is glaring is the differential environmental separatism between the local people and 'other' 'outside' high-level governmental and other interest groups that seek to compete out-compete local resource users, which pose double tragedy with serious consequences on both humanity and ecosystems sustainability. This paper questions the

failure to recognise communal ownership as integral rights that can be exercised at community level. The central critique is that implicit policy implementation from a practical perspective constrain empowerment of the local people by disenfranchising them of their resource rights. It is apparent from literature that communities in Makuleke and Sengwe communities in the Great Limpopo Transfrontier Park, one of the world's wildlife enclave, have valid arguments and legitimate claims over resources that in itself, should be leveraged with to motivate communities' sustainable natural resource conservation.

2. Historical Underpinnings

Since 1999 when the first transfrontier park (Kgalagardi) was established between South Africa and Botswana, states and global actors made enormous efforts to increase transfrontier conservation projects in Southern Africa. Consequently, in the recent decade and half, proliferation of transfrontier conservation areas resulted in changes of land use patterns, altered ownership and access to natural resources by communities who withstand the worst of human-wildlife conflicts through predation and crop raiding inherent in many communities across the sub-region. Notwithstanding these problems, communities have traditionally enjoyed environmental benefits for livelihood purposes (Himmelfarb, 2006:1) despite the philosophy of exclusionary protectionism having remained intact and central in transfrontier conservation initiatives pursued in Southern Africa sub-continent.

It is imperative to highlight that communities have become victims of resource rights modernism. Arguably, although well-intentioned, such resource rights modernism and the attendant management approaches thereof in transfrontier conservation, smacks of unsustainable exclusion of local communities, and therefore, this has had severe repercussions on rural livelihoods, let alone undermining motivation of the local people to collaborate in conservation of biodiversity and ecosystems management in the region. The communities rely on resource for their livelihood and these resources as critical asset for poverty alleviation in line with the Millennium Development Goals (MDGs). At one of the IUCN meetings, one speaker once said:

• "We cannot alleviate poverty over the long term without managing ecosystems sustainably. Nor can we protect ecosystems from abuse without holding those with wealth and power accountable for their actions, and recognizing the legitimate needs of the poor and dispossessed. This is the balance we must strike in all of our decisions for the Earth. Properly mandated, empowered and informed communities, can contribute to decisions that affect them and play an indispensable part in creating a securely-based sustainable society" (IUCN, Caring for the Earth, 1991).

Clearly and apparently so, this balance of meeting interest of communities and those conserving natural resources, has not found common ideological ground in the application of principles of access, ownership and usufruct in many transboundary conservation areas within Southern Africa. Defining the relationship between government and other conservationists on one hand, their respective roles, rules policies and responsibilities with those of the communities, has been and continue to be a difficulty synthesis in development theory, particularly looking at local participation, accountability, local institutional inclusiveness, respecting local practices and indigenous knowledge systems, equity, enhancement of tenure and fair and equitable distribution of natural resources. These elements and the expected synergies, which should always be sought by all stakeholders, demand a radical shift from a centralist development theory and strategy in biodiversity conservation, to one that is participatory and locally driven development processes that complements the rights of local people as resource users and amplify obligations of various parties over the same natural resources in a win-win situation.

Ideally, institutional regimes that have emerged in the Great Limpopo Transfrontier Park in relation to Seng we and Makuleke communities epitomize centralized state control of ecosystems in the form of a 'park' model as a dominant conservation paradigm. This was fueled by neoliberal approaches in international conservation discourses (Brockington et al. 2008). The approach has often resulted in adverse effects on access to natural resources for livelihood by the local people (Saberwal et al. 2001; Adams and Hutton 2007).

From widespread poverty reduction in rural communities to ecological sustainability, this paper argue that existing assumptions need honest evaluation of local resource claims, particularly looking at local ownership regimes, essentially with a view to establish conservation potential, efficacy and correlations. It is imperative to avoid a blanket nullification of local claims, let alone instituting blanket theories and strategies in transboundary natural resource ownership, governance and access, which can conflict locally with specific sustainable conservation management processes that have been in existence for a long time through traditions and culture. The Yellowstone model which is a Western and American conservation management construct embodies ideas of the wilderness as untouched by human presence (Brown et al. 2005; Langton et al. 2005). It emphasizes separation and intimates that communities and local persons are intruders in a particular settings of nature even thought these two used to enjoy nature's providence (Schroeder, 2007).

It is realized in this paper that there is evidence to suggest that some important elements of communal culture, ownership, local rights over resources and communal conservation efficacies exist at community level around the Great Limpopo Transfrontier Park (GLTP). This is despite the orchestra seeking to denigrate common people's claims and rights, with also efforts from state institutions and international organizations increasingly reconstructing social realities around transboundary governance and resource ownership regimes that ignore the importance of communities. The governance processes and ownership generally within community settings are perceived to be archaic because the claim has been and continue to be that the local communities allegedly lack resources and biological scientific sophistication to enhance and improve the quality of ecosystems as confirmed by Gartlan (undated: 223), and he argues:

• "It is unrealistic and irresponsible to hand over the duty for protection of these unique ecosystems to the local communities who have neither the resources nor the biological education necessary to manage them".

The same author claims with less judicious consideration of urgent action required to save these ecosystems and permit the fragile communities to survive. He further argues:

• "Claims for land and territory are often vigorously upheld indiscriminately by social anthropologists, the human rights movement and increasingly by the orthodox conservation movement on the dubious grounds (particularly in Africa) of "indigenous rights" (Gartlan, undated:217).

The central critique is that the attack on communities becomes glaringly unjustified. If communities fail to be guaranteed of their resource rights and ownership, chances of revenge utilization is the ultimate outcome, and it can potentially lead to depletion and ecosystems suffer profusely from unsustainable overexploitation. It becomes supper critical to create equity and parity in natural resource access and ownership, in which case, use rights and benefits should be distributed across different social strata of communities and interest groups as opposed to concentrating rights exclusively in the hands of state agencies and private entities from a selected few. It has always been argued in this study that promotion of people-oriented development, is not only a step forward to poverty alleviation, but can help transformation of societies as an integrative mechanism for social mobilization towards broad-based management of natural resources. Allowing a selected few operators, thus, can potentially institute a new form of transfrontier biodiversity and ecosystems elitism. As a concept, biodiversity has enormous political attraction. It is not just a qualitative area, instead of death, we talk about loss; it is incremental, fuzzy, imprecise and a complex socio-technical area that requires development planners to take cognisance of communities' interest and aspirations. Its use (biodiversity) and management, should not remove nature from the purview of the people, neither should it be also from the biologist scientific understanding, permit ownership and transfer use rights to some social actors somewhere, who are alien to the communities to benefit themselves.

Attempts have been made to link conservation of biological diversity with livelihoods and poverty alleviation. However, Community Based Natural Resources Management (CBNRM) that ushered hope in terms of entrenching community resource rights over natural resources are dwindling in Southern Africa, particularly in Zimbabwe. The Communal Areas Management Programme For Indigenous Resources (CAMPFIRE) was a popular programme that ended up being duplicated in Southern Africa such as Namibia, Botswana, South Africa, Zambia and far afield, Tanzania. However, one of the biggest challenges to CAMPFIRE is, and continue to be its failure to deliver convincing benefits to households. While the Rural District Councils in the case of Zimbabwe and Local Authorities in other polities, get most of the revenue of over 60% of the total revenues, communities consider this as not fair in terms of wealth distribution. Furthermore, the Councils or Local Authorities represent broad spectrums of political and economic interests, which tend to overshadow the interests of wildlife producer communities.

People interviewed in Makuleke also indicated how they incurred losses of land in Pafuri near Kruger National Park and the consequential decline in wildlife benefits, have made life difficult. This paper notes with concern that the redefinition of natural resource rights that arose in the advent of transfrontier natural resource conservation governance and management in Southern Africa, disenfranchises the local people. Through interrogation of natural resource rights, ownership, access and equitable distribution, have shown that the state processes impact quite unfavourably on communities. Thus, generating local attitudes that do not support sustainable management, and produce various environmental value systems that are not sustainable.

3. Methodology

This paper uses secondary data analysis as a source inquiry and mixes it with empirical primary research. The study also uses multilevel analysis of natural resource rights and values systems to get deeper understanding of complex issues by way of looking at conservation social contexts through theoretical evidence. The evidence base is largely made up of data from research analysis on natural resource rights discourses. Literature review was done that aimed at assembling relevant data regarding communal people's rights and value issues to understand transfrontier conservation relationships and dynamics. This research was carried out in Sengwe and Makuleke communities as part of a PhD study carried out from 2010 to 2012, covering the two communities mentioned above. The two communities are geographically located adjacent to the Great Limpopo Transfrontier Park (GLTP). The GLTP is a transboundary conservation area involving three countries that are Mozambique, South Africa and Zimbabwe in Southern Africa. Sengwe community is located in a transitory animal corridor in Zimbabwe linking Gonarezhou National Park in Zimbabwe with Kruger National Park of South Africa. At its Southern boundary, the Gonarezhou National Park shares the same border with Mozambique. The study covered Makuleke community, located 70 kilometers from Pafuri Triangle. Pafuri Triange is a piece of land that the Makuleke community used to own before the September 1969 land appropriation by the apartheid Government of South Africa when the people in that area, were forcibly evicted to their current location by the apartheid system.

4. Understanding Natural Resource Rights and Rural Communities

Some of the challenges facing transfrontier conservation in Southern Africa are rooted in serious contradictions in defining ownership of natural resources in the governance matrix. This paper asserts that contradictions, coupled with lack of clarity on local ownerships affect noble ideas of conservation. Given the successes registered over years in the Southern African region under the popular Community Based Natural Resources Management (CBNRM), lessons learnt from those experiences has taught conservationist that communities are important for the success of biodiversity conservation and management. State-centric ownership, tight control and exclusive management at the exclusion of local communities as is the case in the GLTP, is a recipe for disaster. It has been observed that the current ownership, ascribing of use rights and the GLTP governance architecture, all in all alienate local communities.

Communities living inside and adjacent to transfrontier conservation areas have little optimism over deriving livelihoods from natural resources they live with, and at the same time, there are no clear mechanisms that ensures sustainability in terms of inclusive participatory natural resources management.

However, before premature conclusions are drawn, literature demonstrates that certain ownership regimes have varying implications some and do not work in many scenarios, while others promote sustainable conservation of natural resources in general (Bonti-Ankomah and Fox, 2000:250-251; Ellen, 1986:11-12). As argued before, communities find motivation to conserve natural resources sustainably is they are involved. However, the Southern African region is going unprecedented powerful influence from in terms of resource governance regimes that seem not to be taking cognisance of local community interests as many countries roll-out transfrontier conservation programmes across the sub-region. There are little incentives for communities, yet this is critical to encourage local conservation of nature.

To support this view, Aggarwal and Elbow (2006:1) put forward that enhancing local property rights, secured access, control over land and other natural resources could generate critical incentives for conservation, sustainable utilization, management and governance of natural resources. On the other hand, insecure, unclear, limited or short-term property rights can inhibit sustainable land and natural resource management. In other words, this discourages local communities as stakeholders from acting positively as long-term stewards of the land and natural resources (Aggarwal and Elbow, 2006:1). In this case, the rights of communities over natural resources are as important as conservation is to sustain rural livelihoods. It is important to acknowledge that ownership of resources have been given international recognition in various sets of international commitments from the United Nations General Assembly (UNGAS) Resolution 1803 of 1962, the Rio De Janeiro Declaration on Environment in 1992 to the Earth Summit on Sustainable Development held in Johannesburg, South Africa in 2002 (Iwere, 2008: 2). The UNGAS Resolution 1803 of 1962, Article 1, provides that "the right of the *peoples* and *nations* to the permanent sovereignty over their natural wealth and resources must be exercised in the interests of their national development and of the wellbeing of the people of the state concerned" (Iwere, 2008: 2).

The Rio Declaration and the Stockholm conference demanded in Article 2 that countries have the overall sovereign right to exploit their resources pursuant to their own environment and development policies. This Article, compels countries to ensure that activities within their jurisdictions do not cause damage to the environment as clearly enunciated inRio Declaration, Principle 2:

• "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction" (Rio Declaration, Principle 2).

It is important therefore, to note that the principle did not prevent realization of the rights of local communities. The critical role of communities is further amplified by the UNGAS Resolution 1803 of 1962 and the Rio Declaration of 1992, which in Principle 1 unequivocally stated that:

• "Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature" (UNGA, 1992).

Iwere, (2008:2) argued that such conventions and their principles, did not specify prohibition of ownership of resources by citizens, rather, they emphasized protection of people's interests, however, the only challenge is that these left the responsibility of enforcing the principles and advancing community interest to individual countries to develop laws that would ensure and guarantee enjoyment of such rights by their citizens.

Implicitly, it means that citizens' environmental rights over natural resources are inalienable, however, at international level it is not compelling for nation states to implement these principles for the benefit of communities. It is argued in this paper that sustainable conservation and management of natural resources can be achieved through guaranteeing community property rights under different ownership arrangements. It becomes paramount for this paper to look at property rights as they relate to natural resources, look at community rights and the relationships with other actors in conservation discourse.

5. Natural Resources Rights Contexts and Contestations

Property rights are defined as an individual's right to use, derive income and transfer assets (Demsetz, 1967:354). The definition corresponds with Roman law diction between *usus*, *fructus*, and *abusus* respectively (Foss, 2010:94). Foss (2010:2) stated that property rights might exist in the absence of state structures and institutions, that is, even under anarchic conditions, for example, mostly, in conflict ridden parts of the world where conflicting parties control and utilize resources such as diamonds and oil to finance their illicit activities. Communities in many African societies rich in biodiversity and serene ecosystems, strong social norms, values systems, beliefs and local practices, are known for guaranteeing *de facto* control and regulation of use of natural resources, and income derived from these resources, mediate resource ownership and utilization (Klein et al, 2010: 94 and Muchapondwa et al, 2009: 9). This analogy is of great importance to this paper as it clearly shows that property rights, particularly as they relate to natural resource rights of communities, are inherently forward-looking through localized mediation of use and are clearly self-regulation mechanisms at the local level. These value systems are imbedded in local culture and understanding. Hence, uncertainty about viability and robustness of local ownership process and rights in protecting natural resources should not be seen pejoratively. It is not fair for conservationist to look at local processes that endure the test of times in contemporary conservation practices to allege that they are not scientific enough in conservation and therefore, responsible for environmental resource degradation. Another key observation is that property rights are defined from an economic perspective. Hence, property rights are understood in value terms and "that agents seek to maximize the value of control they hold over assets" (Klein et al, 2010: 94). In most of these definitions of

property rights, there is limited theoretical consensus to relate property rights to natural resources. Much of the information across disciplines, define property rights in economic, legal and land administration perspectives. However, Alchian and Allen offered a highly compact definition of property rights when they put forward that property rights could be understood as

• "the expectations a person has that his decision about the uses of certain resources will be effective" (Alchian and Allen, 1969: 158).

The most important point to note is that property rights cover much wider contexts and perspectives, be they in economic terms at any given level such as at a community, national, regional and international levels. Consequently, Barzel (1994:394) explains further that property rights are an individual's net valuation in expected terms of the "ability" to consume directly the services of the assets, or to consume it indirectly through exchange. A key word to take note of is the "ability" that entails allowable rights in a person's locality to have access and rights to use those resources from which one derives benefits directly or indirectly. This perspective is not entirely concerned with what people are legally entitled to do but also concerns what the individuals believe they can do (ability) over resources to keep them supplying more for their livelihood in their communities.

Essentially, property rights in these ways are not necessarily legal, but encapsulate normative value systems that communities uphold as a collective, which subsequently defy "tragedy of the commons" (Hardin, 1968). It is noted here that many property rights theorists, stress the fundamental social functionality of normative values in nature conservation where communal property rights, and therefore put to nullity the blame on community local systems and processes as responsible for the decline and deterioration of the world's biodiversity. There are a number of factors that are at play and should be examined in their social setting. Hence the whole idea of condemning communities appears misplaced in this discourse. In this view Demsetz (1967: 347) argues;

• "Property rights are an instrument of society and derive their significance from the fact that they help a man form those expectations which he can reasonably hold in his dealings with others. These expectations find expression in the laws, customs, and mores of a society. An owner of property rights possesses the consent of fellow men to allow him to act in particular ways. An owner expects the community to prevent others from interfering with his actions, provided that these actions are not prohibited in the specifications of his rights".

Deininger and Feder (2002:4) elaborated this important point by emphasizing that property rights can be in the form of social conventions that define terms of who has the right to enjoy certain benefit streams arising from the use of natural resource as assets and the length of such enjoyment. This includes limiting societies or community members on the amount of harvest, use and disposition of asset resources to avoid undesirable outcomes. This is done perhaps using structures put in place at the local level to enforce property rights compliance, including mechanisms that can be invoked socially or legally to grant such protection through local social customs or state apparatus (Deininger and Feder, 2002:4). The above authors added their voices by highlighting three important elements, which they identified as crucial and relevant when looking at property rights. These are;

- the breadth.
- ➤ duration, and
- ➤ assurance of property rights.

It is asserted in this paper that on the basis of assuring community ownership rights, the local people find motivation to work collectively towards environmental conservation, sustainable stewardship of natural resources over time (duration) and in proper context (breadth). At a more practical level, most definitions of property rights in natural resources, advocate for conferral of three qualities. These qualities are *excludability*, *withdrawal and transfer* (Sheehan and Small, 2002: 16). These are examined below to deepen understanding and appreciation of how the concepts relate to natural resource rights and how they affect communities in transfrontier conservation areas such as Makuleke and Sengwe communities in the Great Limpopo Transfrontier Park (GLTP) that were part of the study analysis.

6. Excludability: The Ability to Exclude Others

Excludability may sound complicated a terms of analyzing resource rights. Sprankling, (1999:5) observed that the metaphorical understanding of the right to exclude others implies prohibition from use or occupancy of a particular "thing". The same author stated that, for example, if O, "owns" Redacre, O is generally entitled to prevent neighbours or strangers from trespassing Redacre that hypothetical owner 'O' possesses. It is further attested in this paper that in the same manner, if you "own" an apple, you can exclude others from eating it. This is typical of communal natural resources ownership and the rights conferred to users. For instance, Makuleke community has a Contractual Park with beneficiaries confined within Makuleke community. In Sengwe community, users are defined as those under the jurisdiction of Chief Sengwe, residing in this instance of research in Wards 13, 14 and 15, and it involves people who subscribe to resource management under the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) as locally based specific ownership structural arrangement that regulate and mediate resource rights in terms of access and utilizationof wildlife resources at the local level. These local institutional systems ensure that there is sustainable governance and management of natural resources at the local level, and these complement local traditions in relation to natural resources and environment sustainability. This argument is not only general, but highlights that resources in the two communities (Sengwe and Makuleke), are valued assets locally, and cannot be regarded therefore as "open access" an ownership system criticized for undermining biodiversity sustainability. In fact, "open access" from Hardin's 1968 point of view, never existed in African societies since what was then seen as "open access" in African society was and it "communally owned" by communities. One would argue that due to this view of looking at resources as "open access" is partly the reason why the settler who migrated from Europe laid claims

and carved several areas as private property, yet these resources belonged to communities that resided in those areas. Years, later, conflict emerged and the struggle for control of resources including land manifested in wars of liberation and reclamation of land rights.

What obtained and still obtains today even in some of the traditional societies in Africa and Southern Africa in particular, are local value systems that regulate and mediate natural resource use. It is critical to indicate that through local practices, access rules are in stated in the context of community membership (Heltberg, 2001: 185), and resource use are regulated as such. The communities can therefore, legitimately exclude others who are none-members to the communities in question. The exclusion mentioned here include excluding others from enjoying the rights of access and utilization of resources under communal jurisdictions and governance structures.

In contemporary democratic governmental systems, the right to exclude is not absolutely reposed in the community alone since the community is a sub-set of the broader nation. This observation prompted Iwere (2008. 5) in his analysis of 'absolute ownership theory' to contend that one can own the land and all that is underneath it, but he/she cannot own the fugitive hydrocarbons in the sky. Thus, nation states develop agreements to manage fugitive resources, and in the case of conservation areas such as the Great Limpopo Transfrontier Park (GLTP), fugitive resources such as wild animal that migrate constantly across borders of nation states, demand different regimes, as they are migratory species by nature's design. To this extent, parameters of ownership, access and usufructat the inter-state level were defined through the 2002 GLTP Trilateral Treaty that entered into force on 9 December 2002, establishing the Transfrontier Park in a regionally integrated conservation strategy involving Mozambique, South Africa and Zimbabwe. In this context, this has had a dramatic influence as far as conservation of biodiversity is concerned and the assignment of rights. In view of excludability, Sprankling (1999:5) observed that there is a limit to which the principle can be applied, arguing that police officers may enter Redacre (in the example given above) in pursuit of fleeing criminals. In which case, the owner cannot exclude others in terms of trespassing Redacre. In the same context, fugitive natural resources such as wild animals, rivers and stream water in the GLTP, imply that communities alone cannot claim absolute ownership. Hence, park authorities from both South Africa and Zimbabwe by virtue of their conservation work, inevitably get involved in wildlife governance, management and conservation straddling their national boundaries because the resources in this transboundary park are regarded important national assets to both countries. Collaboration thus, straddle national boundaries as well. It is therefore politically appropriate and proper for governments to act in the broader conservation management model and governance thereof, of those resources being extra-territorially collaborative in the administration of fugitive resources (Iwere, 2008: 5). As much as governments and other institutions control and value natural resources, this does not take away the fact that communities have a stake in the same resources, as these are essential for their descent livelihood, hence, the need to be conscious of and recognize local resource needs as equally important as conservation is to park officials, other actors in transfrontier conservation and management of natural resources.

7. Principle of Withdraw: The Ability to Receive/Get Benefits Out of the Resources

One of the most important aspects highlighted in literature is that since local livelihoods are anchored on what communities can obtain from their environment, it is noble to ensure that communities have some form of ownership and rights over natural resources. The obvious changing governance regimes in transfrontier conservation in the GLTP potentially alter the right to use or receive benefits. Mitchell (2005: 3) observed that use rights are the most primary rights individuals or a community can ever have in as much as the right to occupy is to ownership of resources. More essentially, is the right to exploit natural resources (World Resource Institute, 2002:10; Mitchell, 2005:3). The right to possess and use natural resources is common among rural communities in both Zimbabwe and South Africa's Sengwe and Makuleke communities. Natural resources play an important role for survival as an entitlement, but Sprankling (1999:5) would argue further that when resources are being leased out or are under the custody of government, it does not mean that those resources are disregarded and not respected as property by the communities. For example, the author states that if owner O as highlighted above leases Redacre to tenant T for a 20-year term, owner O temporarily surrenders his right to posses and use the land but owner O still holds property rights in Redacre. However, in the case of the GLTP communities (Sengwe and Makuleke) that were studied, the local people have legitimate claims and rights to derive benefits under communal ownership arrangements. Whatever sub-contracting the government may engage with the private actor through leasing by way of subcontracting of natural resources management and eco-tourism development might be agreed upon between government and development partners, it does not mean preclusion custodial rights that the communities have over natural resources. They have and still hold rights over the resources as environmental stewards. From these points, it has to be stated clearly that communal ownership gives the local people the rights and opportunity to extract resources for livelihood purposes in various ways.

Consequently, even though nation states reserve juridical ownership rights of its territorial boundaries and all that is found in it, it does so for its people (local communities living side by side with those natural resources and other people as well in the polity). Communities should therefore be seen as having equal use claims over pristine natural resources since they would have contributed for its upkeep in their areas (Mazor, 2009: iii). In a liberal theoretical eulogy to equality in sharing natural resources, Mazor (2009:5) put forward that governments must act with concern for the life of each person it governs. Taking the debate further from Thomas Hobbes's Leviathan World, Mazor (2009: 11) who raised an important point with regards to natural resource claims (including deriving benefits), argued that communal people's claims have received limited attention. Yet for Hobbes, as cited by Tuck (1996:237), postulated that people initially had the rights to every creation. Gourevth (1997: 161) attests this point in his analysis of the Origins and Foundation of Inequality Among Men by arguing that Rousseau, (one of the greatest political philosophers), explicitly endorsed the natural communal claims when he wrote:

• "The first man who, having enclosed a piece of ground, to whom it occurred to say this is mine, and found people sufficiently simple to believe him, was the true founder of civil society. How many crimes, wars, murders, how many miseries and horrors mankind would have been spared by him, pulling out the sakes of filling the ditch, had cried out to kind: Beware of listening to this imposter; You are lost if you forget the fruits are everyone's and the Earth no one's" (Gourevitch, 1997: 161).

Analysis and interpretation of the above would show that property rights for Rousseau are the fruits of the earth and are everyone's in the sense that people in a defined community should be allowed, by nature's inalienable rights to derive benefits out of their environments. This is perhaps realized through the application of their labour in conserving the resources and directly applying their labour to harvest the resources. To this end, Mazor, (2009: 15) noted that Rousseau sounded to express people's claims on land, which possession facilitates for farming and it does not seem problematic. However, the problem occurs when, land (natural resources) is used one year after the other (unsustainable use), which, as it makes for continuous use, is easily degraded and transforms to cause poverty (Mazor, 2009: 15). This resonates reasonably with the need for proper conservation of natural resources (land management) by individuals so that resources do not become exhausted and driven into extinction.

Perhaps one important point to take note of in this discourse of property rights in the context of resource conservation, is coalescence of institutional interests at national, regional and international levels in the management and governance of the Great Limpopo Transfrontier Park's (GLTP) biodiversity and ecosystems. The central critique is that ecological resources 'unsustainable use can easily be avoided if the local people are incorporated.

It is not coincidental that the fear of depletion of natural resources has proven to be the force for country-level superimposition of restrictions on the amount of consumptive utilization of environmental resources at the local level. The ultimate consequence of such a measure produces emphasis onnon-consumptive use such as eco-tourism that local communities view as benefiting the private enterprises more than it does to the local people. In that perspective, communities consider this process as unfair, hence contesting commoditization and commercialization of natural resources, which has turned in a way, to be consumptive use in the process through treating it as global commodity markets as opposed to promoting it as the local level commodity market. One such good example is trophy hunting which largely benefit hunting concessioners and international sport hunters than the local people. This observation makes economic logic regarding conservation and use of natural resources, but the right to derive benefits from nature as espoused by Gourevth (1997: 161), suggests that wildlife, land, harvesting of forests, water and grazing livestock, are important growth poles to communities. Makuleke and Sengwe communities, are highly dependent on environment resources for providence, and the local people have inalienable claims and rights as their respected "Rights Bundle" (Aggarwal and Elbow, 2006, 4) as would reveal bellow.

8. Right to Transfer/Alienate: The ability to sell or alienate the interest

Aggarwal and Elbow (2006:4) espoused that transfer rights of property refers to the authority to assign or reassign both management and use rights of property (natural resources). The same authors go further to indicate that transfer of rights may be definitive and absolute. This means that the transfer may include all rights included in the property rights bundle. In addition, Aggarwal and Elbow (2006:4) pointed out that the ability to transfer the entire property rights bundle is a typical feature of property rights systems predominant in the West, and may be referred to as *alienation right*. However, a transfer of property rights may also apply to something less than the entire property rights bundle. In other instances, property rights are not transferable (Sprankling, 1999:5).

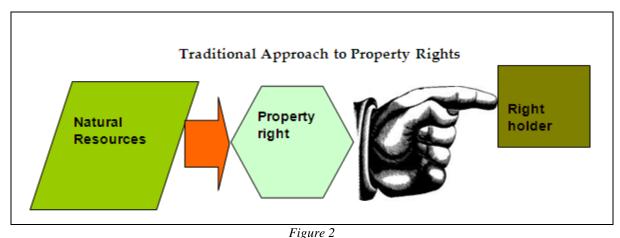
A bundle of rights relates to a unit of land and the associated natural resources, which include:

- -Right to own
- -Right to use
- -Right to manage
- -Right to transfer

Figure 1: The Rights Bundle
Source: Adapted from Aggarwal and Elbow, (2006:4)

In the context of natural resources, communities can transfer management and use rights attached to specific natural resources to an institution they create for regulation such as the Makuleke Contract Park (Spierenburg, Steenkamp and Wells, 2008:92) and the CAMPFIRE model in the case of Sengwe community in Zimbabwe. The local people can also transfer such rights under partnership arrangements. Such transfers occur in the form of partnerships, for example, the partnership fostered between Makuleke community and Wilderness Safari, particularly the management of the wildlife rich Pafuri Triangle. Depending on existing normative rules and regulations on inclusion or exclusion governing communities' interactions with the environment, environmental rights in any case, include the right to use land for crop cultivation and use of pastureland for grazing livestock. One important element in both Sengwe and Makuleke communities is their desire to have access to and benefit from wildlife and forests resources from their areas as food. Some of wildlife and plant species, are used for medicinal purposes and some trees are used as poles for construction of huts. These use-rights resonate with the Rights Bundle. Even though communities can transfer management in a partnership arrangement with a private operator for technical support, which they might lack, but they always retain ownership rights of the resources as articulated in the Rights Bundle (Aggarwal and Elbow, 2006:4).

The major emphasis given in this paper is that the role play and influence communities exert, pertains to the assigning of rights to use, manage and benefit from natural assets which should always be respected by other stakeholders. At the same time, communities might accept new persons and enter into contractual agreements as demonstrated with the Makuleke Contract Park where the local people are co-managing Pafuri Triangle with Wilderness Safaris, a private conservation management company as well as a tour operator running a variety of programmes such as photographic and walking safaris. Above all, the local people take full responsibility to ensure that the rules of conservation and sustainable use of natural resources, which they wholly own as a community, are adhered to. Going forward in exploring property rights in natural resource governance, the rights bundle provides a basis to appreciate various actors' actions in terms of how they lay resource claims in Transfrontier Conservation Areas (TFCAs). There is underlying currency of inalienability of community rights to natural resource assets. These in essence are equated to property rights. Most definitions have shown three distinct aspects that view property rights in econometric, legal terms and further regard property in land holding terms and systems under different ownership arrangements. These ownership arrangements could be private, communal or government. Tan's (2002:2-4) definition uses an approach that property is merely a legal entity and defined in terms of relationships between a legal person and the resource in question. Figure 2 illustrates this dimension as follows:



Source: Adapted with own modifications from Bennett et al (2005:7)

The traditional approach to property rights as highlighted above conforms to communal natural resource property rights theory. As shown earlier on, customs, traditions, implicit knowledge, laws, rules, codes of conduct and normative values (Muchapondwa, 2009:9) are institutional in nature and are regarded as regulatory systems that determine access, use and ownership of such resources. Ultimately, they are also governance processes at the local level. An improvement to this model in contemporary legal governmental systems demonstrate complex network in defining holders of property rights. The belief that only government generates property rights is espoused as legal positivism (Sprankling, 1999:5-7; Bonti-Ankomah and Fox, 2000: 246).

Clearly, the supremacy of government in defining ownership and enforcing user rights is a reality (Bennett et al, 2005:7). Hence, authorities determine land and other natural resource use, which in this case is motivated by a number of factors such as eco-tourism, which governments in the GLTP emphasize that it should be viably government led and private sector driven. Consequently, the missing link that the study noted, is the existence of ambiguous tenure over resources between communities and private sector developers, which transformed by having statutory title, thereby alienating communal people from deriving maximum benefits since the tenure systems repose more power in government structures than the local people (Metcalfe and Kepe, 2008:107). This contradicts the much-hyped view that marginal people's rights and claims over resources be enforced, which governments have not ensured over the last fourteen years in operation of the Great Limpopo Transfrontier Park. It is important to caution that governments should avoid conflicts that actually undermine community conservation collaboration by coming up with a model that takes on board the interest of the local people as integral custodians in natural resource conservation and management. Giving the case of Inyambo and Sekute of Zambia under the Kavango-Zambezi Transfrontier conservation initiative, Metcalfe and Kepe (2008:110) argued that social and ecological issues, cannot be adequately addressed because tenure over resources is divided between land and natural resources, which are managed by governments that are not effectively combining government and private sectors with community interests as integrated. The social assets such as indigenous knowledge systems in the Inyambo Chiefdom have subsequently been weakened by the government's appropriation of wildlife and forest use rights (Metcalfe and Kepe, 2008:111). In the same way, the GLTP in respect of Makuleke and Sengwe communities, appropriation of resources and putting them under state ownership denylocal people access to utilize natural resource for their livelihood. Wolmer (2003, 276-278) in his popular paperon GLTP process, questioned whether the GLTP transboundary conservation initiatives really would improve livelihoods of the local people because it tended to alienate the local people's rights. He went further and warned of a "bioregional plunge" that might not necessarily encourage true selfdetermination and alienate community land, as is the case with Mozambique's side of the Great Limpopo Transfrontier Park (Wolmer, 2003, 276-278). This can ignite unsustainable use of natural resources by the local people.

It is perhaps critical to highlight that livelihoods in Sengwe and Makuleke communities could be protected if conventional statutory and customary systems are merged to produce a hybrid type of rights over resources, unlike having governments just prescribing and ascribing itself ownership, use rights and conservation responsibilities. Having mentioned that, it is essential to examine property rights theories in the context of natural resources so that a clear understanding is made on the subject.

9. Unpacking Property Rights Theories in Natural Resource Conservation and Management: Positivism, Classical Liberalism and Utilitarianism

The above discussion opened a strong debate on natural resource property rights theories. It is important to note that inalienability of property rights of the communal people, who are custodians of natural resources, was outlined and critiqued in the rights bundle above. The definitions of property rights, though somewhat convoluted because of their econometric nature, in essence, they do relate to natural resource claims. To appreciate the discourse deeper, one has to understand the different theoretical underpinnings of claims by various actors. Three theories of property rights have emerged in social ecology. These are the Legal Positivism, Classical Liberalism and Utilitarianism (Bonti-Ankomah and Fox, 2000: 246; Mazor, 2009: 11-19) which are analyzed below.

10. Legal Positivism

Legal positivism theory in property rights as far as natural resources conservation and management are concerned refers to property rights originating from legislation by legitimate entities established by the state (Bonti-Ankomah and Fox, 2000:246). Iwere (2008: 7) refers to it as the "National Ownership Theory". In both circumstances, the two authors perspectives on the legal positivism, clearly argue that natural resources property rights exist whenever there is legislation that outlines duties that binds individuals, and that role to define duties is vested in the state (Bonti-Ankomah and Fox, 2000:246; Iwere, 2008: 7). For example, the South African mineral law states that mineral resources are the common heritage of all the peoples of South Africa and the state is the custodian thereof, for the benefit of all South Africans (Iwere, 2008: 7). South Africa's White Paper on Conservation and Sustainable Use of Biological Diversity (Chapter 5, 5.1) alludes to two major components of natural resources that they seek to promote economic opportunities compatible with conservation and sustainable use; and creating incentives that support sustainable use of biological diversity (www.environment.gov.za/PoLeg/White Papers/Biodiversity. Chapter 3.htm). The same White Paper (Chapter 5, 5.1) indicates that policies and programmes have to be formulated to ensure that resources are harvested sustainably, that the cultivation of harvested species is promoted and that the local economic value of such resources is maximized. Interestingly, the duty of stewardship is clearly reposed in state institutions, with no indication as to how the local people participate and benefit from resources.

The positivist theory (Bonti-Ankomah and Fox, 2000:246), which some refer to as the "National Ownership Theory" (Iwere, 2008: 7), culminated in Locke as cited in Mazor (2009:13) to argue that state driven conservation has been failing people's claims. However, where communities have been actively participating, conservation has been more successful. As such, while government retains authority over resources management in its geographical confines, it is a matter of policy and choice for the state to facilitate and enhance local people's resource rights while retaining control and allow private sector partnerships with those communities to exploit resources sustainably. This is currently lacking in the GLTP communities. Mainstreaming local communities is crucial to the extent that Mazor, (2009:13) his voice that this could only be achieved through 'mixing' ownership in a way that respects people's equal claims to natural resources. Arguably, the need for mainstreaming communities in complex transfrontier conservation or conservation areas such as Makuleke and Sengwe communities is important to achieve rural development and sustainable conservation. To technicize this debate, there is need for both governments of South Africa and Zimbabwe to approach the issue of ownership diligently, with less emotion and less politicization of resource ownership processes, being aware that local people have rights too. Any engagement of experts has to be done in the context of mutual complementarity of actors and move towards consensually agreed solutions (Haysom and Kane, 2009:26).

11. Utilitarianism

The utilitarian theory considers natural resources property rights as a system of nametags that specify individual's right to possession, utilization and disposition of property. The utilitarian theory asserts that governments are capable of making efficient cost-benefit calculations, and allocate resource rights based on that calculation to maximize the total welfare of society (Bonti-Ankomah and Fox, 2000:247-248). Putting it in the context of communities, this theory falls short of security of tenure on the part of communities. The simple reason being that since those who ascribe rights, can also exercise the right to withdraw them, prompted Bonti-Ankomah and Fox (2000:248) to argue that the notion of rights advanced by the legal positivist and utilitarian are transitory, and may make it difficult for property owners to make long-term decisions over efficient use of their property. This is because both legal positivist and utilitarian perspectives consider rights as transitory, which imply that property owners' rights over given properties may be changed over time by the government. This present serious problem to communal natural resource owners such as Makuleke and Sengwe communities in the GLTP, who may not be aware of conditions that would warrant 'social efficiency' in the future since they do not know how rights will be allocated and what legislation will exist in terms of allocation of user rights by government as put forward by Bonti-Ankomah and Fox (2000: 248). This points to the general predicament communal people residing inside or adjacent to transfrontier parks face when it comes to the "development of tribal peoples against their wishes-really to let others get their land and resources" as resource enter into the global market as 'commodities' and treated as global commons (Foreword by Corry, 2006 in Ginzburg, 2005). Basically, the utilitarian theory attempts to put government at the centre of assigning rights over natural resources. However, Rothbard (2010: 3-4) criticized this misadventure, demanding that justice must be arrived at, which goes beyond

government allocation of property titles (rights) to man (communities) to own, not only his person but also the material objects for his control and use. Rothbard (2010: 5) in the end concluded with an appalling criticism of government against unilaterally assigning natural resource rights under utilitarian theory of property rights stating unequivocally that:

• "Land in its original state is unused and unowned. The pioneer, the homesteader, the first user and transformer of this land, is the man who first brings this simple valueless thing into production and use. It is difficult to see the justice of depriving him of ownership in favour of people who have never gotten within a thousand miles of the land and who may not even know of the existence of the property over which they are supposed to have a claim. It is even more difficult to see the justice of a group of outside oligarchs owning the property, and at the expense of expropriating the creator or the homesteader who had originally brought the product into existence." Rothbard (2010: 5).

Put simply, it is not in the interest of effective conservation to avoid bestowing ownership rights of natural resources to communities and then anticipate tradeoff in terms of community collaboration towards sustainable conservation. To assume that communities do not understand the complexities of conservation as the utilitarian theory would assume, is missing the target by an inch which is as good as a mile. Therefore, the utilitarian assumption that local communities should not have natural resource rights and that government and its agencies alone, should be the sole owner and distributor of rights, can be lambasted as fundamentally utopian. It can easily result in a disenfranchising top down approach that has proven not to work in many instances of development discourses, and for conservation purposes this may not work for successful and sustainable natural resource conservation in Southern Africa countries such as Zimbabwe and South Africa's Sengwe and Makuleke communities respectively.

In fact, Ginzburg (2005) put forward that destruction of tribal people's rights in the name of superimposed conservation development, invariably, it is because outsiders grab local people's land and resources, which began during the colonial times and has continued unabated in post-independent Southern Africa. Perhaps, this continues to be the most acute problem being faced not only confined to poor countries in Africa, but in many parts of the world where resource inequalities and disparities are evident between the capital markets and communities struggling to survive. The trend of degradation, depletion and poaching of natural resources happen with complicity of massively syndicated networks that to some extent, involve government officials, and such is the case with rhino poaching in South Africa as well as in Zimbabwe. To validate this argument, Rothbard (2010:4) argued that "considering the historical record, we may indeed say that relying upon government to be the guardian of property is like placing the proverbial fox on guard over the chicken coop" and in the recent past, cases of officials colluding with poaching syndicates have become common. It appears in many instances like asking lions to herd goats and sheep, and when eaten, you then ask why? The amount of natural resource corruption is increasing alarmingly, with cases pointing to the need for a new regime of accountability on the part of individuals mandated by the state to superintend over natural resources to the benefit of all people. In this context, the communal people who claim custodial rights of resources in their areas are beginning to lose trust in government stewardship of their resources.

Looking closely at the above arguments, the utilitarian theory has its fair share of shortfalls to synergize property rights between communities and government. Instead, it emphasizes supremacy of government structures in owning and ascribing rights to individuals. In many cases, this has created a sense of insecurity of tenure among communities to the extent that FAO (2002: 23-24) suggest that land, other natural resource tenure and environmental conditions, are related and insecure tenure is likely to lead to poor land use, which in turn leads to environmental degradation. Furthermore, Mitchell (2005:7) argued that lack of rights reduces incentives to implement long-term natural resource planning measures. Situating these perspectives in the GLTP, it is important to note that in similar processes, both in Sengwe and Makuleke communities, governments are taking the lead in conservation projects, however, they little are being done to enhance the rights of communities to derive maximum environmental benefits, and progressively including the local communities for purposes of successful and sustainable conservation of natural resource management and governance. Ideally, cultivating a sense of local ownership, incentivizes communities to participate actively in conservation management and governance of natural resources.

12. The Classical Liberal Theory

The classical liberal theorists argue that property rights are inalienable in terms of use and transfer of something owned (Bonti-Ankomah and Fox, 2000:246). Unlike legal positivist and utilitarian theories, the classical liberal theory does not consider property rights as transitory. It asserts that no legislation is required in the allocation of rights because if an individual owns a property, that individual has the inalienable and unlimited right to that property within its physical boundaries and must be allowed to exercise his/her right with respect to use of the property (Bonti-Ankomah and Fox, 2000:246). Iwere (2008:6) further insinuated that classical liberal theory is similar to 'qualified ownership theory,' which has its origins in Pennsylvanian history in the United States of America (USA). He goes further to posit that just like the liberal classical theory, the 'qualified ownership' theory is based on the rule of capture in the U.S.A.

In those circumstances, individuals are 'qualified' in terms of ownership, subject to their ability to have captured the resources and put them under their exclusive custody, and thus, no one can lay exclusive claim to it. In this view, Ryan (2001: 484) noted with great interest that classical theory of property rights gives primacy to aspects which are private autonomy to control property and elevate the rights to exclude others as the most important in the bundle of rights that constitutes property. The other argument posed with this assertion is that if it is a collective claim over resources, for example, by a tribal group or a community, it puts those resources under some collective communal ownership arrangements, in which case, the community reserves the right to exclude others as a collective. Communities would detest an approach whereby resources in their proximity end up being owned by some remote outsiders and remote government entities that give rights further to some private owners all in the name of business partnership, particularly with

eco-tourism and safari projects, without allowing communities playing a role. Ryan (2001:484) having been frustrated by such adventurism, argued that many environmentalists reject the classical liberal theory. Ryan (2001) put across that because the whole process elevates individuals and entities autonomy above collective communities' considerations in defining relationships between the human and natural resource components of the world, hence fails to account for ecological realities in terms of its interconnectedness and interdependences that exist naturally between nature and rural communities.

From the discussion above it seems that these theories show more primacy of government and private sector ownership of natural resources. The basic theorisation of natural resources rights that assign ownership to state agencies appear in a variety of combinations, often with competing interests. This study notes that it is the consolidation of private sector rights that has emerged to be more disenfranchising in Southern Africa natural resource debates, particularly where little attention has been given to local community resource interests. In some cases, Europe and North America experiences, show that private ownership and rights are dominant, which are motivated of course, by the capitalist models (World Resources, 2002-2004: 10). In Africa and manifestly, Southern Africa, particularly Zimbabwe and South Africa, state sanctioned titling of natural resources is common, but in the majority of cases, traditional communal ownership historically is strong and should not be ignored in natural resource rights discourses.

Essentially, moving away from traditional ownership practices to more formalised communal ownership arrangements cannot easily blend with private sector driven ownership because of the ownership that communities are uneasiness about (World Resources, 2002-2004: 10). For this reason, any theory that lacks in recognizing communities, serves to set wrong precedence for resource ownership, which can cause serious contestations between communities and other actors involved in the conservation of natural resources. What it implies therefore is that there has to be logic to ascribe communal rights to the local people living side by side with adjoining areas of the GLTP. Although the conservation success of a rights and ownership approaches must be tested empirically, the principal argument made in this study is that rights and ownership, must be recognized in themselves because of their centrality to human dignity and integrity of the communal people. Furthermore, it is argued that the endurance of customary processes, such as believes, values systems, traditions and ultimately customary law, indicate the functionality of societies in its continued legitimacy amongst many theories in conservation. Hence, local communities have a natural stake in transfrontier resource management, conservation and governance as well.

In essence, the current planning processes in transfrontier conservation, particularly the GLTP, has not taken cognizance of the local social, cultural, economic and the values systems inherent in communities of both Sengwe and Makuleke communities, although the rhetoric around community participation through traditional leaders is a popular assentation by governmental agencies. Empirical information tells a story to the contrary. This study suggests that there is deficiency which needs to be addressed, particularly where community resource rights are fronted and camouflaged under traditional leaders when in fact, the traditional leaders are not exercising any authority and have no powers in terms of decision making over natural resources. Their inclusion apart from being cosmetic indeed, are argued to be tokenistic. In many communities, social, cultural values and knowledge systems persist and still play important roles (Zero, et al. 1996; Matwonyika 1997). It is the view of this study that where traditional beliefs are held in in common by communities, the process of ownership and exercising resource rights, sanctions, complementary customary monitoring and enforcement regimes also exist (Clarke, 1994; Chenje et al. 1996), and can be important critical ingredients for management of natural resources. Responsibility for ensuring compliance with local rules generally reside in the community such as the Makuleke Community Property Association in the case of South Africa and the CAMPFIRE Committees in Zimbabwe. These can be improved and leveraged on to enhance local resource rights going forward.

More essentially, traditional leaders such as chiefs, although their authority is subject to checks and balances, also play important roles in ensuring that community members respect nature. New kinds of institutions have emerged at the local level. Increasingly, communities with a high sense of ownership and user rights, are actively engaged in resource management, governance and rule formulation (Chenje et al. 199682). There is, however, increasing skepticism about them, as state institutions and other multi-lateral organizations consider local ownership, local rights and local value systems as not doing good enough to realize effective environmental sanctions, and they question things with no physical basis as of no serious legal force and consequences (Lue Mbizvo and Mohamed: 1993). Having looked at these theories and contentious contesting views, it is fair to examine various ownership arrangements and critique them as they relate to communities found inside or adjacent to transfrontier conservation areas. Perhaps, one of the most important aspects to note in this analysis is trying to understand various community resource rights so that local claims can be justified.

13. Resource Ownership

The efficacy of property rights hinges on ownership categories of natural resources in the GLTP. There are four categories of ownership identified in this study, which are communal, private, state and open access (Adger et al., 1997:2-4; World Resources, 2000-2004: 10; Bonti-Ankomah and Fox, 2000: 248-250; Demsetz, 1967: 354). In view of Makuleke and Sengwe communities, natural resource property ownership regimes have always existed, and they have had varying impacts on livelihoods and conservation of natural resources. As such, the different scenarios to be presented, provide valuable comparative benchmarks of ownership regimes either in the mode that enhance or inhibit livelihoods attainment at the local level and achieving successful conservation at the community level.

Firstly, ownership of natural resources come with authority to use the resources such as land, forests, wildlife, minerals or exercising harvesting rights, which translate into control of natural resources (World Resources, 2000-2004: 10; Aggarwal and Elbow, 2006:7). It is imperative perhaps to mention that rural communities depend largely on natural resources. Thus, how ownership of natural

resources is defined and ascribed in terms of who benefits from these rights, and how they are enforced, become central issues that motivate active participation in conservation of natural resources at the local level (World Resources, 2000-2004: 10). In this view, a mismatch between local people's claims and unfair distribution of benefit streams, are seen as frequently a source of disagreements and conflicts that manifest in poor environmental governance and poor nature conservation (World Resources, 2000-2004: 10). The centrality of the matter is that natural resources in the context of communal ownership arrangements cannot be ignored. For instance, Aggarwal and Elbow (2006:12) observe that in Zimbabwe's southern communal area of Sengwe, wild products managed at community level contribute 40 percent of average household income, and any future partnership with the private sector in wildlife conservation and exploitation, could open great opportunities for rural livelihoods. In this case, claims to natural resources is communal, and is of great importance as this informs the basis of benefits flow from the common resources (Aggarwal and Elbow (2006:12). Accordingly, the World Resources Institute (2000-2004: 10) classified property ownership into four categories outlined in this study as follows:

- a) Communal,
- b) Private,
- c) State owned, and
- d) Open access.

To understand these and their ramifications, it is crucial to analyse each of the categories of resource ownership.

13.1. Open Access

Imply a set of resources where there is lack of rules about natural resource use (World Resources, 2000-2004: 10). In the majority of cases, due to lack of rules, ordinarily leads to a condition issues described as "the tragedy of the commons" espoused by Hardin (1968). Based on this analogy, natural resources easily can be subjected to overexploitation and ultimately exhaustion. This culminates in resource scarcity and ultimately, resource extinction. Under Open access, there is a likelihood of resources being used with no restrain for future benefits to others and in many cases, the individuals are not obliged to manage them sustainably because someone else may benefit from it (Bonti-Ankomah and Fox, 2000:249). Undoubtedly, this leads to depletion of resources as argued by the World Resources Institute (2000-2004: 10). The World Resource Institute (2000-2004: 10) put forward that open access lacks rule enforcement on resources, leading to unsustainable use. Analysis of the GLTP and its surrounding communities, shows that vast areas fall into three categories either as private, state or communal ownership. The issue of Open Access therefore, does not apply even in those areas historically perceived to have been 'open access'. In this regard, Hardin's "tragedy of the commons" theory is as relevant as open access is concerned where no rules, no norms, no values systems and no institutions exist to regulate access and utilization of resources. As such, no due diligence is given for future use and the likelihood of extinction is high.

13.2. Private Ownership

This is one of the most important resource ownership systems that has emerged in the GLTP. It entails ownership by individual agencies, institutions or organizations. They hold the rights to exclude non-owners from using resources and the communities living around conservation areas rich in pristine flora and fauna have to recognize the rights of the owners to exclude them from the resources under private stewardship (Bonti-Ankomah and Fox, 2000:250; Demsetz, 1967: 354). In the case of the GLTP, numerous conservancies and hunting concessions exist in and around the GLTP, which constitute elements of private business and therefore temporary private ownership regimes under lease agreements. Environmental stewardship of natural resources and rights to use, are reposed in private concession or leaseholders. The World Resources Institute (2000-2004: 10) argues that private ownership provides incentives to maintain and continue benefits from a property's resources, but can also allow destructive activities on the part of the private owner, which may affect other people who used to enjoy such resources. Thus, in as much as private ownership gives tenurial security, it still requires monitoring, otherwise the actions by private owners, may turn out to be ecologically destructive if no standards and rules are enforced to ensure that certain biodiversity and ecosystem standards are met. In the case of the GLTP, it is interesting to note that private operators exist on both Zimbabwe and South Africa, through leases and concessions arrangement, and the operations are confined to eco-tourism, wildlife trophy and sport hunting. However, leasing of wildlife to private operators without creating mechanisms for community benefits is problematic as it creates a sense of loss from enjoyment of those resources by communities living side by side with wildlife, and at the same time, the local people face problems of predation, crop raiding and intermittent human injury from problem animals. While local arrangements such as CAMPFIRE in the case of Sengwe community and the Contractual Park in the case of Makuleke provides a basis for partnership between private capital and communities, the net benefits per capita of revenue generated from wildlife have been dwindling. Research evidence showed that there is growing pessimism about the relationship between the communities and the rights holders to hunt, run, own and operate wildlife concession in a relationship that is not yielding significant benefits to communities in so far as development of the people is concerned. The local perception of private ownership is therefore negative.

13.3. State Ownership

One important point raised in this study is state control of conservation processes and governance of natural resources. Taking it from this perspective, state ownership implies that governments have the ultimate control of resources within their territorial jurisdictions and may exclude other nationals and certain people from accessing and using those resources as long as the state follows accepted political and legal procedures in determining who may or may not use natural resources as assets (Demsetz, 1967: 354). Bonti-

Ankomah and Fox (2000: 250) argue that what distinguishes the state from any other form of ownership is the fact that it has the power to levy tax and take it. This is within the acquisitive function of governments as expounded by David Easton's (1965) political systems theory. However, the state faces huge challenges, which may limit the exercise of its power especially where ownership overlaps between the state and community ownership (Bonti-Ankomah and Fox, 2000: 250). The convolution of a web in terms of the overlaps in Makuleke and Sengwe, were confirmed by the claims from the local people with regards to resource ownership. The following discussion focuses on communal ownership, its utility and applicability in view of contested natural resources claims in the GLTP, which will help to understand communal ownership and its relevance.

13.4. Communal Ownership

This is one of the most crucial focuses of ownership, particularly when one looks at it from community-environment point of view. Communal ownership is the cornerstone for local people to enjoy autonomy in presiding over natural resources in their areas. In this sense, community ownership implies that natural resources are owned by a group of individuals such as a village, and in many cases, this consist of social groups who share the same rights to use the resources while excluding non-members from having access and use rights of the same resources (World Resources Institute, 2000-2004:10; Bonti-Ankomah and Fox, 2000:249). Communal ownership basically is regarded as an example of common property, which is controlled, owned and used by a group of individuals together, and hence contrasts with private property or state regulated property (Adger et al, 1997: 4). It is characterized by excludability of those regarded to be non-members. In addition, communal or common property ownership should not be equated to open access, which Hardin (1968) argued would culminate in "the tragedy of the commons." Thus, communal property rights especially over natural resources should be treated separately from open access ownership. Communal property ownership is a characteristic of the majority of communal areas in Southern Africa, especially those affected by transfrontier conservation. Local people as a collective, hold one another accountable over use of the environment, and this shows great promise in conservation and environmental management at least from a group theory point of view where a group of people exercise self-regulation to enforce access and non-access, hence achieve compliance and cooperation among members (Adger et al, 1997: 5).

Equally, management regimes under common property ownership are rooted in local communities through a set of institutional arrangements, customs, rules, formal and informal laws, codes of conduct, norms and strategies (Muchapondwa et al, 2009:9) that define conditions for accessing natural resources and control of a range of benefits arising from collective use of natural resources (Swallow and Bromely, 1995: 100). The authority to administer communal property ownership in the case of natural resources is expressed at two levels in the two communities. These are local government systems such as Village Committees (VC) (Adger et al, 1997: 5) and group associations such as the CAMPFIRE in the case of Sengwe community of Zimbabwe. In Makuleke, the local people lay customary claims to their ancestral land lost in 1969 through support from human rights lawyers and conservationists, which resulted in regaining and restoration of their full ownership rights. They went on to form Makuleke Community Property Association (CPA) for the management purposes of their resources they had reclaimed (Steve Collins, unpublished; Steenkamp and Uhr, 2000: 5).

Communal ownership means that it is regulatory, and access to resources can be denied to some individuals (Demesetz, 1967: 354), which rights are a preserve of defined community individuals within a community. From this perspective, communal ownership is self-regulatory to the extent that the "tragedy of the commons" as outlined by Hardin (1968) is unlikely to occur where norms, values and rules are strong. In the case of Sengwe and Makuleke, non-members cannot enjoy the rights as the community members do. World Resources Institute (2000-2004: 10) argues that communal ownership allows efficient sharing of resources among those dependent on them, but can be harder to define, govern, and enforce formal legal rules and terms. What comes out clearly is that communal ownership shows characteristics of flexibility to evolve in the face of changing socio-economic and political environment (Aggarwal and Elbow, 2006:17). The case of Makuleke CPA is a good example of how flexible communal ownership can be, and locally, the people have the capacity to enhance attainment of both rural livelihoods development and sustainable natural resources management. In this case, environmental sustainability can be realised with limited cost on the part of the government because of local collaboration. To this end, it is not in the interest of communities to replace communal and some customary systems with privatised ownership of their resources. Their desire is improvement and modification of what they already have and what they are doing, taking cognisance of community livelihood interests and local conservation, rooted in rich indigenous knowledge systems.

If the goal is to improve stewardship of natural resources, then the local communities should be the starting point rather than promoting and facilitating exploitation of resources under regimes that enhance outsiders to reap more benefits more than the local people can benefit. The government can materially strengthen communal property rights or combine them to have hybrid ownership systems and accord them official recognition (Aggarwal and Elbow, 2006: 17). In true defence of the responsibility of communities, one writer submitted that:

• "And if any man works for the community, he must perceive and feel the meaning and value of this community, and what it is as a living, organic whole. He can only do this when the community is something other and quite different from a more or less indefinite totality of individual men. It must be informed by an actual spirit in which each single person has his part. The whole communal body must have a spiritual mission, and each individual of it must have the will to contribute towards the fulfilling of this mission. In every single member down to the least, this Spirit of Community must be alive and active" (Rudolf Steiner: Anthroposophy and the Social Question in Freeman, 2008).

14. Resource Rights and Implications for Livelihoods and Conservation Governance

As a starting point, rural communities in many instances rely on a multiplicity of natural resources to sustain their lives. Agricultural practices include subsistence crop farming, livestock, wildlife and forest resource harvesting as integral rural livelihoods strategies (Ashley, 2000). In some cases, the local people supplement by a number of strategies including seasonal wage employment and remittances from relatives working outside their communities, and this was evident in both Makuleke and Sengwe communities. A number of factors determine local people's livelihood practices that households claim ownership, and can draw on to match specific livelihood needs (Shackleton et al. 2000). Shackleton et al, further note that access to and ownership of assets are key determinants to avert creating rural vulnerabilities.

In support of communal rights, literature has it that for a long time, institutions at various levels have been playing important roles in the specification and functioning of property rights at the local level so much that they have strong meaning on communities (Borge and Shonhoft, 2000: 2). As a result, David Easton's (1965: 185) political systems theory suggest that institutions function in a manner that determine who gets what, when and how, and therefore the right to utilize the resources. In support of this point, Demsetz (1967:347) used econometric models, and theorized that property rights, are an instrument of society and derive significantly from the fact that they help people to achieve their expectations, which can reasonably be held in their dealings by others. Demsetz (1967:347) went further to note that expectations find expression in laws, customs and mores of society, thus, an owner expects the community to prevent others from interfering with his or her actions provided the actions are not prohibited in the specifications of his rights. It is clear that property rights in natural resources specify how persons benefit or fail to benefit (exclusion) from resources, they collectively own.

One important aspect to consider when looking at natural resources rights as noted by Borge and Shonhoft (2000: 2) is that the central issue is to understand behaviour of rural people's interactions with the environment in general and the agencies managing or having legal rights over such resources. It is noted with concern that their interactions are not smooth, and research has shown that usually, the relationships is conflict ridden due to prohibitive measures superimposed by state institutions on the management and governance of resources (Borge and Shonhoft, 2000: 2).

The existence of conflict goes as far as demonstrating contradictions found in natural resource rights in the GLTP, with Makuleke and Sengwe communities' claiming to having been subjected to fundamental changes in terms of how people have to use natural resources following the establishment of the Great Limpopo Transfrontier Park. One interesting observation this study makes is that the property rights debate is primarily a function of property rights guides and incentives (Demsetz, 1967.348).

The issues of incentive distribution in this regard underpin directly the extent to which people conserve natural resources. In expanding this analysis, Nanjundaiah, (2008: 9) and Heltberg (2001:187) suggested a framework which this study adapted with modifications to depict how interactions occur regarding communities' behaviour and the influence posed thereof on the condition of natural resources as follows:

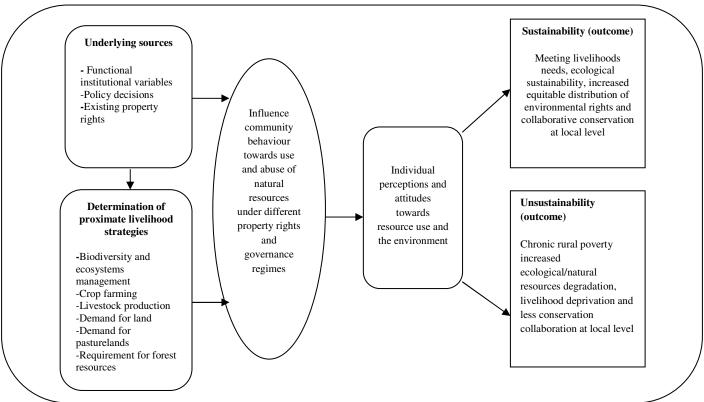


Figure 3: A framework of resource rights factors contributing to influence local communities' behaviour and natural resources conditions Source: Combined adaptation of Heltberg (2001:187), Nanjundaiah, (2008: 9) and own representation and conceptualization of the framework

From the above framework, this study notes that state institutions and international organizations operate in a manner that overlook the vital role played by communities in conservation. It is argued that when resource rights are guaranteed, the attitudes and behavior of communities to influence natural resources and the environment result in positive human-environment relationships. Manifestly, positive outcomes can be realized in meeting livelihoods needs of those communities, and at the same time, motivate the local people towards sound and sustainable environmental conservation. Therefore, the argument that communities lack scientific knowledge on conservation is not valid because they always use body of knowledge to do so based on their local value systems and indigenous knowledge system to effect environment stewardship based to achieve local actors' consensus and compliance. If not, the opposite results in loss of livelihoods and unsustainable "resource capture" can then happen (Murphy, 2005:3, Lind and Sturman, 2002:52). Resource capture comes about due to a sense of ecological marginalization, which occurs when there is structural imbalance between resource distribution and utilization by those communities who legitimately think they should benefit from the resources. The underlying currents of functional institutions' policy decisions and ascription of property rights in those instances usually, are skewed to benefit state institutions and other outside actors, especially those involved in the safari business at the expense of the local people in terms of exploitation of natural resource. This has been happening within Southern Africa communities, and in most cases, it has invited anger from the local people.

Additionally, policy decisions and distribution of property rights are rather imposed and restrictions on proximate livelihood strategies of the communal people normally not consulted, thus, resulting in unsustainable environmental practices (Lind and Sturman, 2002:68). This can have extensive negative consequences on human populations depended on natural resources for their subsistence. One such example is when dominant groups or institutions in a society shift their practices, policies and laws governing distribution of resources and embark on 'elite resource capture', 'play a zero-sum game' in their exclusive favour. There is need therefore to reconceptualize the nature of resource rights, allocation efficiency and acknowledge multiple uses those rights could be put to, as well as redefine the relationships between various actors, and change "zero-sum" game which can potentially be transformed into a "plussum" outcome with enhanced actors' confidence as a major positive outcome (Huggins et al, 2006: 391).

In many instances, institutional currents are caught up in complex situations of having communities living adjacent to the park area claiming rights of ownership and use for which the institutions want to control and manage on the basis of state authority. The local people through their claims usually undertake production activities. These include and not limited to sedentary crop farming, livestock production, wildlife exploitation through various local arrangements and harvesting of forest resources. These production systems locally, are synergized with other conservation practices to ensure no damage is inflicted on the ecosystem.

Institutions working on biodiversity conservation development as argued by Crewe and Harrison (1998: 27) would assume that local communities do not have rights on the land declared as transfrontier conservation area or park. In that regard allegations have always been that local people do not protect the environment, rather they hypothetically degrade it because they are perceived as "primitive" and not aware of the modern scientific ways of managing natural resources and the environment. However, this is countered by Crewe and Harrison (1998: 27), Borge and Shonhoft, (2000:3) gave a good example of Masai Mara and put a strong argument that Masai pastoralists devised techniques for managing (harvesting, improving, protecting and regenerating) natural resources because they have the rights over such resources and understand vulnerabilities associated with depleting them. In their way of life and perceived 'primitivism', they have shown that the Masai Mara and some of the best conservationist that the world has never known, and defy the logic of the so called modern science of conservation by conspicuously using their indigenous knowledge systems to sustainably strike a balance of local use and sound environmental management. Furthermore, Niamire (1995:255) rejected the extremism of this though that defies the logic of local people's value systems in conservation by arguing that local people with full ownership rights, have the capacity over and above having put in place rules, customs, values and regulations that enshrined within their traditions to ensure smooth functioning of their environment. Muchapondwa et al (2009: 9) concurs with this idea when he looked at the importance of institutional variables enhancing biodiversity conservation in bioregions.

Narrowing these arguments to the GLTP, this study observed that community resource rights are caught in complex power relations, painstaking dynamics, and these make local claims difficult to realize in advancing local interests because of the preponderance of multi-level governance of natural resources. The institutional architecture basically determine who gets what, when and how in ecological politics. In environmental governance also, community property rights failures potentially precipitate biodiversity depletion, subsequently engendering poverty and environmental conflicts among groups of people. Apart from that, in many instances, natural resources for example, oil in Nigeria, diamonds in the Democratic Republic of Congo and Liberia, are often major sources of national conflict and instability especially in cases where resources are not shared equally among various groups of the society (Haysom and Kane. 2009:5).

Clearly, where natural resources occur in abundance and are seen as the predominant source of wealth, any ownership mismatch between the state, elites and the larger indigenous people, it is most likely that unequal distribution generate resource based conflicts and poor environmental decisions (World Resource Institute, 2002-2004: 10 and Haysom and Kane, 2009:5). State ownership is so apparent that it is taking precedence over communal ownership and local rights. This is supported by international organizations. In that regard, this study cautions against too much reposing of property rights into individuals or institutional exclusivity to entities regarded as outsiders.

Ideally, environmental planners should take cognizance of political ecology within communities and respect their local rights for conservation to succeed. Again, it would be a misnomer to assume that community ownership and its accompanying rights at that local level, lead to 'the tragedy of the commons' as envisaged by Hardin (1968). In that context of contradictions, it is crucial to

briefly examine how these manifestations affect communities and conservation successes, and how actors in the whole conservation matrix relate with each other from a behavioural theoretical analysis point using Brown's 2005 "quadrants analysis" and the "spiral Dynamics", a "Theory that Explains Everything" espoused by Don Beck (1996).

15. The Spiral Dynamics: Understanding Human-Environment Behaviour in Conservation

When considering natural resources conservation, some of the central issues crucial to look at are the behavioural manifestations of actors involved in biodiversity and ecosystem management in terms of how they interact with each other in the conservation of resources. In the majority of cases, the interactions of actors show diverging interests arising from what Don Edward Beck (1999: 1) described as "...endless clashes over worldviews, constant threats about "us" (institutions) versus "them" (communities) or class-based violence, and expensive, politicized solutions that are both inappropriate and ineffectual". The current global or worldviews influencing transfrontier conservation policies, institutional construction, redefinition of governance and prescription rights thereof, epitomize the "universal awakening on environmental consciousness worldwide" (Yang, 2006:25-26). Environmental conference held in Stokoholm in 1972 to the World Conservation Strategy, 'Our Common Future, Caring for the Earth' and to the 1992 Rio De Janeiro Earth Conference and Agenda 21 blueprint of Action that came out of it, all are evidence of how powerful the global wave is in shaping behaviour of international, regional and national institutions in relation to the environment (Yang, 2006:25-26).

Perhaps one crucial observation made in this study is that conservation policy prescriptions consistently follow guidelines from global discourses, presumably with limited local input because of the scale at which discussions and deliberations take place. Agrawal (1999: 6) argues that attention and understanding the details of manifold developments is critical when it comes to policy changes, which at times, are taken on behalf of communities leading to outcomes that are unsustainable. This is so, obviously to the extent that in the postmodern society, Beck (1999:2), questioned on, who can unite the global knot so that both the capitalist, and the common people's goals, can be meshed for the common good? Through the lens of his analysis of 'Stages of Social Development,' Don Beck (ibid) inspired this analysis to unravel pre-eminence of rigid conservation ideologies when crafting and shaping the perceptions and behaviours of state institutions and international organizations regarding relations with communities living inside or adjacent to peace parks or transfrontier conservation areas.

As a starting point, most of the discussions according to Don Beck (1999: 2), show competing of the global systems, synthesized and ramified as the new world order, resulting in preponderance of external top-down processes and superimposition of solutions on lower tiers of society with limited consultations on those that are affected by decisions taken at the highest level.

Interestingly, as is the case with the Great Limpopo Transfrontier Park, its conception was not rooted in local ideologies and aspirations of communities. This led to external design of conservation approaches that easily falter, unless they include as parallel process, and simultaneous track, take the essential steps and stages to integrate the interior and exterior collective and individual aspects of all polities in dealing with complex issues holistically as envisaged in the Spiral Dynamics and the Integral Framework for development (Beck, 1999: 2; Brown, 2005:2).

According to Beck's (1999: 1) Spiral Dynamics, "The Theory that Explains Everything," human actions, behaviours and attitudes can be understood through colour coding to explain various worldviews that inform human actions in relation to other actors, in this case biodiversity and ecosystems management. On the other hand, Brown (2005:2) used the Integral Framework in the form of "quadrants" to comprehensively map systems in examining cultures, psychology and behavioral issues in understanding human behaviour, which is referred to as the "Theory of Everything" by Beck (1996). These assertions are supported by Hesler-Key and Wood (2002:3). Diagrammatically, the Integral Framework and the Spiral Dynamics are born Siamese twin theoretical aspects that explain closely related issues using different models as shown below:

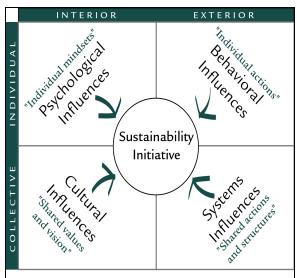


Figure 4: The Quadrants-Conceptualizing Sustainable Human Behaviour Source: adapted from Brown (2005: 2)

Through analyzing various quadrants, one is able to identify the major forces which influence human behaviour that at the same time, determine success or failure of any initiative (Brown, 2005:2). The territory of each quadrant reveals different aspects, subjects and objects that are contextualized within resource governance, livelihoods and conservation that were adapted in this study to understand the issues as shown in the table below:

Quadrant	Context	Area that are addressed	Tools for transformation
Psychological influences (Individual-Interior; self-consciousness and internal reality of an individual) (Guided by 'I')	Self identity; and consciousness; intentions; personal values; attitudes; spiritual beliefs and commitment; depth of responsibility and degree of care for the environment and others.	Development; emotional intelligence; motivation and will; understanding of one's role in the community and impact on the environment; personal goals and connection to the natural world.	Compassion practices to nature through self-questioning (introspection) and emotional literacy.
Behavioural Influences (Individual-exterior actions) (Guided by 'It')	Behaviour; actions; capabilities; physical boundaries and individual qualities.	Conduct toward environmental conservation; response to rules and regulations etc	Clear rules and regulations; guidance from respected authorities; use of sustainability technologies; use of litigation to enforce regulations; etc
Cultural Influences (Collective- Interior: Culture and Worldviews: Internal realities of groups) (Guided by 'We')	Share values and worldviews; shared meanings; mutual resonance; cultural norms; language; boundaries; relationships; symbolism and agreed upon communal ethics; etc	Collective vision; community/family/organization members' relationship with the environment; collective interpretation of power, class, gender and inequities; collective perception of the environment and pollution (environmental degradation).	Dialogue (participation); community directed development; inclusive decision making; consensus-based strategic planning; trust-building; cooperative participation; group introspection; etc
Systems Influences (Collective- Exterior: Social systems and Environments) (Guided by 'Its')	Visible societal structures: systems and modes of production (economic, political, social, informational, technological and educational); strategies; policies; measures natural systems, processes and the interactions in the environment; etc	Stability and effectiveness of political and economic systems; legal frameworks; class; global biosphere; restoration; protection and sustainable use of natural resources; climate change; restoration, protection and sustainable use of natural resources; etc	Policy making; shareholding activism; organizational reengineering; regulations; natural resource restoration and management systems; micro-enterprise; natural environmental changes; population changes; etc

Table 1: Analysis of Quadrants

Source: Adapted from Brown (2005:3) with own additions and modifications (http://terrypatten.typepad.com/iran/files/quadrants_undp.pdf)

The framework divides both individual and societal behavioural aspects into four categories from individual behaviour, attitudes, feelings, collective attitudes, collective behaviour, and systems response as having a strong bearing on the sustainability of an initiative at the centre. This framework helps substantially to assess success or failure of conservation programmes.

As already indicated, the success of the GLTP depends on key success factors espoused in this model. The psychological, behavioural and cultural influences highlighted, express wide perspectives that relate to individuals and local communities, which the systems theory deal with at the higher echelons of governance. If one contextualizes the Spiral Dynamics principles, the blue colour coding augers well with the systems influence as a quadrant in explaining the worldviews, rules and regulations that individual states demonstrate in implementing governance regimes and management of natural resources. Good example this study identified are the United Nations General Assembly Resolution 1803 of 1962 and the Rio de Janeiro, Agenda 21 of 1992 that apply to the systems theory in line with the colour coding of the Spiral Dynamics (Beck, 1999). The resource governance and allocation of rights fit in this framework that is so critical in understanding moral, psychological and cognitive issues pertaining to human interiority (Hochachka, undated: 2). For communities to be motivated to effectively conserve natural resources, they do so with full agreement with others who also share the same views about the same resources. The "worldviews" should be meshed closer with community's or society's way of life for purposes of achieving sustainability (Hochachka, undated: 2). As such, it is argued in this study that the "world-centric" views regarding natural resources, have to move away from the global systems influence, to the local level("glocal") so that

communities can understand issues at their level. This enables the local people to infuse their own cultural meanings into conservation work in order for that work to correspond with local traditions and ways of thinking. If it is policy making, organizational reengineering, regulations, natural resource restoration and management systems, as essential worldviews, with serious implications on nature conservation, still need to be addressed from the local level (Brown, 2005: 3). Perhaps, measures have to get local buy-in in order for them to be supported by communities before being implemented, for as long this is not done, the local people view them as outside interventions since they are not part of it (Byers, 2007: 2). This is so critical so much that Byers (2007: 2) in his analysis of conservation relationship lamented that:

• "Outsiders-actors from national or international levels-should assume that local people who use and manage resources directly are making what they perceive to be the best choices they can, given their options. The assumptions should be, unless there is a great deal of evidence to the contrary, that local management practices are often sustainable and ecologically wise, and if they are not, it may be because the choices available to local people are constrained by factors outside their control."

Increasingly, it is clear from literature that behavioural aspects of individual organizations, communities and state institutions, should find some interface with the local people in the whole matrix of resource governance and conservation. It is also important not to ignore critical aspects of the local people as they form ecological system integration in their interactions with the environment. Thus, the assemblage of behaviours called natural resource governance, conservation, sustainable livelihoods and human ecology meet at a common rendezvous between ecosystems (natural resources) and social systems (Byers, 2007:1). In other words, this meeting point, is the driver where the rubber meets the road, an analogy that is perhaps familiar in developed countries, and is where the neets the soil, a tree is planted and a wild plant is gathered for basket making and traditional medicine (Byers, 2007:1-2; Sola, 2004: 245). The quadrants analysis sharpens our understanding of relationships that ought to exist at various levels of environmental governance. To broaden the scope, the Spiral Dynamics, helps to appreciate the above assertions when environmental leadership behaviour is cross-examined from a colour coding perspective.

16. The Blue/Yellow Institutions and Green Communities in Transfrontier Conservation (TFC)

The Integral Framework addressed the issues holistically in broadening understanding of individual actors ranging from rural people to conservation managers in terms of how they conceptualize policies, engage in practices that affect natural resources in the decision making ladder. To this end, the unfolding conservation governance regimes and the assigning of specific resource rights thereof in the GLTP, attest to the systems quadrant in which transfrontier conservation is contextualized as rooted in worldviews that inform conservation strategies, policy measures, institutional design and broad interactions of actors.

Linking these analytical aspects to the Spiral Dynamics by Don Beck (1999), this study makes serious considerations of multi-level actors involved in the GLTP. The study notes that the state actors are in the blue and yellow categories in terms of their understanding of how biodiversity and ecosystems have to be governed, while communities generally, fall within two interfaces of the purple and green category in terms of their relationships with the environment as shown bellow.

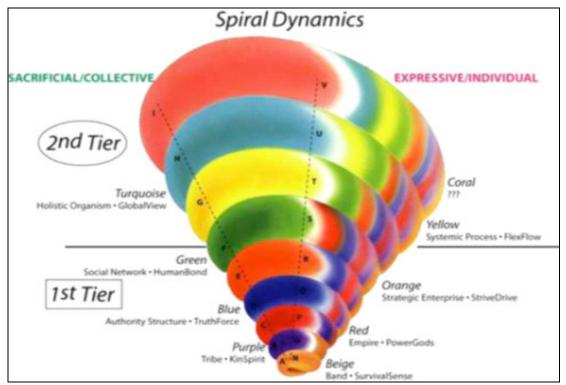


Figure 5: The Spiral Dynamics

The Spiral Dynamics shows that colour codes can be useful in describing human socio-ecological behaviour in terms of attitudes and social organization as they relate to the environment. These codes as Beck (1996) envisaged them, create global diversities and drive evolutionary changes in societies. These changes described as "magnetic forces," attract and repel individuals, form webs that connect people within organizations, social strata and forge the rise and fall of nations and cultures (Don Beck, 1996). The following table was constructed from Don Beck's (1995) arguments to contextualize his views into conservation processes. In the following table, various values are shown demonstrating how they affect conservation worldviews in relation to community resource and their conservation claims. Again, this is not an easy synthesis of complex theoretical value systems. However, this study managed to expand Don Beck's analysis on individuals and organizations through the lens of the Spiral Dynamics value systems, and noted that there is a lot of influence that conservation institutions and individuals operate under as they relate with each other as actors individually and or collectively. Taken together, this study would assert that these value systems drive the appearance of certain interrelationships that characterize attitudes, perceptions and approaches applied in transfrontier conservation such as the GLTP. Ideally, Beck (1996) defined the different tier colours in terms of what they imply, particularly congruent leadership style exhibited or associated with a particular colour and the organizational configurations, imbedded in those leadership characteristics that can exist at different stages of society's development. These value systems are further contextualized deductively in the Table bellow in unpacking the various colours on how they directly relate to communities.

Resource Conservation Leadership and Organizational Styles of the Spiral					
First Tier	Description	Congruent	Organizational		
System		Leader style	structure		
1st Level:	Produces instinctive skills to survive in the rainforest, savanna, bush and	Caretaker	Survival Band		
Beige	tundra, as well as in cases of serious deprivation and tragedy.				
2nd Level:	Creates animistic thinking, bonds humans to closely-knit groups, and	Caring Parent	Tribal Order		
Purple	enriches inanimate objects with meanings and magical significance				
3rd Level:	Stimulates the impulsive self while generating powerful images of	Big Boss	Exploitative		
Red	aggressiveness, conquest, and predator/prey relationships.		Empire		
4th Level:	Awakens transcendent purpose, impulse control; creates abstract causes,	Rightful	Order-Driven		
Blue	principles; focus on future reward; disciplined and dedicated.	Authority	Hierarchy		
	Forges the autonomous self, creates the	Win: Win	Strategic		
5th Level:	algorithms of strategy, changeability and		Enterprise		
Orange	pragmatism; stresses status, winning and success				
6th Level:	Rejects authoritarian and materialistic codes while exploring the inner self	Sensitive	Social Network		
Green	and inner selves of others. Searches for harmony, supports egalitarian	Facilitator			
	communities in a quest for peace and caring.				
7th Level:	Integral, systemic, natural works to restore human viability to a world	Competent	Systemic Flow		
Yellow	convoluted by First Tier systems, both their successes and failures.	Partner			
	Legitimizes all of the vMeme codes; works to keep each healthy and open to				
	movement along the Spiral.				
8th Level:	Detects holistic energy flows that bind everything together. Constructs large-	Spiritual	Holistic		
Turquoise	scale mandates in acting on behalf of all life. Nurtures all human	Counselor	Organism		
	manifestations that contribute to "the whole," while sensing big picture				
	perspectives and comprehensive initiatives.				

Table 2: Spiral Dynamics behavioural colour codes and analysis

If one looks at the table above, it may be difficult to make sense. However, the power in this model comes from the ability to identify what value systems are in operation, and which value systems naturally seek to emerge stronger as the community develops and the worldviews change in biodiversity and ecosystems governance, and assigning of resource rights. These manifestations are embedded in human institutional relations, capacities and life forces, which can help readers to appreciate transfrontier conservation resource rights discourse. The value systems therefore, can assist in the understanding and visioning of institutional resource governance-community and environmental relations. In essence, this study makes an effort to interpret and simplify these details in the Spiral Dynamics in describing the way its viewpoints can be interconnected with transfrontier conversation actors' analysis, particularly how the rich territory of value system can be exploited for ease reference to interrelationships. This includes the influences existing in conservation characteristics as they relate at various developmental stages of our societies. This study's framework discuss the critical colours as highlighted by Beck above, but confines more on the "Blue," the "Yellow," the "Turquoise," the "Purple" and "Green" colours as they are the most relevant in understanding institutional governance in terms of resource governance and rights perspectives with communities' claims and the evolving relations in the GLTP.

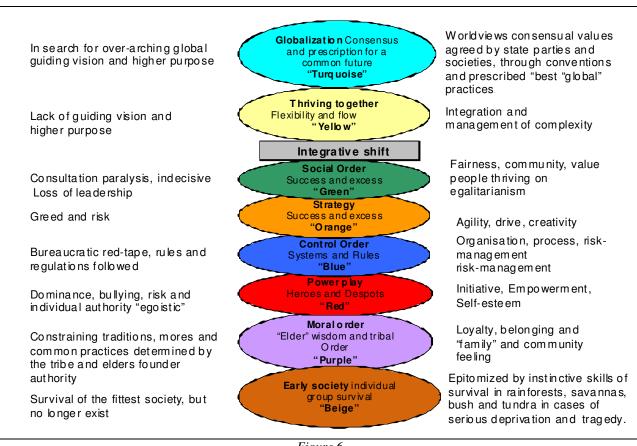


Figure 6

The idea postulated here addresses societies, cultures and subcultures as well as the world at different stages of psycho-cultural emergence, evolving in a complex manner through different stages (Beck, 1996) in terms of colour codes that look at actions shown by individuals, communities, nations and various interest groups. These actors, act in a manner reflecting how they are affected by different developmental stages in their environments. The changes show particular relationships derived from each evolving developmental stage. Typically, the relationships at each developmental stage inform conservation actions and the manner in which actors relate to communities, particularly in Makuleke and Sengwe communities in the GLTP in which there is reflection of the actors' values in terms of environmental leadership, policies and practices such as fortress conservation model used in most parks in neo-liberal conservation terms.

The question that arise is how does the *Spiral Dynamics* become relevant to this study and where does it fit in the whole debate about the GLTP, especially resource governance, assigning of property rights and relations with communities? It is the view of this study that the Spiral Dynamics becomes a central framework particularly when global biodiversity problems associated with *use* or *overuse* of environmental resources push states to rely on global support and global solutions, which, in turn, dictate national policy interventions as they relate to their citizens, fundamentally showing the global thinking (Beck, 1999:6). From the colour coding perspective, the conservation thought processes become world-centric.

World actors are also involved in the GLTP from state institutions, regional and global conservation organizations. These organizations at different levels follow clearly, what this study refers to as the "global conservation enlightenment". To buttress this argument, many conservation ideas derive from conventions, global conservation rules and regulations, international policies and practices such as Agenda 21, Rio De Janeiro, Earth Summit 1992 Declaration, Brazil and the Johannesburg Earth Summit of 2002, South Africa. These global summits, which in terms of conservation, exemplified three levels of policy interventions that can be linked to the "Blue," the "Yellow" and ultimately, the "Turquoise" colour of the Spiral Dynamics. The three colour codes, have important conjectures in so far as how actors in the "Blue-Yellow-Turquoise" categories behave and correlate in conservation discourse. These are analyzed bellow although they are complex and difficult aspects to deal with in this discussion, and this paper, examines the discourse and bring out exciting perspectives.

One point of departure is the assumption in Beck's Spiral Dynamics that as societies grow in numbers or complexity, the tensions of the "Red" conflict ridden egocentric society, becomes perpetually unacceptable, including uncertainty and individualistic struggles create a sense of societal disorder reminiscent of Thomas Hobbes state of nature. This state of nature becomes a society, rigidly deterministic with a pessimistic vision of the consequently natural state of human beings in perpetual struggle against each other in an attempt to escape from the grim fate.

Hobbes argued that societies form a commonwealth, surrender their individual powers to the authority of an absolute sovereign, then, surrenders his/her individual obedience to an even an arbitrary government as necessary order to forestall the greater evil of an endless state of war. Such interests of power absolutism are insufficient for stability, and society then hungers for an overarching goal to which all members may adhere to. The society would seek for example, rules and principles, which members are expected to abide by, and the "Blue" category according to Don Beck (1996), typifies that stage, in which a society comes into being with a search for purpose, rules, regulations and systems to maintain and arbitrate on fairness and justice among citizens.

At this stage, a commonwealth witnesses the development of an organised society that brings in the legal structures and democratic rules based on a mirage of laws, policies and procedures applicable to the whole society (Beck, 1996). These interests typically represent the aspirations of the entire community. There is an attempt to institute basic internal standards in conservation. These compel communities in transfrontier conservation zones to abide with specified conditions in terms of biodiversity and ecosystems management in which case, the state has emerged to be the biggest player with enormous degree of control to ensure incentives and disincentives are imposed on the people and rules complied with in the process, and punishment meted out on none-compliance respectively.

Typically, this is an area where park authorities in the GLTP from both South Africa and Zimbabwe derive what can be referred in this paper as the supreme 'guided mandate' in conservation of the GLTP. This 'guided mandate' is based on a plethora of laws and policies, hence the park model would ensure that certain standards are met, conservation is not compromised, which enables biodiversity and ecosystems to flourish. According to Don Beck (1996:5), the actions of the state agencies by way of policies and rules, qualify them under the blue category, which technically requires that state actions be embedded in specific ideology, impulse control, principles (policies), rules, discipline and focuses on future rewards. This assessment resonates with the architecture of resource governance regimes unfolding in the GLTP with huge impact on livelihoods (socio-economic) practices of the local communities as well as affecting their capacity to conserve natural resources. Communities interviewed highlighted that they have been left out by governments in the conservation process of natural resources. The adoption and implementation of coercive 'park strategy,' in the GLTP corresponds with the concept of 'rules' that apparently are reposed in state agencies under the blue category in the Spiral Dynamics. Perhaps, the idea of conservation is not exclusively bad, but coercion is what is inimical to humanity.

The state having played an interventionist role, in this regard only serves the purpose of a guarantor in the GLTP dynamics, which is envisaged that the park would attract investment on the basis of the hypothetical economies of scale through eco-tourism and private sector investments. In that context, the companies and state agencies are expected to reap benefits through taxation. Again, this point puts emphasis on the necessity of national control in the collection and distribution of rewards such as tax. The common understanding is that it is only the state and its mandated 'blue' institutions that are entitled to levy taxes and distribute them to its citizens.

However, there is no clear indication on how the local people, particularly those who endure predation and crop raiding from wildlife can benefit. Hence, this has tended to make the issue of benefits sharing an elusive one, and the issue of resource governance, resource rights remaining highly contested in Makuleke and Sengwe communities. Interviews conducted during the study indicated that the state actors and their complementary conservation organization, a decade ago, had affirmed blending of the 'colour dimensions' in conservation. That is to say, combining the "Yellow" and the "Turquoise" colourcategories as the global conservation overarching value systems that provide a strongest basis for common sharing, consensus and collectivism at a global level towards sustainable conservation.

The national thinking, which Don Beck (1996) says is "Blue", and it is inadequate in meeting sustainable conservation of natural resources, is supported fundamentally by regional, global protocols and conventions that guide state actors on conservation programmatic and policy matters. Accordingly, Freeman (2008) says, the "Yellow" colour integrates multiple complex global viewpoints in which it seeks to manage communities from strong traditions in a regulated world containing passionate idealists with healthy individuality. These have prompted a mix of employed intentional community members running their organizations undergoing exponential growth in complex forces of policy formulations governing relations, all of which aspire to consensual ways of life.

Further to that, the "Yellow" value system is seen as the toolset that supports hierarchies, however, present flexible models, which recognize local competence, attitudes and knowledge that help to respond collectively to global needs (Freeman, 2008). Above the "Yellow" colour code is the "Turquoise" value system, which constructs large-scale mandates acting on behalf of all life and different human manifestations to contribute to "the whole" and global harmony, while sensing big picture perspectives and comprehensive initiatives that allows sustainability of things beyond sectoral interests (Beck, 1996). How does this link with transfrontier discourses in this paper?

It is argued in the framework developed above in the analysis of the Spiral Dynamics that state parties and societies consensually agree on conservation policies and programmes through conventions that prescribe the 'best global' practices for the management of biodiversity and ecosystems such as the GLTP. Perhaps, one important point is that the "Yellow" and the "Turquoise" colour value combinations evolve and operate almost in the same manner as the global environmental decision-making processes, thereby manifesting in institutions such as the United Nations, international and regional conservation organizations. A good example at the sub-continent level in Southern Africa, is the Peace Parks Foundation, founded by the late, Dr Antony Rupert.

Going forward in this discourse, a combination of the "Blue," "Yellow" and the "Turquoise" colour value perspectives, produces a hybrid mirage of colour codes preferably referred to in this paper as the "Blue-Yellow-Turquoise" characterization for purposes of analysing both conservation state actors and other organizations relationships with communities in the GLTP.A deductive logical

combination of Beck's Spiral Dynamics shows that global influence in the GLTP is apparent. Its manifestations in terms of conservation philosophy is well articulated through neo-liberal biodiversity conservation approaches, in which case, resources are subjected to forces of global markets and regional policies as well as conservation practices in a top-down approach in the hope to prevent the "tragedy of the commons" (Hardin, 1968). This global wisdom resonates fervently with the quest for a common future and envisages a biodiversity kingdom that the United Nations in 1992, Agenda 21, and the 1987 Report of the World Commission on Environment and Development, called "Our Common Future". This also includes the thrust pursued insofar as defining human-environment relations are concerned. A combination of these succeeding colour codes, clearly help to deepen the understanding of the development of multi-level institutional construction that determine the direction of conservation programmes, practices, policies, resource ownership, access, utilization rights and defining stakeholders' relations in the GLTP. Hence, multi-level neo-liberal attitudes and perceptions are more pro-private sector business than being pro-poor poverty alleviation, particularly when the whole process tries to change use rights and ownership of natural resources from the communities to the state.

In this visualisation, state agencies and conservation organisations are seen as `climbing the ladder', with citizen control at the bottom ignored in existence. Arnstein's 1989 classification in collaborative management mentions a process of value-laden, which is a product of the philosophy of the time preceding its development, unfortunately, it has not been given its practical experience since then as many forms of collaborative management, ownership and rights over resources, have been criticised. In the case of Makuleke and Sengwe communities, the government officials interviewed revealed that there is no universally `right' level of community control, ownership, use rights or involvement. What is important in this study is that the involvement and claims by communities seem meaningful and appropriate to the capabilities and characteristics of the stakeholders concerned, particularly in Makuleke and Sengwe communities.

In many situations community management, control and ownership as put forward by Arnstein's `citizen control' concept, is ordinarily viewed by state institutions as more adverse to long-term sustainable resource use than total government control. Equally, of course, there are situations where total government control is not conducive to long-term sustainable natural resource management. This suggest two things, first, that in order to know the appropriate level of community involvement in a given situation it is necessary to know the relevant characteristics of the situation and of the parties (stakeholders) involved. Secondly, it suggests that the level of community involvement appropriate to a situation can be increased by taking action to change the capabilities and characteristics of the parties concerned. This is an important point that has not been fully appreciated by most government agencies in Southern Africa that are undertaking transfrontier conservation which are missing out on collaborative management, ownership and entrenching community user-rights as reflected in Makuleke and Sengwe communities.

In addition, it is important to also address what the UN Agenda 21 implies in understanding actions by various stakeholders with respect to resource governance, community livelihoods and sustainable conservation. The term 'stakeholder' refers to people with varying interests from local, national, regional and international levels in terms of how they perceive the use and management of natural resources in a particular place, area or region (Byers, 2007: 4). Agenda 21 is a globally accepted blueprint for sustainable development in the 21st Century. In the analysis, the blue colour coding in the Spiral Dynamics in which the GLTP leadership is influenced through these commitments the government affirmed that they will implement, indicate the influence of global-views from neo-liberal economic terms. These international commitments are universal as guiding principle and have had far reaching effect in the region's conservation programmes. They were embraced as the main conservation philosophy, and with government and private sector taking centre stage in the implementation of programmes through various partnerships in both governance and management of transfrontier biodiversity and ecosystems.

In the end, the partnerships are a matter of government processes. Community conservation and resource utilization that existed and benefited communities for decades, are now under new governance principles and regimes that do not serve the local people's interests. It is critical to note that the Rio de Janeiro outcomes encapsulated what local administrative councils would do in terms of producing local environmental plans, which can be described as Local Agenda 21. Had this been implemented, it would have given power and authority to the local people than central government as is the case in making decisions. Currently, the local people do not exercise play a critical role in the management, conservation and determination of use of natural resources. It is no speculation that local people have rich local knowledge, which needs harnessing to advance sustainable environmental conservation.

In a more practical way, Agenda 21 shows that if issues concerning key stakeholders, such as communities are not tackled deeply from their local poverty particularity, there is danger in imposing ownership and utilization regimes that may not work in Africa. The integration of the local people in conservation of biological resources becomes a human rights issue, which humanity should treat with greater semblance of respect. While the idea of protection led by governments is noble, it should also seek to strike a balance of competing socio-economic interest such as sustainable development, poverty alleviation, sustainable use and conservation resources. It is apparent that the creation of buffer zones such as Sengwe Corridor in the GLTP, culminates in local loss of livelihoods. Hence, it is imperative to emphasize that the government that governs, should put in place alternative livelihood options for these communities without changing much of what they traditionally do and obtain from their ecosystem as livelihood strategies.

Brown and Wyckoff-Bair (1995:23) observed that lack of consideration of local people's rights and interests in buffer zones, is the missing link in policies that directly have a bearing on achieving conservation objectives and more indirectly, in influencing positive behaviours of the local people to support conservation based on their local patterns of life in buffer zones. This is critical to the extent that recent academic revelations bemoan elevation of current paradoxes in which there is global pressure for private property rights to be entrenched at the expense of community rights. There is simmering conflict in resource governance, premised on disparities in the rights accorded to various stakeholders in terms of use and to own resources in transfrontier parks. Some community members and

experts argued that there is a new form of resource exploitation under neo-liberal economic markets, particularly the introduction of conservation trophy and sport hunting, implying that animals can be killed for sport profit and therefore can have the same impact in depleting the species (Kahn, 1998:378). Going back to Don Beck Spiral Dynamics, the combination of the "Blue-Yellow-Turquoise" national and worldviews, assume that local ownership and use processes are unsustainable. However, this atavistically ignores the environmental truth that communal resource ownership often has self-regulatory restriction regimes on the use, whereas open access as espoused by Hardin (1968) does not (Kahn, 1998:378). In essence, the United States of America, Kahn (1998:378) would argue, hold cultural traditions among Native Americans that dictate the method and magnitude of hunting. Those traditions tend to conserve resources, of which, communal areas in Southern Africa, and the GLTP in particular, have similar mores that perform similar regulatory functions. Thus, this study would further argue that the superimposition of global-views under the "Blue-Yellow-Turquoise" in terms of assigning rights, conservation policies and programme manifestations in the GLTP, overlook local traditions that are critical in conservation and resource governance.

The "Green" value perspective in Spiral Dynamics clearly shows issues of attitudes and behaviour of local networks, common values and quest for an egalitarian society that exist in many rural communities. The "Green" components of the Spiral Dynamics, does not imply that communities' perceptions and attitudes typify the "green ecology," but can be linked to Level 2, which is the "Purple" colour representing what is thought to be that type of a tribal society (Freeman, 2008). The life conditions precedent thereof, epistemologically shows a shift from mere survival into relative safety and existing cultural values that are intended to preserve coexistence of communities. The key features, as Freeman (2008) would argue, involve the authority of elders, traditional systems, which value kinship and demands high levels of community members' conformity to social norms, traditions, and cultures that also define environmental relationships of the community.

As a result of these gluing elements rooted in local traditions, mystical beliefs, cultural practices particularly views on respecting elements such as the 'totems' trading and the sacredness of certain flora and fauna species, expressively emerged during this study as having helped to conserve natural resources in both Makuleke and Sengwe communities. It is argued in this study that traditional conservation wisdom, if harnessed, could enhance the "Blue-Yellow-Turquoise" at national and worldviews conservation level in terms of objectives and programmes, with limited cost incurred in policing biodiversity and ecosystems management in the GLTP. More importantly, it is noted in this study that for rural communities, the "Green" stage is often the early phase in which people strongly rely on traditions, founders (mostly strong community leaders) guidance and cultural beliefs, which develop and evolve over time.

To buttress this point, Freeman (2008) went further to state that the "Green" culture links with the "Purple" colour, with the "Green", having evolved from "Purple" where communities are seen as relatively stable, but eventually the founding beliefs would show signs of failure to adapt to altered environmental changes (Freeman, 2008). This is particularly so with a number of societies that change take place on the biotic and abiotic components of the environment, obviously caused by both human and natural changes such poaching and climate change, just to mention a few at this stage. The illustration bellow shows the evolvement and the interface of the "Purple" and "Green" colours.

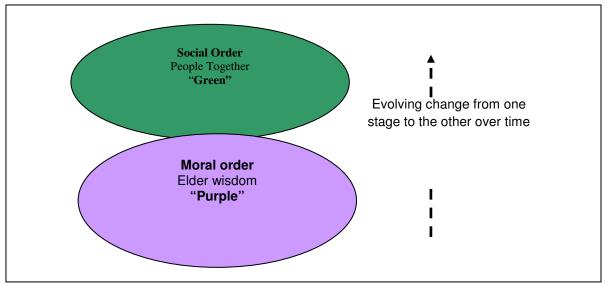


Figure 7

In advancing the point stated above, it is the view of this study that found out that climate change created part of the new conditions requiring livelihood adaptations. Equally, institutional construction and reconstruction, the promulgation of environmental conservation regulations and climate change policies, laws and programmes, have had to be re-oriented to respond to the hostile vicissitudes of nature's anger. These factors have forced changes in the manner biodiversity and ecosystems are governed. In that

context, strong state intervention measures with global partners' support, have been topical in order to save the 'global commons' and protecting 'our common future' at the global hierarchical level. Interestingly, the institutions governing natural resources have somewhat superimposed some of these measures seeking total compliance of the local people where the resources are found.

Largely, local communities have not played a major role to contribute to the laws and policies at all the different levels of policymaking. In that sense, they regard the policy measures as alien, and therefore they have least respect of them. A case in point is the experience for example, of the Bushman in the Kgalagadi Transfrontier Park, which involve South Africa and Botswana. The Bushman, in their humble way of life, were moved out of their traditional habitat as hunter-gatherers to pave way for diamond mining in the area despite being a conservation zone. They lost their livelihoods without compensation. Such social changes are purely alien and undesirable externalities, which cause forced migration of people, bring pressure on communally owned resource, as is the case with Makuleke community who lost their strategic livelihood practices in the Pafuri Triangle when they were evicted by the apartheid system during the colonial period. Sengwe community is likely to experience the same should the relocation proceed.

There is strong pressure for conformity. Pressure is beingexerted on the localpeople to accept what the central government wants to do with their resourceswithout much consultations, is a clear proofof unacceptable practice from a human rights point of view on those with strong and independent spirits of exercising their rights (Freeman, 2008). Even if the communities justify how they have managed thesenatural resource such as forests and wildlife throughtheir own culture in a sustainable way, there is clearly no deep sense of appreciation of communal property rights (based on indigenous property rightsbasis) that are clearlyarticulated in the Spiral Dynamics analysis well captured by the "Green" and "Purple" colour categories. The "Green" and "Purple" colour categories remind planners of how societies in their ownways, regulate use of resources through mores, which have the ability to ensure compliance at the local level without higher-level institutions dictating things to them. This is more particularly when outsiders migrate to the same area having no legal rights to use the resources, let alone, having no incentives to protect the environment and destruction then that result (Kahn, 1998:66).

Sengwe and Makuleke communities, despite having robust localized environmental traditions for conservation of natural resources, face two pronged challenges. One of them is that of natural population growth and people slowlymigrating into these areas. Thus, it is inevitable to avert long-term potential forecological pressure on natural resources particularly from elements of non-conformity to the generally accepted and respected conservation practices in the areas since those migrants, at times lack appreciation of those practices. While Makuleke and Sengwe communities' search for ownership and inclusion in the governance of resources and ownership of resources fits well within the context of egalitarian society resembled by the "Green" and "Purple" colour categories, it is important to note that these communities are driven by quest for environmental peace. They understand that the environment sustains their lives. Hence, environmental care is of strategic importance to their wellbeing. From time to time, communities strive to use the environment sustainably to end their poverty using the environmental resources as their supply-pot. Communal poverty rights over natural resources are therefore inexorable part of their humanness. To this end, many researchers have raised critical issues that poor rural people often have the most direct and indirect material and intrinsic interests in local natural resource. However, and unfortunately, they are often the most marginalized of any stakeholder group in terms of participation in conservation (Byers, 2007:4). More particularly, where there is emergence of high-level institutional construction, which are far divorced from the local focus. Others radically challenge the rationality of such global wisdom and multilateralization of local resources. They argue that in most cases the designing principles rarely capture local interests and ignore empirical local realities in terms of indigenous needs, usually having unclear definition of roles, rights and at worst, convoluted benefits sharing arrangements. They recommend a radical shift in thinking to go to the drawing board and craft mechanisms that "promote local control over access to resources and effective institutions that set and enforce rules over use" (Brown and Wyckoff-Bair, 1995:42). The effect of this in as far as the contribution local people can make towards biodiversity conservation was captured by Singh (2006:61), who cited the clarion call by Dr. Y.C. James Yen's Vision on the Credo of Rural Reconstruction of Philippine in which he called to:

"Go to the people
Live among them
Learn from them
Plan with them
Work with them
Start with what they know
Build on what they have"

Credo of Rural Reconstruction

(From Dr Yen's Vision (Singh, 2006:61).

Taking it from these assertions as a point of departure, the most important aspect is to be cognizant of the communities, building development programmes based on their local institutional systems, values and social mobilization in partnership with them as an adaptive bottom-up participatory approach to transform communities. In that view, it was argued by community leaders in Sengwe and Makuleke that tokenistic participation without user-rights and ownership does help to expand their livelihood options.

17. The Ecological Confluence of the Spiral Dynamics with Communities in the GLTP

It is important to mention, perhaps at this stage that the stages that Beck (1996) talkedabout are developmental. It needs to be understood that societies as they evolve from one stage to the other, never lose the capacity from earlier stages. The migration to

another stage(s) only emerges in response to the demands of changing life conditions within a particular environment and a particular ecological polity. If conditions change back, this study observesthat there is potential for reversion to the use of earlier sets of capacities, underpinned by different values systems. Hence, the power in this model comes from the ability to identify what value systems are in operation, and which value systems are naturally seeking to emerge, as conservation actors interact with communities as they develop, going forward. The reality of the matter is that human community capacities and life forces such as environmental traditions cannot be constrained, but grow like grass through concrete and the most important interface therefore, if the various multilevel actors is to find a synergy with the local processes to achieve collaboration in conservation. As Freeman (2008) would argue,

• "When a community shows signs of stress or collapse, we can identify earlier stages which have become weak, and we can underpin them. We can also identify where individuals are most at odds with the surrounding conditions and values of the whole, and help them understand why and how to change in ways that will help them on their own developmental journey. The development of the community and the health of the individual are inseparable, in line with the social ethic".

The integral viewpoints, this study notes, which emerged with the "Blue" "Yellow" and "Turquoise" value systems, provide the means in which it becomes easier to understand the national, global and community dynamic in all of its aspects. The impact on state actors, from the perspective of the Spiral Dynamics, provides the lens through which to view the balance of values present at high level of biodiversity and ecosystems governance, and institutional construction. These have an effect at local conservation level. This further affects communities in different ways depending on existing policies that either enable or disenable local members to have ownership, access to and exercise usufruct rights over biodiversity and ecosystems they lay claim rights over. Externally, it has been observed from the Spiral Dynamics analysis that global forces enable multi-level institutions to relate to the surrounding culture, and it is clear that various perspectives drive through to the local levels with legitimacy via state actors. However, this studyargues that this does not imply outright biodiversity and ecosystems sustainable conservation. Usually, the link with the local people is weak, and higher-level institutions in most cases fail to recognize local traditions ad rules of environmental relationships, which are the driving for holistic and collaborative resource governance and sustainable management. Too often, conservation programmes and activities are propagated at higher level, premised on presumably untested hypotheses about local social situations of communities, which is a recipe for failure (Byers, 2007:3) of conservation.

18. Conclusion

It is without doubt that Makuleke and Sengwe communities remain caught up in complex global conservation contestations, arising out of different ideas regarding resource ownership and user-rights. Claim by the communities insofar as resources concerned for livelihood purposes, and the attendant economic, social and ecological benefits, have not been fully comprehended by other multilevel conservation agencies. The governance processes propagated at the higher level in terms of management of the resources, do not affirm local community user-rights and local ownership in full. Rather, the aforesaid community ownership is cosmetic because there are not user-rights to talk about. Such enigmas, are ostensibly not showing signs of being reconciled. Obviously, there is potential for serious conflicts. Local collaboration in this instance will be diminished, and the potential to undermine conservation of biodiversity and ecosystems in the GLTP becomes an issue. It has been revealed that state institutions and other multi-level natural resource governance structures, follow neo-liberal biodiversity and ecosystem development philosophy. Neo-liberal global market forces and private ownership, which that have been amplified by the state, are not always in sync with local development processes, and clearly shows a major shift from local people's competing livelihood interests. Ultimately, negative attitudes have been generated over communities' claims, ownership and user-rights of natural resources in and adjacent to transfrontier conservation areas. This negative attitude, negates simple reality that human-environment relationship, is fundamentally mutual, and separating the two, especially where communities are sustained by nature's providence, will do harm to both. If local people's trust is secured through guaranteeing their local natural resource claims, there is most certainly the possibility of motivating participatory collaboration in the management and conservation of biodiversity. Indeed, one cannot ignore the importance of buttressing indigenous knowledge systems in conservation of wildlife in the GLTP. More importantly, to imagine the utopian "open access" in the GLTP's environmental discourse as Hardin's (1968) "tragedy of the commons," as the primary cause for resource depletion as currently and erroneously applied in many conservation projects by the majority of the planners, would be missing the target since no free riding would happen because communal ownership in Africa existed before western civilization enshrines rules of access and local procedures of utilization. In essence, transboundary ecological resource management in Southern Africa likely succeed only if the planner strikes the nexus between community and multi-level natural resource governance. If not done, this study has cautioned strongly against transfrontier natural resource conservation processes and governance regimes that remain fundamentally elitist, and far removed from the local people. The study further notes that this ca be recipe for disaster for transboundary biodiversity and ecosystems management. Ideally, what comes out clearly from this study is that Makuleke and Sengwe communities over the last thirteen years, experienced latent contradictions with government institutions in securing their resource claims. The relationships between communities and conservation institutions around resource governance are therefore not always smooth. Change in prescribed resource use, unclear and unequal benefit sharing arrangement, skewed resource ownership and constrained local participation in natural resource governance, all these issues need to be addressed to safeguard local people's interests. If not, the relations of key stakeholders remain acrimonious, and potentially, it can undermine biodiversity conservation sustainability. By arguing this way, the study's deductive reasoning is that the current state of affairs in the GLTP in relation to communities, simply needs to change. The study alerts policy makers to realize that the environment and all that is found in it, is not important for itself, but co-exist interdependently with various aspects. A re-think to reorient conservation approaches from the current ecological processes to a new model that is compatible and acceptable to all

stakeholders, is of paramount importance towards inclusivity and sustainability. One can only ignore this to the peril of conservation wisdom. The issues of benefit-sharing, ownership and resource governance remain highly complicated, but should be addressed in its broader context and manifestations to achieve a win-win situation

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