

Enabling a Global Imperative of Sustainable Development through Indigenous (Local) Ways of Knowing: A Case of Southern African

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“If development is endogenous, however, then people are the subject. They are not trapped in the cold condescending gaze of the rich upon the poor, because endogenous development begins at the point where people start to pride themselves as worthy human beings inferior to none; and where pride is lost, development begins at the point at which this pride is restored.”
Odora-Hoppers (15: 2002)

INTRODUCTION

Although the concept of sustainable development has been viewed by many around the world as a moral imperative; it has equally been highly contested and approached with a lot of suspicion and caution by many. This sense of hopelessness and skepticism is unfortunately common to most global initiatives; narratives and constructs however well intended they may be. People around the world, in particular poor and developing countries, have often been introduced or invited as equal partners in missions well intended to ‘improve the state of our world’ or ‘save our common future’. However, within these calls are often deeply embedded imperialist or paternalist approaches and content that have little if no regard to local content, expertise, experiences or ways of knowing. This unfortunate state of affairs is what prompted Turnbull (2000: 5) and others around the world to call for what is termed a process of ‘decentring’- recognizing that there are other ways of knowing the world in addition to the Eurocentric and egocentric as exemplified in the term ‘Western Science’. Gough (2003 manuscript) citing that attempts to generate global knowledge in areas such as health (necessitated, in part, by the global traffic in drugs and disease) and environment (for example, global climate change) draws attention to the cultural biases and limits of Western science. Similar concerns and warning signals can be raised for a global sustainable development agenda. Although the

term sustainable development has become widespread in recent times, there is little indication that a clear global consensus has emerged about the content, the interpretation and the implementation of this moral imperative (Hattingh, 2002). Perhaps, our concern should not be about a ‘global consensus’ but about how this imperative is used by various interest groups and agendas to respond to challenging socio-ecological issues at the local level and how local contexts and communities play an equal role in defining its programmes, missions or projects.

Hattingh (2002: 5) draws attention to different interpretations of sustainable development and their associated ideological character and warns that there are those interpretations that can have the effect of establishing, justifying or maintaining relationships of domination and exploitation. He gave an example of sustainable development as a ‘Green Agenda of conservation’ which has been criticized for its global policy of zero-growth, steady state economy that would confine those living in developing countries to the trap of a highly skewed and unjust distribution of the world’s resources, with no hope of ever changing the material basis or substantively improving the quality of their lives. He further points to a number of critical questions that need to be asked regarding various notions of sustainable development:

“Whose interests are served by adopting this or that agenda of sustainable development? Whose power is served and through which mechanisms? And who or what stands to win or lose in which ways from adopting this particular agenda of sustainable development?”

Are new forms of dependency created by adopting this or that interpretation of sustainable development? Are new forms of domination and exploitation created, or are we in the process of creating conditions that slowly but surely push back domination and exploitation in the world?”

“...The agenda of sustainable develop-

ment is one of radical and critical questioning of ourselves and our motives, of the social bases of our actions, and of the implications and effects of these actions on others: people, future generations and other members of the community of life. If this point is missed, however, sustainable development could become just another entry in the current list of ideologies in the service of the status quo that leave the world, with all its risks and injustices.” (Hattingh 2002: 14-15)

If the current discourse on indigenous knowledge and sustainable development is to have any tangible outcomes, care needs to be taken against using indigenous knowledge as a tonic, ‘magic trick’ or a ‘political correctness’ for enabling sustainable development objectives in their various forms. Crossman and Devisch (2002:102) raised concern about notions of ‘indigenous knowledge’ which has simply become “a catch all phrase for most variations of the development discourse, namely feasibility, sustainability and participation which are a result of the realization that decades of development projects have failed”. They further assert that much of the concern with indigenous knowledge is actually ‘a veiled preoccupation with feasibility and efficacy – in other words, making development efficient’. Our concern for engaging with indigenous knowledge systems (IKS) within contexts of sustainable development will therefore need to be informed by epistemological imperatives of local contexts and not just the other way around.

In this paper, I try to highlight the complexity of the challenge for a sustainable development approach that takes on board IKS. Simplistic and instrumentalist approaches to indigenous knowledge and sustainable development are also questioned. A brief overview as well as examples of practice within the South African and the Southern African contexts relating to IKS policy initiatives are provided to further illustrate the inherent issues and challenges.

SUSTAINABLE DEVELOPMENT AND INDIGENOUS KNOWLEDGE

The moral imperative of sustainable development already appears to be inextricably linked to the values of IKS. What proves to be a challenge though has been the erosion and marginalization of IKS through processes of colonization and globalization.

The South African Socio-Ecological Context

In South Africa, Apartheid laws of forced removal and separate development have contributed adversely in displacing communities from areas where they have over decades invested in developing a rich capital of indigenous knowledge. Even well intended and noble processes of developing national parks and other protected areas for conservation were executed at the backdrop of unjust conservation laws which sought to create leisure and recreational facilities for white minority groups at the expense of disadvantaged indigenous communities. These conservation crusades have to date left a legacy of local indigenous community always being glared at with suspicion and often treated as ‘poachers’ and potential threats to conservation in neighbouring parks. Odora Hoppers is justified in claiming “that a major threat to the sustainability of natural resources is the erosion of people’s indigenous knowledge, and the basic reason for this erosion is the low value attached to it” (Odora Hoppers 2002: 7). She further warns that the erosion of people’s knowledge associated with natural resources is under greater threat than the erosion of natural resources themselves. Breidlid (2004) adds by contrasting modernity and modern knowledge systems against IKS:

“While modernity and modern knowledge systems can be seen as the ideological foundation of the West and capitalism’s aggressive exploitation of nature, the holistic nature of IKS (the interrelationship of nature, human beings and the supernatural) has, as noted, major contributions to make to the critical debate on ecology and the preservation of natural resources. The neglect and eradication of such knowledge, also in the developing world, is a major threat to sustainable development” (Breidlid 2004: 5).

The South African National Parks (SANParks), through its People and Conservation Division, has currently embarked on efforts to implement new approaches to conservation which regard local communities as equal partners in conservation. This is done through a variety of programmes including environmental education and interpretation; community relation and community based conservation; cultural heritage, including a focus on indigenous knowledge; youth development; and social science research. These programmes aim at building supportive consti-

tuencies for individual national parks and at the same time providing opportunities for social and economic development from developments in and around national parks. It will however take a number of years to change perceptions and to undo the injustices of the past. After ten years of democratic governance; conservation and associated tourism benefits in South Africa remain a terrain for the previously advantage sectors of society.

Troubling Narrowing Approaches to IKS and Sustainability

Care should however be taken that we are not too preoccupied with narratives that are centred on contrasting western scientific knowledge with indigenous knowledge without going beyond such oppositional juxtapositioning. According to Masuku Van Damme and Neluvhalani (2004:367), in Southern Africa efforts to establish processes of inter-epistemological dialogue, rather than an oppositionalised logic of contrasting indigenous knowledge and western knowledge as two distinctly different ways of knowing and irreconcilable. My concern in this paper is centred on how the different knowledge systems can begin to complement each other without recreating power hierarchies amongst such knowledge systems (Odora Hoppers, 2002). There is need to reposition indigenous knowledge and its holders not just as 'objects of research and important sources of information' or 'participant and beneficiaries (stakeholders) of development projects', but as "authorities in an epistemological domain that have been purposefully kept subjugated" (Odora Hoppers, 2002:20).

Challenging Utopian and Romanticised Ideals

Another area of concern in our bid to find a common ground between IKS and sustainable development emerges when we try to create utopian ideals and stereotyping of both indigenous knowledge and sustainable development. It is often tempting to simply assume that by including IKS within development projects, there is a guarantee for successful project outcomes. There is a need to look carefully at the complexity of finding such a common ground amidst a myriad of interpretations and agendas of sustainable development and the indigenous knowledge discourse. O'Donoghue and Janse Van Rensburg

(2002:9) warn that "a utopian synthesizing of indigenous knowledge eco-sensitivity has even been used as an economic stick to facilitate an imposition of sustainable environmental management through inter-ventions of international development agencies." Masuku Van Damme and Neluvhalani (2004:356) also argue that the "abstraction of indigenous knowledge from socio-cultural contexts to generalised institutionalised views failed to illuminate indigenous knowledge not only as embedded in people's lives but also as a constantly shifting meaning making process of one within his/her environment". They further argue that most of the definitions and objectives of indigenous knowledge by international bodies have only resulted in alienating indigenous people from the discourse.

Simplistic and naïve approaches towards resolving the challenges sustainable development and the resolution of environmental issues are often technicist, instrumentalist and not different from 'a farmer who wants to solve the problem of livestock theft by simply inviting a missionary to start a church in his farm.' Hattingh (2002: 14) concludes:

"there are different interpretations of the moral imperative to promote sustainable development ...none of these interpretations is neutral; rather they represent ideological positions in so far as they justify and promote the interests of certain sectors of global society. The fact that these interests clash and are mutually exclusive is a clear indication that any interpretation of sustainable development functions as asset of normative ideas. Such a set of normative ideas can function as guidelines for personal actions, and a baseline in terms of which governments, industry, commerce, consumers and citizens can be held accountable for their actions".

Hattingh's conclusion is an indication that we are not simply attempting to fit one to the other (indigenous knowledge and sustainable development) but that we need to constantly be alert to the baggage that comes along, as well as, the challenge of bringing into play the unique IKS embedded within individual local contexts and which is often tacit and largely contextual. Although Fien and Tilbury (2002:3) warn against a preoccupation with the different interpretations and definitions of sustainable development by arguing that these interpretations may result in 'paralysis by analysis' and in delays in key

changes for a more sustainable society, caution needs to be taken against turning international declarations (sustainable development) into religious missions lacking any critical discourse required for efficient implementation at the local level. Such a critical discourse will allow us to ‘interrogate and explicate the links between epistemology, cosmology and democratic participation’ (Odora Hoppers, 2002: 18), and to establish new formulas for fostering critical, ‘self reflexive praxis’. Sustainable development processes and projects will thus require such self reflexive praxis in order to benefit from the rich capital of IKS within diverse local contexts.

CHALLENGE FOR POLICY DEVELOPMENT

It has become critical to take as a point of departure the need to enable public policy development dialogue which is interdisciplinary and multidisciplinary and which problematises the relationship between knowledge, power and human development (Odora Hoppers, 2002). Policy making processes that assume and wield power by virtue of their link to ‘global or national imperatives and mandates’ may fail to find relevance and adaptability at local level or amongst millions of marginalised indigenous communities. In order to avoid such imposition and domination, Fien and Tilbury (2002:4) argue that public policy makers should approach sustainable development as transcendent to conflicting worldviews. I would further argue that such sustainable development initiatives should also serve to reaffirm and appraise indigenous knowledge ways of knowing that already promote sustainability in local contexts. Rather than try to reinvent the wheel or convert the converted, there is to a large extent a need to reinstate pride and confidence in local ways of knowing amongst those that hold it. The struggle amongst indigenous communities may not be a lack of understanding the sustainable development moral imperative, but a realisation of their own potential contribution to the imperative and awareness to the detrimental effects of the globally celebrated and enticing modernist idea of development which is counterproductive to an agenda for sustainability. Masuku Van Damme and Neluvhalani (2004) provide insight into the Southern African context where indigenous communities and nation states seem to have (paradoxically and ironically) become active

participants in the subjugation of their own local ways of knowing as they participate in ‘transformative’ post-colonial/ post-apartheid processes of educational and social reform in broader modernising and globalising contexts. It is critical that sustainable development is not seen as intermeshed and to a large extent informed by ideals that work against its moral objectives. On the other hand, it is equally crucial that attempts to promote indigenous knowledge at the local level are not misconstrued as a call back to ‘old fashioned ideas’ or “an extension of a distinct Bantu knowledge systems” (Crossman & Devisch, 2002:107) coupled with a fear of being ‘left out’ of the process of globalisation. This concern is further highlighted:

“As globalisation privileges values such as materialism, individualism and commodification over human values propelling a divisive and polarized social fabric, it becomes imperative that the country (South Africa) begins to rediscover, and generate its local values ... the ‘knowledge’ as defined within the context of globalization is to a great degree, western based, and Americanized.” (Odora Hoppers 2001: 2)

In South Africa, Odora Hoppers (2002: 18) proposes that attention given to rural development in policy needs a critical re-evaluation from the perspectives of IKS in order to determine the extent to which IKS as national resources are actively incorporated into development strategies, and the extent to which expertise in indigenous knowledge is accorded cognisance. In his critique of the South African education curriculum and other related policies, Breidlid (2004) acknowledges the positive intentions of South African policy makers in recognising and referring to indigenous knowledge and sustainable development; but raises concern about the limited extent to which this is done as well as the disharmony caused by a continued adherence to dominant modernist worldviews. In South Africa, there is an apparent need to broaden the scope of the indigenous knowledge discourse and level of awareness. Crossman and Devisch (2002:106) note that “the discussion on IKS very much remains a minority debate among intellectuals. There is a lack of widespread interest in the discourse on the part of politicians, academics and the public, the very actors who could give it any structural impulse.”

In Southern Africa, one also observes a

narrow and biased focus on areas such as traditional healing and medicinal plants or issues around intellectual property rights. This may be due to the fact that such issues are obvious and have political and economic currency that can easily find its place in contemporary socio-political discourse of democratisation and redress (Crossman and Devisch, 2002). It may also be due to current and past experiences of exploitation and abuse of local knowledge and communities for commercial gain by big multinational pharmaceutical companies and bio-prospectors. In Southern Africa and most parts of the African continent, indigenous knowledge has historically been transformed to become both a tool of oppression and a voice within the struggle for liberation (O'Donoghue, 1994 working document). The challenge for policy development processes focusing on promoting sustainable development would be to embrace diverse epistemologies, and value diverse ways of knowing, identify with people and communities; it purports to serve and respect community based approaches to development and social change (Fien & Tilbury, 2002)

INDIGENOUS KNOWLEDGE SYSTEMS AND POLICY DEVELOPMENT IN SOUTHERN AFRICA

The Southern African Development Community (SADC) is made up of 14 member states: Angola, Botswana, the Democratic Republic of Congo (DRC), Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe. SADC is a legal intergovernmental institution committed to the equitable and sustainable development of the Southern African region. Member countries of the SADC have individually signed and ratified most of the international environmental conventions and are signatories to Agenda 21- the global framework for action on sustainable development. Most of these countries are faced with severe problems of poverty and malnutrition, natural resource degradation, including land degradation, pollution and waste, and health problems such as HIV/AIDS (SADC regional Environmental Education Programme, 2004). In its review of environmental policies within the SADC region, the SADC Regional Environmental Education Programme (SADC REEP) came to the following conclusion:

“The main problem and concern

identified in this policy analysis is the apparent lack of understanding around the notion of sustainable development, particularly, of the environmental requirements for sustainable development. Development is not sustainable unless it includes economic, social and environmental aspects. In some sectors, the policy focus is on the economic development of the sector; although environmental management concerns are included, there appears to be lack of understanding of the significant requirements for sustainable development. This is made apparent in policies which aim to ‘accelerate’ the development of a sector e.g. Mining and Agriculture. There is currently a significant lack of expertise regarding environmentally sustainable management” (SADC REEP, 2004).

This analysis provides insight into contradictions inherent in policy development initiatives, their purpose and implementation; caused by the need for accelerated development and exacerbated by high levels of poverty and health problems.

The background provided in the preceding section gives insight into some of the challenges around efforts to promote indigenous knowledge and sustainable development. The 2002 Johannesburg World Summit on Sustainable Development (WSSD) made a significant impact in foregrounding the moral imperative of sustainable development in the region, particularly in South Africa the host country. It still however remains difficult to notice the tangible impact of this event on the lives and daily practices of ordinary people at local level.

Although there were some side events focusing on IKS, they also had little influence on the outcomes of the whole event. More dedicated work will need to be done in order to concretize the objectives of sustainable development and indigenous knowledge. Although the WSSD reaffirmed a number of critical development issues like the eradication of poverty and a fair and just allocation of resources, Breidlid (2004) raised concern about the lack of a clear focus or declaration on knowledge systems and cultural practices. The Environmental Education Association Southern Africa (EEASA) in its annual conference just before the WSSD made a declaration (Gaborone Declaration) that clearly stated the need for policy developers to take into account

livelihood issues; the challenge of enabling more sustainable futures and the need for IKS (EEASA, 2002). Although there have been a number of initiatives aimed at promoting IKS and sustainable development throughout the region, a critical challenge is that these efforts often take place in silos, uncoordinated and their outcomes go unnoticed.

In South Africa, there has been visible progress regarding policy development on indigenous knowledge. This is also coupled with initiatives by the South African Department of Science and Technology (DST) to encourage and facilitate similar and regionally based policy development initiatives within the Southern African Development Community (SADC). In his speech during a SADC policy workshop held in Pretoria, South Africa in 2004, Minister Mangena stated the South African government's commitment to promoting IKS and mentioned the following initiatives:

- The drafting of the IKS Policy and Bill (which was approved by Cabinet in November 2004);
- Financial support of the IKS of South Africa Trust;
- The establishment of Inter-Departmental Committee on IKS;
- Dedicated ringed-fenced funding to National Research Foundation (NRF) for IKS Research; and
- The development of a Framework for the establishment of the South African Indigenous Knowledge Digital Library. This is based on the Traditional Knowledge Digital Library completed recently by India. (DST, 2004)

A number of university-based research projects funded through South Africa's National Research Foundation are currently underway with a few having been completed. It is hoped that such research initiatives will further inform development and policy direction with regard to IKS. South Africa's Research and Development Strategy (DST, 2002) pays particular attention on indigenous knowledge. It notes that there are many indications that indigenous knowledge can play a role in poverty reduction, firstly by the appropriate provision of support for innovators, and by the integration of indigenous knowledge system with modern scientific knowledge systems to produce new products and services. The document also acknowledges that some piloting has occurred in this regard and that there should be focus on indigenous knowledge within

the technology mission. With regard to the economy and development issues, the South African Policy on IKS acknowledges that Indigenous knowledge still plays a pivotal role in sustainable livelihoods. The policy further states that in deploying the economic potential of IKS, there is "need to consider three main factors:

- The creation of incentive mechanisms to promote IKS innovation;
- The promotion of IKS in the context of sustainable development; and
- The promotion of IKS as an employment generator" (DST, 2005)

It is clear from the above that the South African government's approach to IKS is to a large extent driven by the need to benefit local communities and contribute to the country's economic development and scientific innovation. What seems to lack though is a clear blueprint on how this can happen. Further work, including research, still needs to be done in order to translate these policy imperatives. The policy also promotes a multi-sectoral; multidisciplinary and interdepartmental approach to research and development with regard to IKS. Other government Departments such as that of Agriculture; Trade and Industry and; Health have respectively made progress on a number of indigenous knowledge related programmes. An added challenge to this progress would be to strengthen the imperatives of sustainable development across Departments and within Local Government structures and to further implement these in contexts of the rich diversity of IKS.

A case study undertaken by O'Donoghue in the Kwazulu-Natal province of South Africa after a cholera outbreak and subsequent attempts by the Department of Health and that of Water Affairs to educate the affected rural communities about the diseases and ways of combating the outbreak, provides a classic example of some of the challenges still embedded in attempts to enable sustainable development through participatory processes that recognize the importance of indigenous knowledge. O'Donoghue (2005 manuscript) through this case study tries to demonstrate that such 'participatory' processes remain rhetorical and ironically tend to overlook situated intergeneration capital of indigenous ways of knowing.

A number of the challenges portrayed above are also common to other countries within the Southern African Development Community.

Box 1: Extracts from O'Donoghue's Case Study
(*O'Donoghue, Manuscript submitted for publication 2005*)

The study notes and probes a surprising resonance between the ecology of the disease and an intergenerational social capital of indigenous hand-washing practices. The evidence suggests that these patterns of hand washing practice would have served to contain the disease in earlier times and points to this social capital as a focus for co-engaged action on environment and health concerns. The findings suggest that moving beyond a legacy of cultural exclusion and marginalisation remains a challenge as the first decade of post-apartheid democratic governance is concluded... When there was a cholera outbreak near Melmoth on the north coast of KwaZulu-Natal, the response by water, health and education departments included the review of existing water education materials for an anti-cholera campaign. Besides the obvious instructions for sanitising contaminated water and posters on oral re-hydration, environment and health education resources included materials on patterns of water collection / storage by indigenous communities as well as simple hands-on test kits for school and community groups to detect coliform contamination before engaging local health risk. The indigenous knowledge and coliform testing materials were noted for their local relevance by health workers and because they resonated with a departmental policy to work with people in participatory ways. The Department of Water Affairs and Forestry and local water authorities thus supported the adaptation of school water audit materials to include materials on indigenous hand washing practices and the use of a low-cost coliform test kit in curriculum and community-based environment and health education activities. The Health Department, as lead agent in the programmes, coordinated a joint operations task force in a responsive campaign to establish emergency re-hydration centres and to implement programmes of water supply improvement and toilet building in the affected areas... The study gave attention to developing patterns of inclusion and exclusion amidst the interplay of institutional structure and human agency that played out in health education activities within the cholera campaign. It probes patterns of meaning making interaction for a sense of how institutional processes in/of the times did not take up and sustain an engagement with an Nguni cultural capital of hand-washing practices or use of simple coliform testing tools for local communities to participate in the determining of health risk... In simple terms, within an appropriating development of instrumental functions in government departments during a fairly seamless transition from colonial to apartheid and democratic state, the rural peasant was variously portrayed as primitive, dirty and defenceless, lacking in capacity and the will to develop, and thus in need of development through the agency of others, the health education professional from their institutional setting in/of the modern state. A sustained denial of agency to rural peoples within the modernist state structures, and an emerging institutional imperative to cure disease and improve health through communication and development interventions, in effect, developed and functioned as a closed system of appropriation exacted amidst colonial intrusion, extended within an ethos of separation in the apartheid era, to currently reside in professional habits of mind within modern state institutions... Ironically, a rhetoric of agency / participation at a policy level had produced policy level transformation without much change in patterns of institutional practice. It is also noteworthy that there is now a greater reliance on consultants as outside professionals who come in, often through donor aided initiatives, to facilitate much of the steering work in/of state institutions. Here one finds the facilitative steering of others to develop the personal and institutional capacity to steer themselves. In education activities one also finds the emergence of action research as a rational process of co-mediated reflexive engagement under the facilitating hand of an external technical assistant from donor agencies. This is apparent in the externally funded Project W.A.S.H. that was launched at the conclusion of the cholera campaign. Social processes such as those sketched above ensure that institutions and agents within these remain insulated from and blind to much of the knowledge capital and agency in/of rural communities. Despite a vibrant period of socio-political change with an accompanying rhetoric of democratic participation and transformation, institutions still seem to subvert a reappropriation of more steering control in the realm of daily life...

Unlike in South Africa, there are still huge policy development gaps on IKS in most of the countries within the region. These policy gaps have been caused by a number of factors that were deliberated upon during the June 2004 workshop titled 'Towards IKS Policy Development and Regional Cooperation'. Delegates from Namibia also indicated the need for policies that would protect the indigenous knowledge and intellectual property of local communities. They also propose incentives and royalties for holders of indigenous knowledge. During the discussions, I noted a general concern with the high levels of poverty and a common lack of access to basic resources like food, shelter and water, which

makes it difficult for most governments to prioritise indigenous knowledge projects. These and other concerns raised by delegates need careful consideration to avoid IKS being simply dealt with as commercial transactions benefiting a few community members and leading to further misuse. An added concern and risk to this commodifying approach is that it may deviate attention away from the need to reposition IKS as an equal partner in knowledge generating processes within contexts of sustainable development. Other concerns raised by delegates from the region include the lack of funding for more research and development with regard to indigenous knowledge initiatives. Presentations

and discussions held during the workshop, however, provided insight into an amazing wealth and diversity of IKS within the SADC region. Some of the recommendations that came out of workshop include:

- Individual countries cannot move forward individually on the issues of IKS i.e. there should be a regional approach
- There should be a coordination at a governmental and organizational (institutional) levels
- The ultimate goal for IKS policies should be the commercialization of IKS i.e. transform goals into the global market
- Support seed activities which are sectorally based. Government has to support sectoral based activities. This is required in order to diversify indigenous knowledge initiatives.
- Government should take a lead in coordinating related activities. This is due to the fact that most indigenous knowledge activities and projects are not linked and lack coordination at national and regional level.
- Convene an annual meeting on IKS; it should precede the Science and Technology meeting of SADC. (notes from the workshop)

In his presentation, Adolfo Mascarenhas summed up the challenge for a regional IKS policy initiative as follows:

“In a continent awash with policy reforms, in some countries more than in others, it seems almost callous to suggest yet another policy on local and indigenous knowledge. There are several compelling reasons for advocating the need for a policy framework. In several countries in the region, tribal and ethnic diversity were considered a threat to a centralized national state and ethically or racially based intolerance made the situation very vulnerable to volatile outbreaks. Chiefs and any local form of government was frowned upon or even abolished. Both minority and majority “tribes” are equally culpable of gross intolerance of the others. The frenzy of the Cold War also contributed a major part in the vulnerability of Indigenous Knowledge. First and foremost it is necessary to have a policy framework to redress in a cultural and governance context to give people the right to develop.” (Mascarenhas, 2004 presentation)

CONCLUSION

Although there appears to be clarity that IKS and the moral imperative of sustainable

development are natural allies, much still needs to be done to enable genuine and sustainable participatory processes of engagement involving the multiplicity of knowledge systems. Critical regional challenges of poverty eradication and access to basic resources will always outweigh calls for a focus on sustainable development projects that are not well aligned with genuine concerns of local communities. A mere focus on and promotion of IKS may not be enough to demystify prevailing conceptions on sustainable development as discussed above. A genuine re-examination and redefinition of power relations coupled with efforts to start where local communities are at, and a willingness to articulate the goals and priorities for sustainability as informed by needs for redress and equality; would go a long way in aligning the moral imperative of sustainable development with the holistic values imbedded in IKS.

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REFERENCES

- Breidlid, A. 2004. “Sustainable Development, Indigenous Knowledge and Education in South Africa.” *Journal of Teacher Education and Training*, 4: 3-19.
- Crossman, P. and R. Devisch. 2002. “Endogenous Knowledge in Anthropological Perspective: A Plea for a Conceptual Shift”, (pp. 96-125) in C.A. Odora Hoppers (Ed.) *Indigenous Knowledge and the Integration of Knowledge Systems*. Claremont: New Africa Books.
- Department of Science and Technology (DST). 2002. *South Africa’s Research and Development Strategy*. Pretoria: Government of the Republic of South Africa.
- Department of Science and Technology (DST). 2004. *Speech by Minister Mosibudi Mangena at the Dinner of the Workshop on Indigenous Knowledge Systems*. Pretoria: Government of the Republic of South Africa
- Department of Science and Technology (DST). 2005. *Indigenous Knowledge Systems Policy*. Pretoria: Government of the Republic of South Africa

- Environmental Education Association of Southern Africa (EEASA). 2002. *Gaborone declaration: a working document, prepared by the 20th Annual International Conference of the Environmental Education Association of Southern Africa (EEASA)*. Gaborone: EEASA.
- Fien, J. and D. Tilbury. 2002. "The Global Challenge of Sustainability", (pp. 1-12) in D. Tilbury, R.B. Stevenson, J. Fien and D. Schreuder (eds.) *Education and Sustainability: Responding to the Global Challenge*. Cambridge: IUCN.
- Hattingh, J. 2002. "On the Imperative of Sustainable Development: A Philosophical and Ethical Appraisal", (pp. 5-16) in E. Janse van Rensburg, J. Hattingh, H. Lotz-Sisitka and R. O'Donoghue (eds.) *EEASA Monograph: Environmental Education, Ethics and Action in Southern Africa*. Pretoria: EEASA/HSRC.
- Masuku Van Damme, S. and E.F. Neluvhalani. 2004. "Indigenous Knowledge in Environmental Education Processes: Perspectives on A Growing Research Arena." *Environmental Education Research*, 10(3): 353-370.
- O'Donoghue, R. and E. Janse van Rensburg. 2002. *Indigenous Myth, Story and Knowledge in/as Environmental Education Processes, in Indigenous Knowledge and Education: A Collection of Papers*. Grahamstown: Environmental Education Unit, Rhodes University, South Africa.
- O'Donoghue, R. and E. Neluvhalani. 2002. "Indigenous knowledge and the school curriculum: a review of developing methods and methodological perspectives", (pp. 121-134) in E. Janse van Rensburg, J. Hattingh, H. Lotz-Sisitka and R. O'Donoghue (eds.) *EEASA Monograph: Environmental Education, Ethics and Action in Southern Africa*. Pretoria: EEASA/HSRC.
- Odora Hoppers, C.A. 2001. *Decolonizing the Curriculum, Indigenous Knowledge Systems and Globalisation* (Unpublished). Pretoria: University of Pretoria.
- Odora Hoppers, C.A. 2002. "Indigenous Knowledge and the Integration of Knowledge Systems: Towards A Conceptual and Methodological Framework", (pp. 2-22) in C.A. Odora Hoppers (ed.) *Indigenous Knowledge and the Integration of Knowledge Systems*. Claremont: New Africa Books.
- SADC Regional Environmental Education Programme. 2004. *A Review of SADC Level Policies and Protocols in terms of Their Opportunities for Environmental Education Processes*. Howick: SADC Regional Environmental Education Programme.
- Turnbull, D. 2000. *Masons, tricksters and cartographers*. London: Routledge.

KEYWORDS Sustainable development; indigenous knowledge systems; indigenous ways of knowing; endogenous development; policy development

ABSTRACT The paper attempts to highlight the complexity of the challenge that faces a sustainable development approach that takes on board indigenous knowledge systems (IKS). Although on the surface there appears to be inextricable links and similarities in values and purpose between the moral imperative of sustainable development and indigenous knowledge, deeply imbedded tensions caused by pluralistic interpretations and associated agendas for sustainable development still need demystifying. This is further made complex by the holistic, contextual and often tacit nature of IKS. Simplistic, utopian and instrumentalist approaches to and perspectives on indigenous knowledge and sustainable development are also questioned. A brief overview and examples of practice within South African and the Southern African contexts relating to IKS policy initiatives are provided to further illustrate the inherent issues and challenges.

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