

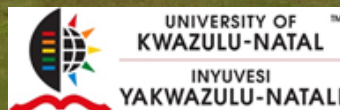
BENEFIT SHARING IN SOCIAL-ECOLOGICAL SYSTEMS: POLICY AND PRACTICE

An International Symposium

Host: University of KwaZulu-Natal

Dates: 23 – 26 June 2015

Venue: Fernhill Hotel, Howick



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Appreciation

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Organising Committee

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Duncan Hay – Institute of Natural Resources

Trevor Hill – Geographical Sciences, UKZN

Philisiwe Manqele – NRF Chair in Land Use Planning, UKZN

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Vision

A community of practice with the passion, commitment and professional competencies to provide African centered leadership and innovation that influences management of complex social-ecological systems

Mission

We use our institutions of higher education to catalyse dialogue, knowledge generation and learning



Benefit Sharing

The Insaka theme ‘Benefit Sharing’ has its origin in a belief that progress toward sustainable use of the benefits we derive directly and indirectly from natural resources depends on how, when to whom and by whom benefits are allocated. While we are familiar with sharing, our experience of this is commonly limited to sharing what we have among those who have the same interest. By contrast, sharing in large social-ecological systems is confounded by their complexity and variability in time and space. Society needs to learn collectively how to organize for, and adaptively manage equitable benefit sharing in such systems. The theme ‘Benefit sharing: policy and practice’ provides an opportunity for us to learn from experiences of those who have been mandated to share benefits in complex social-ecological systems and to deliberate on research that is required to improve performance.

The Insaka Partnership comprises Copperbelt University, Zambia; Monash University, South Africa; the University of Namibia; The University of Montana, USA and the University of KwaZulu-Natal. SANParks is also a non-academic lead participant.

Programme

Tuesday, 23 June	
09h30 – 17h00	Fieldtrip: uMngeni River Catchment
17h00 – 18h00	Registration
19h00 – 22h00	Welcoming Dinner
Wednesday 24 June	
08h00 – 08h30	Registration
Session 1: Session Chair – Bimo Nkhata Introduction and key-note presentations	
08h30 – 08h45	Welcome: Professor Deo Jaganyi
08h45 – 09h00	Purpose of the Symposium – Trevor Hill
09h00 – 09h25	Biodiversity conservation and community benefits: A comparative analysis of private and community-based conservation practices in Zimbabwe - Tanyaradzwa Chigonda and Urmilla Bob
09h25 – 09h50	Benefit Sharing and Water Security: The IWSN experience - Chad Staddon
09h50 – 10h15	Benefit sharing in Zambia: An examination of policy and practice - Nyambe Nyambe
10h15 – 10h40	Restoring and protecting rivers: An Australian experience - Richard Kingsford
10h40 – 11h30	Tea and symposium photograph
Session 2: Chair – Alfons Mosimane Benefit Sharing – Taking account of complexity	
11h30 -12h45	Benefitting Benefit Sharing Using Notions of Complexity as a Heuristic Framework - Steve McCool
12h45 – 14h00	Lunch
14h00 – 15h30	Small group exercise, reporting and plenary discussion on Benefitting Benefit Sharing Using Notions of Complexity as a Heuristic Framework
15h30 – 16h00	Tea
16h00 – 1700	Insaka Management Committee meeting
19h00	Dinner

Thursday, 25 June 2015	
Session 3: Conference Chair – Trevor Hill	
Instruments for benefit sharing	
08h30 – 08h50	Resource economics as an instrument for tracking benefit sharing: Myles Mander
08h50 – 09h10	Land use planning as a benefit sharing instrument: Mathieu Rouget
09h10 – 09h30	Self-Regulation: An Instrument For Promoting Benefit Sharing And Water Security: Nyaradzo Nazare, Agness Musutu and Jitender Taneja
09h30 – 09h50	Polycentric governance as an instrument for benefit sharing: Busani Masiri, Nkosi Musutu and others
09h50 – 10h10	Stakeholder collectives as an instrument for benefit sharing: Experience from Tokai Forest: Ernita van Wyk and others
10h10 – 10h40	Tea
10h40 – 11h00	Conservancies as a benefit sharing instrument - The Namibian Experience: Alfons Mosimane
11h00 – 11h20	Conservancies as an instrument for benefit sharing - Lessons from the Dargle Conservancy: Nelly Mwangi and others
11h20 – 11h40	Factors that foster Nature-Based Tourist Attractions as an instrument for Benefit sharing -The Victoria Falls World Heritage site experience: Jane Kwenye
11h40 – 12h00	Human well-being, relationships and conservation constituency: Louise Swemmer
12h00 – 13h30	Lunch
13h30 – 14h30	Small group synthesis of lessons
14h30 – 15h00	Plenary report back
15h00 – 15h30	Tea

Session 4: Chair – Dirk Roux Restoring the benefits of river basins	
15h30 – 16h30	Perspectives and working group session
16h30 – 17h00	Plenary
19h00	Dinner and entertainment
Friday, 26 June 2015 Session 5: Conference Chair – Duncan Hay Insaka - The way forward	
08h30 – 09h15	Reflections and Perspectives Copperbelt University – Royd Vinya Monash South Africa – Bimo Nkhata University of Namibia – Alfons Mosimane University of Montana – Wayne Freimund University of KwaZulu-Natal – Trevor Hill
09h15 – 10h30	Working group session
10h30 – 11h00	Tea
11h00 – 11h30	Plenary report back
11h30 – 12h00	Thanks and Closure
12h00 – 13h30	Lunch
13h30 – 15h00	Insaka Core Team discussions

Abstracts

Session 1: Key-note addresses

Biodiversity conservation and rural livelihood benefits in private protected and community conserved areas in Zimbabwe. Tanyaradzwa Chigonda and Urmilla Bob, University of KwaZulu-Natal

There is growing acceptance that protected in developing countries, where socio-economic challenges are widespread, must integrate and respond to the livelihood needs of local communities to ensure that conservation efforts are sustainable attain environmental and community benefits. Thus, biodiversity conservation is

increasingly viewed in rural areas of developing countries as a variant of sustainable community development. Persistent and grown poverty as well as a decline in Zimbabwe's biological resources requires a critical assessment of current strategies. This research specifically undertakes a comparative examination of livelihood benefits to local communities in the context of two different conservation approaches, namely, a private protected area (Malilangwe) and a community-conserved area (Mahenye). Both quantitative (questionnaire) and qualitative (interviews, group discussions and observation) approaches were adopted to undertake primary research in the case study communities. In terms of the survey, 150 household surveys were conducted in each. Both livelihood benefits and costs emerged with notable similarities and differences. The main benefits were linked to income generation opportunities, service provision aspects linked specifically to health and education, and access to environmental/ natural resources. It is important to note that the income and service/ infrastructure benefits, while important, did not meet the demand in the communities. Specifically, only a few households derived direct benefits in comparison to those who needed jobs and better access to facilities. In Mahenye specifically, sport hunting and ecotourism benefits have generated income at the community level while no income enhancement from locally-based tourism activities was noted at the community level in Chizvirizvi from Malilangwe. However, in both communities the stimulation of business opportunities (especially in relation to crafts) was discernible. While projects were started in both communities, maintenance and sustainability issues have undermined these efforts. These issues need to be addressed to ensure sustainable community livelihood benefits in conservation areas in Zimbabwe.

Benefit Sharing and Water Security: The IWSN experience. Chad Staddon, International Water Security Network, University of West England

“Water security” is usually conceived in terms of formal governance mechanisms for the allocation of vulnerable water resources amongst competing uses. These allocation mechanisms must consider both quantitative and qualitative aspects of water management as well as different sorts of water – urban versus rural, surface versus groundwater, fresh versus salt and (increasingly) “green” versus “blue”. “Benefits sharing” perspectives imply softer approaches, based on a different kind of water politics, based on reciprocity, trust and transparency. In other words, it may be possible to approach water security through (re)establishment of common

property regimes in water related ecosystems services. I will discuss some examples of such drawn from work currently underway within the IWSN's global network.

Benefit sharing in Zambia: an examination of policy and practice. Nyambe Nyambe, WWF Zambia

Policy and practice in Zambia's benefit sharing arrangements are examined against the backdrop of the institutional arrangements, sectoral differences and current practices in different sectors. While the wildlife sector has implemented what is arguably the country's better known and tested benefit sharing system, the other sectors – notably, fisheries, forestry and water have not institutionalized benefit sharing. Policy gridlocks, institutional lapses and the absence of an overarching framework have been cited as important barriers. Inaction and lapses in the current benefit sharing regime is inconsistent with the expectations of the Convention of Biological Diversity. It also erodes opportunity to leverage the social capital required for co-management of resources in a common property regime context. The paper discusses the main challenges and experiences and identifies some practical key recommendations for benefit sharing in the Zambian context. A key point made is that stewardship for resource management cannot be promoted in a context where local communities do not have the full rights to the best possible benefits spectrum

Restoring and protecting rivers - an Australian experience. Richard T. Kingsford, Centre for Ecosystem Science, University of New South Wales, Australia

Australia is the world's driest inhabited continent, resulting in considerable development of water resources, particularly in the southeast. This has had widespread ecological and social consequences for rivers and wetlands and ecosystem services. Ecological understanding of these impacts resulted in the most significant investment of the nation on the environment (\$A12 billion). I examine some of the ecological evidence for degradation of freshwater ecosystems, stimulating investment, and its value in subsequent decision-making. For ecosystems, restoration has focused on returning environmental flows to rivers through the buying of irrigation licences and increasing efficiencies of irrigation. There are now large volumes of water held in storages as environmental flows, necessitating active management. This requires development of sophisticated ecological models that can provide predictions of ecological responses of different organisms and processes at a

range of temporal and spatial scales. Despite evidence of widespread degradation caused by water resource developments, Australian governments continue to develop water resources on arid and tropical rivers, ultimately detrimentally impacting on wetlands of considerable biological diversity as well as dependent indigenous and other landholders dependent on flooding.

Session 2: Benefitting Benefit Sharing Using Notions of Complexity as a Heuristic Framework

Sharing and distributing the benefits from application of human capital to natural systems occurs within a changing, complex and uncertain context. Humans have two choices in these contexts: complain about the difficulty of making decisions or building and applying best practices for surviving in them. We choose the latter course because it likely leads to more efficient and equitable distribution of benefits and costs of resource management. In this two part session we first attempt to understand complexity by (1) characterizing it; (2) simplifying it; and (3) discussing best practices. In the second part, we learn to apply complexity thinking to benefit sharing decisions. In the first part, Steve McCool, Wayne Freimund and Charles Breen give short presentations on each of the three subjects. After assimilating the three topics, Insaka participants are asked to apply them as a heuristic framework to better understand the complex system we call benefit sharing.

Session 3: Instruments for Benefit Sharing

Resource economics as an instrument for tracking benefit sharing. Myles Mander, Futureworks

Without a clear understanding of who benefits and by how much in resource use and management, the risk of conflict or lack of cooperation is high, and therefore systemic sustainability is doubtful. Developing a systemic understanding of the range, magnitude and frequency of benefits (and costs) supplied by natural resource

use and management there-of is critical as this enables a facilitator to identify who benefits (or bears costs), and whether there are incentives for individuals to use and manage resources on a sustainable basis, and whether there is an incentive to cooperate or not in management. Resource economics offers tools which can measure the balance between an individual's own costs and benefits, and the balance between different individual users and/or managers. The presentation will explore some economic tools and examples that may assist in developing a clear understanding of management and sustainable use incentives.

Land use planning as an instrument for benefit sharing. Mathieu Rouget. School of Agricultural, Earth and Environmental Sciences, University of KwaZulu-Natal

The spatial allocation of human activities, such as agriculture, residential settlements impacts on natural resources and their utilisation. Ecosystem services, the benefits that people derive from naturally-functioning ecosystems, can be considerably reduced due to inappropriate land-use planning. For example, over-extraction of water upstream will impact downstream users. In this talk, I will illustrate how integrated land-use planning can lead to benefit sharing in the landscape. Until recently, land use planning was conducted on a sector basis (conservation, agriculture, etc..). The development of new planning tools such as municipal spatial development framework and bioregional plans has enabled some planning integration across sectors. Several provinces, notably KwaZulu-Natal, the Western Cape and Mpumalanga, have developed provincial maps which identify important areas for biodiversity and ecosystem services. These maps are used to guide conservation efforts, inform development applications and to minimize the impacts of land use on biodiversity and ecosystem services. Several local initiatives, such as the uMngeni Ecological Infrastructure Partnership, are underway to map and quantify the flow of ecosystem services in the landscape and to redistribute the benefits provided by ecosystems across users in the whole catchment. Landscape sharing of benefits across sectors requires new ways to do research and new partnerships to be established.

Self-regulation as an instrument for promoting benefit sharing and water security.

Nyaradzo Nazare, Agness Musutu and Jitender Taneja and others, Monash and International Water Security Network

It is difficult to exclude users of common pool resources, such as water. The implication is that the benefits which are derived from common pool resources should be shared in ways that are equitable and productive. Benefit sharing is thus increasingly recognized as a mechanism by which resource users can regulate their appropriation of benefits. Hence, the users have to develop institutional arrangements that enable them to self-regulate as groups of users, and as individuals. The institutions that are set up to enable self-regulation establish who has what rights to access and use the resource. The institutional structure should facilitate dialogue so that beneficiaries are able to adjust their appropriation of resources to accommodate changes in supply and demand. Self-regulation and benefit sharing allow collective action for managing risk thereby promoting water security. This will be illustrated with case studies.

Polycentric governance as an instrument for benefit sharing. Busani Masiri, Nkosi Ncube and others, Monash South Africa and International Water Security Network

In common-pool resource systems the diverse ways in which resource users appropriate benefits results in complex and dynamic configuration of stakeholders. Problems in benefit sharing are bound to be experienced in such a resource system. It takes the input and actions of multiple actors to achieve joint outcomes and it is difficult to exclude beneficiaries of these actions even if they do not contribute. With an increasing number of stakeholders in a resource system the resource units become highly valued and many actors benefit from harvesting them. The harvests withdrawn by an individual or group are likely to create negative externalities for others. Benefits appropriated by various actors differ at an individual or stakeholder grouping level. If governance systems arrange polycentrically – from small to very large – solutions to problems associated with benefit sharing can be found on multiple scales.

Ordering meanings as an instrument for benefit sharing: Experience from Tokai Forest, Cape Town. Ernita van Wyk and others, South African National Biodiversity Institute

Benefit sharing schemes are challenged by change because of its influence on the both the supply of, and demand for benefits. Change causes stakeholders to interrogate the meanings they associate with resource benefits. Some stakeholders accommodate change by re-prioritising the meanings they attach to benefits. In doing so, they adapt their appropriation of benefits to conform to the emerging pattern of supply. Others strive to maintain the ordering of their meanings and associated benefits by contesting change that affects opportunity to appropriate their preferred benefits. To this effect, changes that prompt the fundamental re-ordering of meanings can be disruptive as stakeholders behave in ways that support or resist the change, simultaneously. Mitigating the disruptive nature of change (e.g. tensions and adversarial behaviours) is thus an important objective when navigating fundamental and rapid change. We draw from a case study to illustrate the relevance of ordering meanings as an instrument for managing benefit sharing.

An assessment of benefit sharing instruments applied in Community-based natural resource management in Namibia 2004 - 2013. Alfons Mosimane and others, University of Namibia

The Namibian Government uses devolution of rights to manage and use natural resources, wildlife in particular, to promote conservation and improve the well-being of rural communities. Communities that establish conservancies are authorised to manage and use the natural resources on their land. They apply a number of instruments to increase benefits and to apportion them equitably. This study draws from registered community conservancies to illustrate and assess the instruments conservancy committees apply to improve the wellbeing of members through the provision and equitable sharing of benefits. The study analyses and synthesises secondary material collected across all registered conservancies through various organisations and constructs profiles of conservancies since 2003. The study shows that some instruments deliver benefits and continued to grow, while others were discontinued and new instruments emerge as conservancy committees learn from their experience.

Conservancies as an instrument for benefit sharing: Lessons from the Dargle Conservancy, South Africa. Nelly Chunda Mwango and others, Copperbelt University

Establishing a conservancy defines a collective of users who desire to secure the benefits they derive from a shared resource. In the context of this paper the resource users are landowners and conservancies extend across private property boundaries creating multi-tenure conservation areas with meanings and associated benefits that require landscape-scale collective action for the common good. Conservancies are thus an instrument for promoting the integrated management and sharing of landscape benefits. However, when landowners in a conservancy engage collective action for conservation objectives they are challenged by the tensions that arise between meanings defined at the scale of their own property and those associated with the landscape that straddle property boundaries. This tension is reinforced by a property rights regime in which each actor seeks to retain control over 'own' resources while at the same time securing the benefits they derive from other properties in the conservancy. Using insights from the Dargle Conservancy, we show how these challenges might be overcome through the incorporation of common pool property rights into governance of conservancies.

Investigating factors that foster nature-based tourist attractions as an instrument for benefit sharing: The Victoria Falls World Heritage site experience. Jane Kwenye, University of Montana and Copperbelt University

Nature-based tourist attractions provide a potential setting for promoting benefit sharing in Zambia. On one hand visits to nature-based tourist attractions can provide various benefits to the Zambian domestic tourists. The benefits can be physical, mental, social, cultural and emotional. On the other hand, domestic visits to nature-based tourists can activate personal values that support sustainable behaviors. Sustainable behaviors are essential for protecting ecosystem services upon which our well-being depends. One way to promote domestic visits to nature-based tourists attractions is to understand factors that influence domestic tourists' loyal relationships to nature-based tourists attractions. This paper reports on research that investigated factors that influence domestic tourists' loyalty to the Victoria Falls World Heritage site. Structural equation modeling was used to explore relationships among the antecedents of domestic tourists' loyalty to the site. Findings suggested that service quality at the site, perceived value of the visit to the site, satisfaction

with the visit to the site and attachment to the site are important determinants of domestic tourists' loyalty to the site. Thus, to promote domestic tourists' revisit predispositions to the Victoria Falls World Heritage site these factors need to be enhanced collectively.

Human well-being, relationships and conservation constituency. Louise Swemmer, South African National Parks

For the last few decades, planning and implementing projects and programs using community based approaches has been listed as a priority for conservation agencies world-wide. Driven by the history of exclusion and restricted access that has led to social tensions between local residents and conservation authorities, Southern Africa has demonstrated some relatively successful examples of community based conservation (Namibia, Zimbabwe) despite their many challenges. However, as a country, South Africa is relatively far behind when it comes to CBNRM (Community Based Natural Resource Management), although there are numerous current programmes and projects that facilitate community benefits from conservation. A mindset change towards shared ownership is needed in order to foster true partnerships in benefit sharing arrangements, and to date, there has not been enough political will for this mindset to occur. The recent increase in rhino poaching in the region, South Africa being the hardest hit, has caused international and national bodies to scrutinize Community/park relationships, pressurizing parks to do more towards creating alternative economic opportunities (as opposed to wildlife crime), and in so doing to foster positive park/neighbor relationships. Assumptions are being made that local economic development and positive relations will reduce the poaching crisis. However, there is relatively little understanding of the mechanisms behind these assumptions, and what scale (spatial and temporal) and scope these initiatives need to be implemented at that will sufficiently increase human well-being, improve relationships between stakeholders, and build support for conservation, and in so doing, reduce poaching. Acknowledging the complex history many of the local people have both with the land they live on and with conservation, this paper will explore the links between human-well-being, relationships and constituency and will draw on global and local cases studies to unpack some of the assumptions and implementation challenges facing the new face of benefit sharing in the Kruger National Park, in South Africa.

