



THE SPEKBOOM

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2014 VC's Distinguished Award for Community Engagement

The Jongaphambili Sinethemba Project Group (Professor Sheona Shackleton, Dr. Georgina Cundill, Mr. Nick Hamer, Mr. Monde Ntshudu) from the Department of Environmental Science, and Professor Heila Lotz - Sitsika) from the Department of Environmental Science, are the recipients of the 2014 Vice Chancellor's Distinguished Award for Community Engagement. The engaged research project into climate change and adaptation in rural contexts, where vulnerability is exacerbated by multiple stressors, undertaken by the group, involved the participating communities of Lessyton and Willowvale from the conceptualisation stages of the project. The research project was named Jongaphambili Sinethemba (looking forward, we have hope) by the communities involved.

During their research into various aspects of food security, health, vulnerability and adaptation to climate change under multiple stressors, the group facilitated a groundbreaking social learning process in both communities which highlights a best practice model for engaged research that has attracted national and international attention and recognition. The social learning process was developed and implemented through the research project to ensure that the communities' concerns and voices were heard in the research project, and also, importantly, to build capacity to adapt to climate change and other stresses that people face; and to establish platforms for co-learning. The social learning process was therefore not only focused on climate change and adaptation as identified by the researchers, but rather on the contextualised vulnerabilities that people in the communities themselves identified as important. Their aim was not simply to build an understanding of community capacities for adaptation together with community partners, but also to expand on existing practices within communities, while at the same time developing insight into what a social-learning approach means for how participatory processes are designed in the future.



The Jongaphambili Sinethemba Team

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A floating 'barge' of tropical forest logs on the Uyacalli River

Charlie goes to Peru

Food security along deforestation gradients in Peru

Charlie Shackleton enjoyed a ten day trip to Peru in September, dividing it more or less equally between the Andes mountain region and the lowland rainforest. The primary reason for the trip was a progress workshop and field visit on the ASSETS project (Attaining Sustainable Services from Ecosystems through Trade-off Scenarios). This project is a consortium of ten agencies across seven countries, with project sites in Peru, Colombia and Malawi.

The broad objectives as outlined on the project website (<http://espa-assets.org>) are "research on ecosystem services for poverty alleviation at the forest-agricultural interface, integrating and developing cutting edge modelling and risk management tools to address three themes: (i) drivers, pressures and linkages between food security, nutritional health and ES; (ii) crises and tipping points: past, present and future interactions between food insecurity and ES at the forest-agricultural interface; and (iii) the science-policy interface: how can we manage ES to reduce food insecurity and increase nutritional health?"

During the project visit Charlie visited several villages in the lowland tropical forest region within several hours travel (by boat or vehicle) from Pucallpa, which is the regional capital, relatively close to the international border between Peru and Brazil. At each village feedback was provided by the research team at a community meeting on the research results so far, much based on extensive and comprehensive use of PRA (participatory rural appraisal) tools. These were used to explore some possible future scenarios at each site. Similar work is being done in Colombia and Malawi.

The three countries represent a deforestation gradient of low in Peru to very high in Malawi, and also within each country a further deforestation gradient is being examined at a more district/local scale. The stark reality of the deforestation in the broader Pucallpa region was evident by dozens of fires in the tropical forest visible from the air when coming in to land at the airport, the large sawmills lining the banks of Uyacalli river and the frequent floating 'barges' of dozens of massive logs tied together and floated down the river to the sawmills, each with a makeshift tent or two on top for the family guiding the barge for 1 - 2 weeks down the river.

The guinea pig betting game

Towards the end of one village workshop we were interrupted by much hilarity outside. Upon finishing the workshop we went to see what it was all about. Many villagers were in a circle betting on which box a guinea pig would choose when released. The guinea pig was placed under an upturned bucket. Surrounding the bucket are a dozen or so upturned cardboard boxes, each with a small entrance hole cut into the side. On the top of each box, was a small prize, such as sweets, toothpaste, cigarettes, biscuits and the like. Spectators placed their bets on the box of their choice, the bucket with the guinea pig was rotated, and then lifted. The guinea pig eventually made a dash for one of the entrance holes and the lucky winner claimed their prize.



The guinea pig betting game

We also had an interesting morning browsing the general market in Pucallpa, where I was intrigued by the variety of natural resource products on sale, mirroring markets in Africa; palm hearts, herbal medicines, wild fruit, fish, bushmeat, crocodile heads, turtle eggs, and the myriad different colours of corn cobs (reflecting the genetic diversity of the ancestral home of maize).



Monkey bushmeat and turtle eggs in the Pucallpa market

Stealing a few extra days, I spent some time in Cusco which is the primary tourist base for visiting numerous ancient Inca sites, the most well-known being the cliff-hugging site at Machu Picchu, which is now regarded as one of the new seven wonders of the world. Whilst Machu Picchu is the most renowned, there was many other exhilarating sites in the same region, and many are somewhat easier to access. Getting to Machu Picchu involved hitching a local taxi ride to Ollantaytambo, a narrow gauge train ride down the valley to an overnight stop at Aguas Calientes, and then a bus ride up the mountain early the following morning. But all well worth it. The train ride was particularly spectacular because as one slowly descends

along the valley the surrounding landscapes change from alpine grasslands with snow-capped mountains to scrubby bushlands with farmhouses, to lush forests clinging to steep cliffs. There is no road into Aguas Calientes, everything meanders down the valley by train.



The Inca ruins at Machu Picchu

The area is so rich in Inca sites that one does not have to focus on Machu Picchu. For example, Pisac is a lot more accessible and the ruins are as equally stunning. The primary difference is that it is not in the tropical forest zone, and not so crowded. Rather ironically, the terraces of the ancient Inca sites are largely intact, whilst on the opposite hillsides, extensive erosion scars are visible under current land use practices.



Six hundred year old Inca terraces in stark contrast to current day erosion

Honors trip to the Baviaanskloof

Working towards living landscapes in the Baviaanskloof

On the 3rd of February 2015, the Environmental Science Honours class of 2015 set out on a 9-day excursion to the Baviaanskloof as part of their annual fieldtrip. The atmosphere was that of excitement as a culturally diverse group of individuals shared memories and experiences along the way. It was a trip to remember and one that strengthened not only knowledge but relationships amongst colleagues.

Tia Ghee was our first home for the fieldtrip. We stayed in candle-lit tents and spent every night around the fire learning about each other and playing fun games. Living Lands hosted us for environmental learning from which we learned about some interesting approaches to learning such as the theory U approach.

The trip to Baviaanskloof comprised of magical scenery and a careful convoy through the Kloof. We got to see practically what we have been reading on environmental degradation. Engaging with one of the actors in the biodiversity stewardship (restoration) programme was an eye-opener to the bigger picture of restoration and to the magnitude of some environmental issues.



“It is amazing how what we have been learning in class made so much sense when we actually saw degraded landscapes”

“It was so cool to bond with lecturers”

“We actually saw the stars- something you hardly see when in Grahamstown”.

A big thank you from Ntsika High School

Dear Gladman, and the team

A big thank you to everyone involved in greening Ntsika! You gave generously of your time, your energy and most certainly of your blood, sweat but-hopefully-not-tears, while organizing, digging, off-loading, planting and following up. I think Gladman felt this quite keenly when he single-handedly off-loaded those huge trees while some of our learners just watched! My apologies again, Gladman.

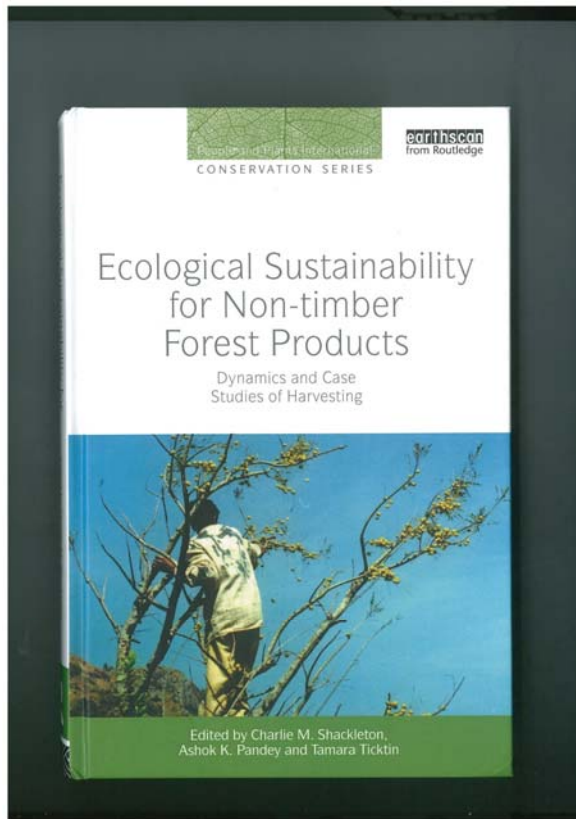
The tree planting coincided with a difficult time for our school, but despite that it went well. This is largely due to the manner in which you just jump in and get the work done. Thank you so much for that.

Thank you also for agreeing that we share the trees with neighbouring houses. This gesture leads to much goodwill and good publicity in the community. I have already seen a few trees planted in township gardens, and will keep an eye on the progress.

Ntsika benefits hugely from our association with your department. I just wish we could reciprocate more. Perhaps one day when we are old and wise, we can have a beer in the shade of your trees?



Tree planting at Ntsika



New book publication

Nosiseko Mtati interviewed Charlie Shackleton, who was one of the editors

What was your experience of editing the book?

First, editing a book can be really rewarding. It allows one to plan a bigger piece of work than a typical paper, to take stock of the current knowledge and debates on the topic, and in the last chapters to take the opportunity to look into the future regarding the next steps, debates and knowledge needs. This is all accomplished through interacting with a number of different contributors who each have their own perspectives and angles they wish to emphasise. Directing these into a comprehensive and coherent piece that makes a significant contribution to the field is really exciting.

Second, editing a book can be a big millstone around one's neck. This is largely because contributing authors often let one down by perhaps dropping out during the process (leaving the book short of chapters), missing deadlines, not communicating, or submitting only partially developed work. This inevitably results in books taking many years due to constant delays. All of the previous six books on which I have been a lead or co-editor missed the original submission date by years. As the lead editor of this one, I wanted to see if I could rectify that and get a book submitted to the publisher by the agreed date. Yes, we did lose some contributors along the way; yes, the standard of some chapters was originally very different to the standard of others, and yes, some of the authors required constant reminders and cajoling along the way, but by the end, we submitted the book to the publisher only two months late; a feat that even the publisher was really amazed by.

Any insights you got from editing the book?

It became abundantly clear that although we have spoken about and tried to measure ecological sustainability of resource harvesting for decades, that there are very few comprehensive studies that can truly illustrate it. In particular, of those studies that have examined ecological sustainability none have considered all spatial scales, namely genetic, population, species and ecosystems scales. After all these decades, nobody as yet has done this. Wow – what an opportunity for the next generation of resource ecologists and environmental scientists!

Briefly describe the book

The book is composed of sixteen chapters arranged in three sections. The first part (comprising four chapters) sets the scene regarding non-timber forest products in livelihoods, defining and measuring ecological sustainability (at various scales) and the necessity for long-term perspectives and analysis. The second section presents nine different case studies of sustainable use of non-timber forest products including fish, honey, medicinal bark, grass stalks, fruits, cork and resins/saps. These case studies come from Brazil, Chile, India, Malawi, Portugal and South Africa. The third section of the book has three chapters which provide the broader context for ecologically sustainable harvesting, namely the governance system and the role of increasing resource commercialisation. The last chapter brings it all together and poses some management and policy guidelines and introduces future research needs in this subject area.

What important messages does the book have?

The book is built around one key message, although obviously it has many subsidiary messages. That message is that the mere practice of humans harvesting one or more resources from the wild does not doom those resources to destruction and extinction at the local scale. Whilst examples of such negative impacts do exist, so do examples of sustainable harvesting in many different regions, contexts and resources. Therefore, managers, scientists, conservationists, policy-makers and NGOs should not generalise and view all harvesting as negative (as many of them do), but should rather examine each on a case by case basis, whilst simultaneously recognising that the context is dynamic which therefore requires flexible, adaptive and reflexive monitoring and management approaches.

Joana Bezerra: new postdoc in the Dept.

The DES welcomes Dr Joana Bezerra, a young academic whose research background is centred on Environmental and Forest Policies. Her recent research endeavours while in Germany at the International Forest Regime Working Group at the Georg-August-Universität Göttingen were focusing on International Forest regimes using the rational design of international institutions framework and discourse analysis at the Forest and Nature Conservation Policy Group at Wageningen University, the Netherlands. While continuing with that she got an opportunity to work with Dr Georgina Cundill, one of the DES staff members on a project about Land claims in protected areas. She is conducting her research at the Great Fish River Reserve, but is hoping to expand the study site next year.



Joana spent her childhood in Rio de Janeiro, Brazil. Her weekends were filled with the beach and hikes around the Atlantic forest in Rio. When she was 15 she made a trip that changed her paradigm and was the beginning of the path she is in today. She went to Europe for the first time with her brother and mother and fell in love with the social, cultural, historical and political diversity. In the following year she went to England to study English in London and made plans to go back.

Marrying her desire to experience different cultures and the need to speak English in today's world, she decided to do her bachelor in Politics and International Relations at Sussex University, England, where she also did her Masters. It was at the end of her Bachelor that she became interested in Environmental Politics, triggered by the heat from Europe and from developing countries. She then decided to continue her studies with a Master of Arts in Environment, Development and Policy.



Joana with her students

After an internship with a non-profit organisation in London (E3G), which then had an office inside the Science Museum in London, Joana decided it was time to go home. In Rio de Janeiro she started working at the Getulio Vargas Foundation as a researcher in the Social and Environmental Analysis Group. This is where she met the professor who would become her PhD supervisor in Campinas.

One year after going back to Brazil she was accepted for the PhD at the Environmental Studies Group at the State University of Campinas, Unicamp. During her PhD she juggled between Rio de Janeiro where her job was and Campinas, in the State of Sao Paulo, for her modules, so she knows what it is like to live in a suitcase! Her thesis was the first of Unicamp to be defended in English with one of the referees participating from abroad via video-conference.

After finishing her PhD, she was invited to go back to the Getulio Vargas Foundation in Rio de Janeiro to work on a development project to help 14 municipalities in the State of Rio to improve their development in the following broad themes: housing, sanitation and transport. It was in this job that Joana learned a bit more about the political dynamic between municipalities and the federal government in Brazil.

She has taught at three different Universities in Brazil and one in the Netherlands, all courses related to environmental policies. During her time in England she started running and hasn't stopped since. She has done 6 half-marathons, five in Brazil and one in the Netherlands. Her last stay in the Netherlands made her used to flat terrains, so she is currently struggling with hilly Grahamstown.

She is very excited about being in South Africa and in the department and her research project can be renewed for up to three years. She has integrated well into the department and is already greatly involved in departmental gatherings. She is currently at the forefront of facilitating and organising the departmental fortnightly seminar club for post graduate students and staff members.

A warm welcome to you Dr Bezerra, from everyone in the department.



Joana in London

Yahia Gumaa: new postdoc in the Dept.

The DES welcomes Dr Yahia Gumaa who hails from the Sudan. Yahia was born in Korokooli village in the Darfur region. Later in the early 1980s his family settled in Central Sudan (Ombenin), Sennar State.



The type of emotional support that he received from his parents during the first three and a half years of his life, had an effect on his education, social life and romantic relationships. He was raised in a supportive and caring home environment that enabled him to do better on standardized tests later on in life, and more likely to attain higher degrees. Yahia is married with two daughters and a son. His hobbies are football, swimming and travelling.



The concept of living life to the fullest is something he fully endorses. His greatest influences came from spending time with his parents and listening to them. He is amazed at how life was for them when they were young and what they have experienced and believes the life lessons they can teach him are more valuable than anything to be found in a textbook.

His research interests include natural resource-based livelihoods and micro-level forestry poverty relations, including commercial utilization of biodiversity. He is interested in analyzing forest product markets and their influence on rural livelihoods and forest utilization as well as forest dependency and rural livelihood strategies. His current research is looking into the role, value and importance of natural resources in rural and urban livelihoods for poverty alleviation.



Sudanese food prepared by my wife for our German and Sudanese guests



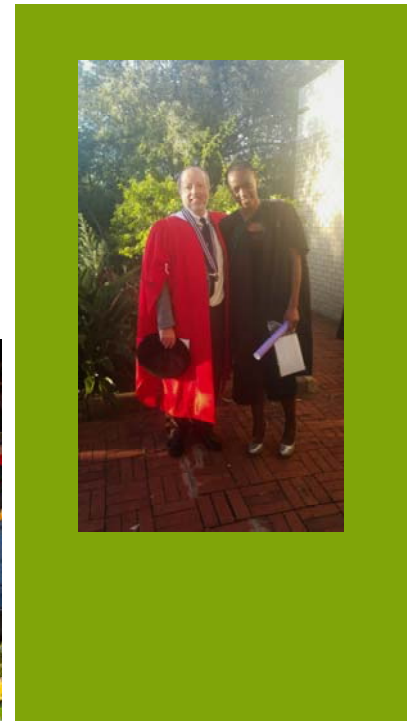
Khartoum the capital of Sudan

2015 Graduation

This year there were two PhD (Megan Spires and Gosia Bryja) and four Masters (Peter de Lacy, Mwazvita Sachikhonye, Lara Molony, and Nosiseko Mtati) degrees conferred on our students. In addition, there were 17 Honors who received their degrees.

Nosiseko Mtati

As a student coming from another institution I received a lot of support and encouragement from all the staff members and colleagues. It was not easy as the culture of Rhodes was foreign to me but I soon found my place and I can safely say that I am grateful I chose this department to do my master's degree. Through the support of my supervisor I am now a graduate with a Msc in environmental science. The department of environmental Science has a strong culture of research and I have learnt a lot in the two years here. I am currently an intern with the department, under the NRF. I am looking forward to enhancing my research skills and expanding my knowledge.



Mwazvita Sachikhonye

My experience as a master's student in the department of environmental science for two years was one I relished. Coming from the big city of Johannesburg to the little town of Grahamstown was an experience all on its own. I was however quickly swallowed by the academic culture of the university, and through my exposure to the staff and students of my department, I went through an exponential learning curve. As one can imagine, this was not always easy; and an occasional tantrum in my supervisor's office was not at all unusual. Thankfully, the patience and support of my supervisor, colleagues and the love and encouragement from my family and friends have made me a proud Old Rhodian - with a master's degree.

I now look forward to my new challenge of passionately pursuing my PhD once again in Environmental Science. It is my hope and aspiration to not only be an influential academic voice at the end of it all, but I hope to one day consult on major development projects for international banks and other funders to promote the sustainability of our natural resources and livelihoods in Africa.

