

Contents

Adaptation Network Mid-Term Review Workshop 12 June

Climate Change Adaptation Training Courses 2017: Overview

Bonn Climate Conference overview

By Candice Arendse

Climate Risk and Vulnerability: A Handbook for Southern Africa: 2nd Edition

By Claire Davis and Katharine Vincent

The use of and obstacles to social learning in climate change adaptation initiatives in South Africa

By Shakespear Mudombi

Listening to the Voice of Nature as it Echoes from an Adaptation Retreat

By Felix Donkor, Christopher Mabeza,

Planning for extreme events: uMngeni Resilience Project hosts Early Warning System workshop

By Mpfunzeni Tshindane and Candice Arendse

Adaptation Network Mid-Term Review Workshop 12 June

The Adaptation Network is currently undertaking a mid-term review of the current project funding cycle. We anticipate that the outcomes of the review regarding successes, failures and lessons learnt will be of great value in growing and improving the Network. The Network is also developing a fundraising strategy and framework. As the current funding cycle comes to an end at the end of 2017, establishing a sound funding platform beyond this is crucial for the sustainability of the Network.

In light of this, the Steering Committee and Secretariat invite members to participate in a workshop to be held in mid-June in Cape Town where the findings of the review as well as the fundraising strategy will be presented. This will be an opportunity to strategically assess the future trajectory of the Network and make some collective decisions on priority areas going forward. Your input will help ensure that Network activities, outputs and ultimately outcomes meet the needs of the membership.

The Workshop will take place on the 12th June 2017 in Cape Town at a venue that we will announce closer to the time. If you are interested in participating please save the date and let us know by email to Candice Arendse at candice@emg.org.za if you are interested in participating.

Climate Change Adaptation Training Courses 2017: Overview

During the remainder of 2017 the Adaptation Network will be offering three further training courses in venues across South Africa. The *Practical Adaptation for Vulnerable Groups* will be held in Nkomazi, Mpumalanga in June, in Durban in July and in Cape Town in October.

Courses are free for Adaptation Network members. Registration fees are payable by non-members only. Travel and accommodation is at the cost of each participant. We can provide a limited number of bursaries. Please enquire with Candice Arendse: candice@emg.org.za

An overview of each course is provided below.

For more information, please contact [Noel Oettle](#) or [Candice Arendse](#). If you or your organisation is interested in signing up as a member: check our [website](#) or email [Candice Arendse](mailto:Candice.Arendse@emg.org.za) for more information.

Practical Adaptation for Vulnerable Groups

- 20 & 21 June 2017: Nkomazi, Mpumalanga (2 Days)
- 25 & 26 July 2017: Durban (2 days)
- 3 & 4 October 2017: Cape Town (2 Days)

This 2-day training course will provide practitioners from government, research institutions and NGOs with a sound grounding in climate science, the developmental context of climate change adaptation and participatory adaptation approaches. Practical methodologies and tools will be provided, illuminated by examples from adaptation practice. The learning methodology is experiential and interactive and is aimed at enabling participants to design and facilitate adaptation processes for vulnerable communities.

- Facilitators: Noel Oettle and Shannon Parring
- Registration fee for non-members: R 200
- Registration closing date for the Nkomazi workshop: 01 June 2017
- Registration closing date for Durban: 01 July 2017
- Registration closing date for Cape Town: 28 September 2017

To register please contact Candice Arendse: candice@emg.org.za

Bonn climate talks: Where to from here?

By Candice Arendse and Noel Oettle

The Bonn Climate Change Conference convened from 8-18 May 2017 at the UN Campus in Bonn, Germany. This was an important stepping-stone in the negotiations between COP 22 and this year's COP 23, and included a number of subsidiary meetings: the 46th sessions of the Subsidiary Body for Implementation (SBI 46), the Subsidiary Body for Scientific and Technological Advice (SBSTA 46), and the third session of the first meeting of the Ad Hoc Working Group on the Paris Agreement (APA 1-3).

More than 3 900 participants from governments, the UN and other intergovernmental agencies and organizations, civil society organizations and the media attended the conference. Although this was not a full-blown COP, it nevertheless attracted a wide range of stakeholders, and represents a huge investment. Unfortunately, by all accounts little progress was made in the negotiations. The Trump administration's negative attitude towards the UNFCCC, and its "denialism" relating to anthropogenic climate change cast a pall over the proceedings. The United States is the world's second largest emitter of GHGs, and has ratified the agreement. However, President Donald Trump has voiced concerns that the deal could harm the US economy.

During the Opening Press Conference webcast of the conference, Patricia Espinosa, UNFCCC Executive Secretary noted that the Bonn sessions were intended to address technical and practical matters towards evolving climate action under the Convention, the Kyoto protocol and the Paris Agreement. This is a highly complex environment of inter-twined issues, and topics under discussion included the Compliance Regime Cooperative mechanisms, the Technology Framework and Global Stocktake, developing guidelines for the Nationally Determined Contributions (NDC's) to the Paris Agreement, Adaptation Communications and determining how the Adaptation Fund can serve the Paris Agreement.

When Donald Trump was announced as the in-coming president of the United States of America (USA) during COP22 in Marrakesh, uncertainties about the USA's commitment to climate action were rampant. This mood of uncertainty accompanied delegates to the Bonn conference and questions were raised about the US negotiators involvement in the negotiations. The change in attitude of the US government was signalled by the greatly reduced size of the US presence in Bonn.

Comments made by the COP Secretariat during the Opening Press Conference that outlined the international commitments that have already been made apart from the 144 countries that have ratified the agreement, seemed to contribute to silencing doubts. Uncertainties were replaced with attention to goals as participants continued with the mission at hand indicated by multiple reports that covered the conference.

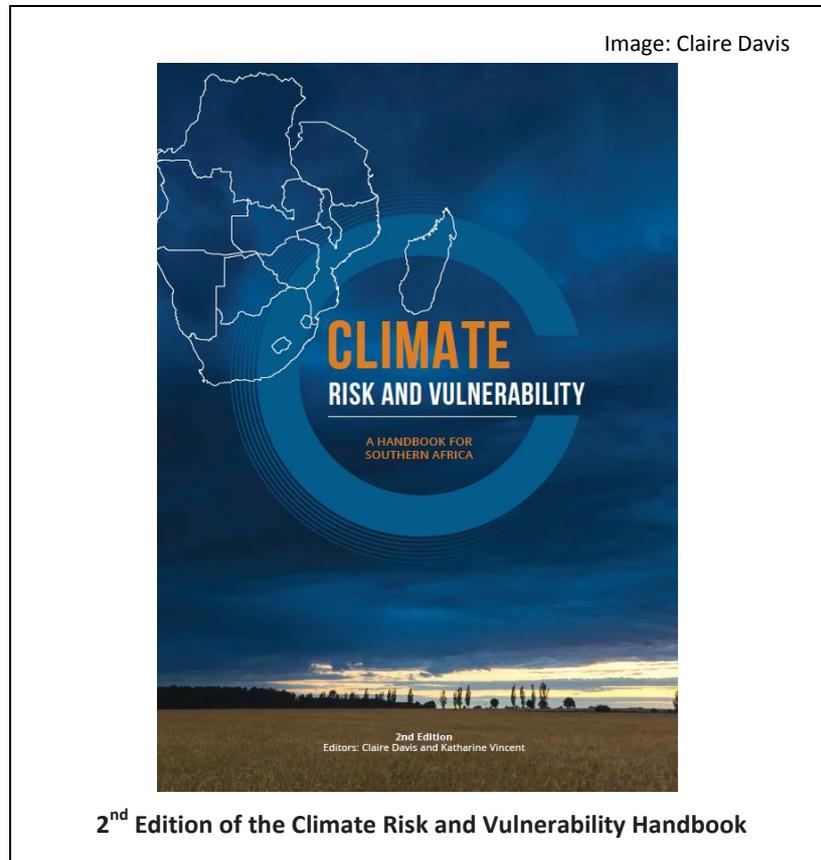
As expected, the Ad Hoc Working Group on the Paris Agreement (APA) took centre stage. APA was tasked in Marrakesh with delivering a detailed framework of actions to determine what, who, where and how to achieve the goals set out in the Paris Agreement. The Working Group was mandated to present the progress of their work by December 2018, and the Bonn Conference was intended as a crucial opportunity to move this forward. Although the timing and progress towards formalising the Paris Agreement was reiterated and emphasised throughout the conference, little substantial progress was achieved. The Earth Negotiations Bulletin reported that adequate time was spent on efforts to operationalize the Paris Agreement, but many loose ends were still left hanging to be dealt with during COP 23 in November 2017. Loose ends notwithstanding, many delegates felt that progress, although slow, is moving in the right direction.

In a more recent pronouncement, on Tuesday 30th May, UN Secretary-General Antonio Guterres urged the world to raise its ambition in implementing the Paris climate agreement. Following an address at New York University he responded to a question by saying "We believe that it would be important for the US not to leave the Paris agreement, but even if the government decides to leave the Paris agreement, it's very important for US society as a whole -- the cities, the states, the companies, the businesses -- to remain engaged. It is very clear that governments aren't everything." This came in wake of the refusal of Trump to join the other six leaders at last weekend's G7 summit in pledging to implement the Paris accord and said he would announce the US position this week.

With thanks to Earth Negotiations Bulletin (Vol. 12 No. 701)

Climate Risk and Vulnerability: A Handbook for Southern Africa: 2nd Edition

By Claire Davis and Katharine Vincent



The 2nd edition of the “Climate Risk and Vulnerability Handbook for Southern Africa” presents the latest available scientific knowledge on the nature of climate change and its implications for southern Africa. The handbook serves as an important guide for climate and development practitioners, researchers and students. An executive summary is targeted specifically at policy-makers.

Reliable and accessible climate information is an important tool in responding to the impacts of climate change and the development of robust response strategies (adaptation and disaster risk reduction). The Handbook was conceived and designed to provide decision-makers with up to date information, appropriate for country planning, on the impacts and risk of climate change.



The 2nd edition updates and builds on the critically acclaimed 1st edition, which helped support Southern Africa Development Community (SADC) level engagement (partly through providing source material for the SADC Climate Change Think Tank in early 2012; as well as the SADC Climate Change Science, Technology and Innovation (STI) Response Framework) and country-level capacity building in Malawi, Mozambique, Namibia, Zambia and Zimbabwe, among others.

The content of the 2nd edition covers the likely physical manifestations of climate change in southern Africa, together with an understanding of how social vulnerability and adaptive capacity are likely to affect the ways in which such changes translate into impacts. A number of key sectors are selected to illustrate best practices in assessing vulnerability, agriculture and livestock, commercial forestry, terrestrial ecosystems and biodiversity, water resources, coastal zone, settlements, human health, energy and air quality.

The Handbook for Southern African on Climate Risk and Vulnerability is accompanied by a concise Executive Summary that will support decision makers in southern Africa as they implement NDCs under the UNFCCC Paris Agreement as well as national climate change policies and strategies.

The lead authors of this report are Claire Davis (Council for Scientific and Industrial Research, South Africa) and Katharine Vincent (Kulima Integrated Development Solutions, South Africa) with key inputs from a multi-disciplinary team that comprises climate scientists, social scientists with experience in impacts, vulnerability and adaptation, as well as communications experts.

Citation: Davis, C.L. and Vincent, K. 2017: Climate Risk and Vulnerability: a Handbook for Southern Africa (2nd Edition), SunMedia Press, Stellenbosch, South Africa.

The project was funded by USAID with the support of the Department of Science and Technology (DST), South Africa. The authors would like to acknowledge the Applied Centre for Climate and Earth Systems Science (ACCESS), Southern African Science Service Centre for Climate Change and Adaptive Land Use (SASSCAL), and Future Climate For Africa UMFULA (Uncertainty Reduction in Models for Understanding Development Applications) project for supporting the research presented in the handbook.

The use of and obstacles to social learning in climate change adaptation initiatives in South Africa

By Shakespear Mudombi

This news article is an extract from the paper ‘The use of and obstacles to social learning in climate change adaptation initiatives in South Africa’, published in *Jàmbá: Journal of Disaster Risk Studies* 9(1), by Mudombi S, Fabricius C, Van Zyl-Bulitta V, and Patt A (2017)

Global environmental change will have major impacts on ecosystems and human livelihoods while challenging the adaptive capacity of individuals and communities. Many studies have highlighted the vulnerability of South Africa to climate change. This is worsened by the fact that the country is prone to limitations in water supply. Dealing with this challenge requires rapid anticipatory responses that empower and enable individuals, communities and decision makers to better adapt to the risks associated with climate change.

Adaptation is an important response as it enables the system to better cope and adjust so as to minimise the negative impacts while taking advantage of the likely opportunities. Challenges such as climate change are viewed as ‘messy problems’, which require the participation and cooperation of different stakeholders. When there is lack of consensus, it is difficult for stakeholders to work together for the successful implementation of programmes. Social learning has been proposed as an effective means to enhance responses to challenges such as climate change.

Social learning is an on-going adaptive process of knowledge generation, reflection and synthesis that can enhance people’s awareness about climate change and its impacts, with positive outcomes for their adaptive capacity. The objectives of this study were to assess the prevalence of factors promoting social learning in climate change adaptation initiatives in South Africa.

The first stage of the study involved conducting a literature review to identify factors that tend to promote social learning. The factors were split into two categories. Factors in the personal social learning category relate to the cognitive perceptions and abilities of individuals. These factors include willingness to share ideas, development of trust among stakeholders, participation by all stakeholders, capacity for conflict resolution, collective action towards project goals, continuous interaction and feedback, flexibility in planning and implementation, and willingness to share information. On the other hand, organisational social learning category relate to organisational characteristics and policies likely to create an environment that facilitates social learning. These factors include: empowerment of junior employees to experiment, existence of processes to translate feedback into changed practices, sufficient budget to regularly engage with stakeholders, continuous updating of project or planning processes, support for locally initiated projects, and development of local stakeholders’ capacity to

engage with projects or interventions. The second stage of the study was data collection (through an online survey that was conducted in 2013), targeting decision makers in government and non-governmental organisations to get their perceptions on the presence of personal factors and organisational factors that promote social learning.

The findings provide some evidence of social learning in climate change adaptation projects in South Africa, with the majority of respondents indicating that personal social learning indicators were present. Mechanisms for improved conflict resolution were, however, less prevalent. The challenges associated with conflict resolution were believed to be exacerbated by lack of consultation by powerful stakeholders who usually take unilateral decisions. Organisational and governance-related barriers to implementation also presented significant challenges. Some of the main organisational barriers were short timeframes for implementing projects, political interference, shortcomings in governance systems and lack of knowledge and expertise in organisations. Inadequate funding was highlighted as a serious constraint. This was aggravated by funding requirements and guidelines that tend to be rigid, coupled with delays in budget and resource allocation. This situation calls for flexibility in project budgets and timeframes.

Efforts to promote social learning should be focused at both the organisational level as well as the individual level. There is a need for organisations to promote social learning by ensuring that their organisational environment and governance structures are conducive for their employees and the communities they work in, to embrace social learning. It was revealed that in some cases, social learning approaches tend to be adopted by a few individuals rather than it being embraced by the entire organisation. While acknowledging that social learning is not a panacea to the climate change challenge, it is critical to stress that it is one of the essential ingredients in seeking to find long lasting solutions to the challenge through enhancing the adaptive capacity of communities.

A better understanding of the challenge and improved collaboration between individuals, organisations and communities are critical. Of significance is the need to incorporate different but complementary forms of knowledge i.e. both indigenous and modern. This will help contribute to the overall success of climate change adaptation initiatives. Optimal sustainable win-win solutions can result when stakeholders come together to collaborate on solutions with better understanding of the challenges and are equipped with appropriate technical skills.

This study was undertaken in 2013 as part of the Southern African Young Scientists Summer Program hosted by the University of the Free State, with support from the National Research Foundation (NRF), the Department of Science and Technology (DST), and the International Institute for Applied Systems Analysis (IIASA). During the time of this study, Shakespear was working with the NRF SARCHI Research Professor, Mammo Muchie at the Institute for Economic Research on Innovation (IERI) at Tshwane University of Technology. The support received from all these institutions is highly appreciated.

Listening to the Voice of Nature as it Echoes from an Adaptation Retreat

By Felix Donkor and Christopher Mabeza

Anthropogenic climate change has been given different accolades from being a “wicked problem” (Rittel and Webber, 1973) to a “super wicked problem” (Levin, 2012). A common denominator in both descriptions is that climate change, due to its hyper-complexity, defies simplistic or straightforward planning responses. Consequently, as we grapple with complexity in the Anthropocene, response interventions merit an interdisciplinary or trans-disciplinary approach.

The South African Adaptation Network responded to a call for an advanced platform where discussions could be deepened and stimulated and climate change adaptation initiatives and experiences could be shared among practitioners in the adaptation landscape. The platform was facilitated in the form of a

Adaptation Retreat, held in the town of Nieuwoudtville in the Northern Cape from 15 -18 May 2017. Facilitated by Noel Oettle (Adaptation Network), Shannon Parring (Indigo development & change) and Athina Copteros, the Adaptation Network hosted 18 participants from different disciplines across South Africa and neighbouring countries who anticipated a week filled with cross pollination of ideas on enhancing adaptation practices and increasing their knowledge.

“The opportunity to attend a retreat in Nieuwoudtville was very enticing for us. It was a much-needed break from the hustle and bustle of city life. It was also an opportunity for a Trump-less week, an escape from the unrelenting bombardment by Cable News Network (CNN) on Donald Trump’s seemingly unending gaffes. We packed our bags and off we went to Nieuwoudtville in the Northern Cape, the land of rooibos tea” said Chris Mabeza, an independent climate change consultant.

The programme involved an intercourse of theoretical input, critical analysis of a case study, field experience of adaptation initiatives with farmers who live on the frontline of the adverse effects of climate change, individual and shared reflection on practice and immersion in the unique natural environs of Nieuwoudtville. Hence the retreat afforded practitioners with the opportunity to deepen their theoretical knowledge of adaptation and share experiences from the field.

During the first day of the retreat, participants and the facilitators were introduced to each other and the rationale of the retreat. Additional background information was articulated and participants agreed on norms that would guide their participation, which included respect for each other’s views and cultural and professional backgrounds. This set the scene for a harmonious and collaborative ambiance. Participants showcased their artistic skills as they illustrated and shared their journeys in the adaptation landscape through drawings.

Of all the stories that we heard during the retreat, none so epitomises hope as the story of Maria Kotze, known as Lena. Lena, a rooibos tea farmer and a member of the Heiveld Cooperative in Nieuwoudtville, described the adaptive strategies behind the success of the rooibos tea farming communities in the Suid Bokkeveld with the meticulousness of a heart surgeon. Lena chronicled how her life and that of the small-scale farmers in the cooperative has been transformed through the work of the Environmental Monitoring Group (EMG). The organisation introduced the farmers to climate smart farming techniques and other capacity development programmes. The story of Lena is a good news story. It is a story about relentless tenacity and attests to the fact that smallholder farmers can hold their own as the vagaries of a human-induced climate change begin to be felt.



Retreat participants on a field excursion to Melkraal with Lena Kotze

To illustrate the impacts of climate change and responding adaptation initiative, the participants visited the Heiveld Tea Court and interacted with rooibos tea farmers on the farm Melkkrall, both located in the Suid Bokkeveld. We witnessed first-hand the effects of an eight month long dry spell which threatens the viability of the Cooperative. However, it was a humbling experience to learn about the adaptive measures the cooperative has put in place as they attempt to adapt to rainfall variability. One such measure is rainwater harvesting. Admittedly, rainwater can only be harvested when it rains and as already alluded to, it has not rained in that part of the country for eight months. However, like all interventions, there are no easy answers to complex problems such as climate change. Suffice to say that rainwater harvesting has potential to help communities adapt.



Siya Myeza talking to the Retreat participants about the implementation of the Adaptation Fund Small Grants Facility funded project in the Suid Bokkeveld

On the third day of the retreat, the participants discussed relevant theoretical frameworks that can enhance the effectiveness of adaptation interventions such as the Human Scale Development framework. Basic human needs, as defined by Manfred Max-Neef and others are argued to be few, finite and classifiable contrary to economic "wants" that are infinite and insatiable. Moreover, they are constant across cultures and historical time periods. What varies over time and between individuals and communities are the means by which they are met. Human needs can also be appreciated as a system—i.e., they are interrelated and interactive. Consequently simultaneity, complementarity and trade-offs are features of the process of needs satisfaction. Manfred Max-Neef and his colleagues developed a taxonomy of human needs and a process by which communities can identify their "wealths" and "poverties" according to how their fundamental human needs are satisfied.

Armed with this knowledge, participants formed three teams that were tasked with designing interventions that would help reverse degradation in the livelihoods of three imaginary communities. One team addressed the needs of an insect harvesting community, another dealt with livestock farmers experiencing draught on large areas of land due to climate change impacts whilst the third one focused on the needs of a flood prone community suffering from rural-urban migration and dwindling agriculture. Following each team's presentation, the other participants "voted with their feet" to provide their assessment of how convinced they were of the likelihood of each intervention to achieve synergic satisfaction of a range of human needs. Lively discussion ensued!

The final day involved activities in ecopsychology, which sought to develop and expand the emotional connection between participants and the natural world through ecological and psychological principles, thereby assisting them with developing sustainable lifestyles and remedying alienation from nature. Most participants were overwhelmed with the experience and expressed their satisfaction. This was followed up with a final wrap up of the retreat and participants had the chance to evaluate the event and share their perspectives for future events. Final thoughts from some of the participants included,

"Being a priest and being on regular retreats I thought to myself, what NEW can I learn from this one. But one thing I always have to bear in mind is to be always open for the birth of something NEW. I was also internally confronted about the Adaptation Retreat in praxis vs my expectations as a grassroots person coming from a very climate challenging area – Namakwa! And again it was good to be open to the OTHER than the expected. This retreat ignited a fire within to know more, explore more and be more for my people and myself." Earl Richards, Step Up Foundation.

"As a first time participant in such an event, it was a good experience with all the activities that were conducted. Meeting new people and also joining them on their individual journeys, makes you feel that in some point even though we come from different backgrounds on a personal and professional level we are related to each other, because we are striving towards the same thing. One thing that stood out for me was the visit to Melkkraal, and seeing how passionate these people are about the work they are doing especially Maria Kotze (Lena)". Albert Koopman, Indigo development & change



Retreat participants

The Retreat was ended with a word of thanks to the participants, organisers and the facilitators. What a remarkably insightful retreat it was! We listened, we saw, we had fun, we learned. And that's not the only positive spin-off from the retreat – not by a long shot.

Citations: *Levin, K., Cashore, B., Bernstein, S. et al. Policy Sci (2012) 45: 123. doi:10.1007/s11077-012-9151-0; Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. Policy Sciences, 4(2), 155–169.*

Planning for extreme events: uMngeni Resilience Project hosts Early Warning System workshop

By Mpfunzeni Tshindane and Candice Arendse

The uMngeni Resilience Project (URP), funded by the Adaptation Fund, aims to increase the resilience of vulnerable communities to extreme weather-related events such as flooding, storms and droughts. Focussing on the uMgungundlovu District Municipality, interventions will include early warning systems, climate-smart agriculture and climate proofing settlements.

The Project hosted a two-day workshop that focussed on the development of Early Warning Systems for the uMgungundlovu District Municipality. The workshop was attended by approximately 80 stakeholders from around the country which included data generators, data users and disaster management officials within KwaZulu Natal. The institutes present included, the South African Weather Service (SAWS), the International Water Management Institute (IWMI), eThekweni Municipality, the Provincial Disaster Management Centre and the University of KwaZulu Natal (UKZN).

The first day of the workshop focused on understanding the state of South Africa's existing Early Warning Systems and the national vision for using climate information. The second day focused on how the uMngeni Resilience Project can build on what is already in place and fill the current gaps so that warnings can make their way to vulnerable communities in the District and in two local municipalities. Additionally, the Disaster Management capabilities in the uMgungundlovu District Municipality were discussed.

The workshop was successful in stimulating lively discussions about the best way to generate, package and send weather warnings to communities in high-risk areas. The importance of partnerships was stressed, as was the inclusion of Indigenous Knowledge in monitoring risks and sharing warning messages. Numerous lessons from other Early Warning Systems were shared and the important points were noted for inclusion in the uMngeni Resilience Project. An exciting outcome of the workshop was the strengthening of the partnership with the South African Weather Service, who is the custodian of climate data in the country.

Recognising the importance of responding to Extreme events, the Adaptation Network will host a one day workshop in Grahamstown on 29 May 2017 which will focus on Adaptation for Extreme Events. A two day Multi stakeholder Think Tank will follow the workshop on 30 & 31 May 2017 organised by the Department of Environmental Science, Rhodes University and co-hosted by the Adaptation Network. The Think Tank will focus on linking disaster risk reduction (DRR) and climate change adaptation (CCA) to reduce social vulnerability and build resilience.

For more information on the workshop or to join the NIE mailing list to receive future URP and Small Grants Facility project updates, please email Mpfunzeni Tshindane (M.Tshindane@sanbi.org.za).

Credits

This newsletter is produced by the Adaptation Network Secretariat,
which is hosted by Environmental Monitoring Group.

Contributors to this edition:

Candice Arendse: Environmental Monitoring Group
Christopher Mabeza: Climate Change consultant
Claire Davis Council for Scientific and Industrial Research (CSIR)
Felix Donkor: PhD student at University of Witwatersrand
Janet Kachinga: South Africa Climate Action Network
Katharine Vincent : Kulima Integrated Development Solutions
Mpfunzeni Tshindane: South African National Biodiversity Institute
Noel Oettlé: Environmental Monitoring Group (editor)
Shakespear Mudombi: Trade and Industrial Policy Strategies
Thanks to the Earth Negotiations Bulletin

Articles do not necessarily represent the views of all Adaptation Network members.

To contribute please email Candice Arendse: candice@emg.org.za

Download a PDF version of this newsletter at: www.adaptationnetwork.org.za/news

The work of Adaptation Network is made possible through contributions
from the Government of Flanders



www.adaptationnetwork.org.za

info@adaptationnetwork.org.za / Tel: +27 27 218 11171 Neethling Street, Nieuwoudtville, 8180,
South Africa