# Newsletter October 2015

## Contents



## Notice of AGM

Adaptation Network members are invited to attend and contribute to the 2015 AGM.

**Date:** Friday, 20 November 2015
**Time:** 10h00 to 13h00 (tea at 09h30)
**Venue:** Seminar Room, SANBI Kirstenbosch, at Kirstenbosch Botanical Gardens. Cape Town.

Key agenda items

- Report on Adaptation Network activities
- Discussion of plans for 2016
- Appointment of the Network Secretariat
- Election of Adaptation Network Steering Committee

Please submit additional agenda items ahead of time.

Limited travel support is available for members who wish to attend. If you would like to apply, please submit a short motivation and budget by 04 November 2015.

***RSVP by Wednesday, 04 November 2015 to info@adaptationnetwork.org.za***

## Key outcomes of the UN desertification conference

By Noel Oettlé

*Photograph courtesy of Drynet*

**Civil society delegates and the delegation of Luxembourg at the UNCCD**

Desertification, or the loss of productivity of land, is a global problem affecting many countries - from Iceland to Australia. In mid October, 6,000 delegates met in bomb-shocked Ankara, Turkey to seek agreement on the way forward for the global agreement on land, the United Nations Convention to Combat Desertification (UNCCD). In the 21 years since it was adopted, this was the twelfth meeting of the 195 parties to the Convention (COP12).

The refugee crisis in Europe is intimately linked to the politics of Turkey and the war in Syria. The reality that the Syrian crisis was partly precipitated by a prolonged drought, rising temperatures and loss of livelihoods of many thousands of farmers, caused delegates to pause and reflect on the vital significance of sustainable land use in the overall context of social stability.

*Photograph by Noel Oettlè*

**UNCCD Executive Secretary Monique Barbut, Marcos Montoira of the UNCCD Secretariat and Chair of the CSO Panel Juan Luis Merenga**

In the run-up to the December climate conference in Paris, the Ankara meeting was highly significant. Soil is increasingly seen as a 'carbon sink' whose potential has not been adequately recognised or made use of. On the other hand, the ways in which we use the land are associated with a range of economic, social and ecological problems. According to the IPCC, agriculture contributes to over 20 per cent of global anthropogenic greenhouse gas emissions (21–25 per cent of carbon dioxide, 55-60 per cent of methane, and 65-80 per cent of nitrous oxide). Nevertheless, the soils of the planet have the potential to sequester vast quantities of carbon, if used in the right ways. The climate agenda must therefore address land use.

The UNCCD is an exception amongst the UN's environmental agreements in that it recognises the central role of people in sustainable land use. The Convention recognises the physical, biological and socio-economic aspects of desertification, the importance of redirecting technology transfer to be demand-driven, and the importance of involving local communities in combating Drought, Land Degradation and Desertification (DLDD). This emphasis makes the UNCCD an ideal vehicle for promoting participatory adaptation to climate change.

The recently adopted UN Sustainable Development Goal 15 is: "Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss". One of the targets adopted by the UN in this regard is "By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world".

Throughout history, people have caused the destruction of agricultural land through misuse and over-exploitation. However, current losses of arable land are estimated at 30 to 35 times the historical rate. Global estimates by the UN indicate that 52 per cent of the land used for agriculture is moderately or severely affected by soil degradation, with 12 million hectares lost each year, affecting the livelihoods of billions of people.

When COP12 convened, its task was to find ways in which the governments of the world could agree to take more effective action to reverse this trend. The meeting adopted 35 decisions, including how to pursue the target to achieve land degradation neutrality (LDN) and how to align actions undertaken in the context of the UNCCD to the Sustainable Development Goals (SDGs).

Given the limitations imposed by the Convention's definition of desertification as a process occurring only in the world's drylands, COP12 took on board a broader understanding of land degradation. In its decision ICCD/COP(12)/L.2, it noted that "the significant proportion of land degradation occurs beyond arid, semi-arid and dry and sub-humid areas" and recognised "that parties may use the UNCCD to guide their policies to DLDD and voluntary targets when striving to achieve LDN at national and subnational levels". This seemingly innocuous decision was the result of many hours of wrangling to overcome the resistance of some parties that did not want to be obliged to implement the UNCCD in more humid areas.

*Photograph by Rehana Dada*

**Degraded forest in Amazonia, Brazil**

Much of the work of the COP takes place in committees and working groups. The Committee on Science and Technology (CST) and the Committee for the Review of the Implementation of the Convention (CRIC) tabled a number of decisions for adoption by the COP. Unlike the Committees, which are open to civil society observers, the contact groups negotiate out of sight of observers, yet play a key role in determining the outcomes of the COP. The five contact groups that negotiated the COP's decisions focused on the Programme and Budget; Matters Other than Programme and Budget; the CST; the CRIC, and joint CST/CRIC matters.

The CST developed six decisions for COP consideration regarding, among other issues: the outcomes of the UNCCD 3rd Scientific Conference; improving the efficiency of the CST; improving knowledge dissemination; the work programme of the Science-Policy Interface (SPI). The CRIC developed eight decisions for COP consideration regarding, inter alia: collaboration with the Global Environment Facility (GEF); establishment of national-level voluntary LDN targets within National Action Programmes (NAPs) and national reports, including funding to support national target-setting towards achieving LDN; actions to achieve the 10-year strategic plan and framework to enhance the implementation of the Convention (2008-2018) (the Strategy); procedures for communication of information to be submitted to the COP, including on progress indicators for trends in land cover, land productivity, and carbon stocks; and a results framework against which the CST, CRIC, Global Mechanism (GM) and Secretariat will organise their work for the period 2016-2019.

By the conclusion of the COP there was agreement that parties would play an important role in the follow-up on the United Nations 2030 Agenda for Sustainable Development by striving to achieve a single, unified objective and collectively delivering on SDG target 15.3, which seeks a 'land degradation neutral world'. The challenge with achieving this goal lies not only in reversing the enormous losses of productive land, but also in assessing how 'neutrality' should be measured, and what political, economic and social trade-offs will be needed to achieve it.

The annex to the decision identifies six progress indicators: trends in population living below the relative poverty line and/or income inequality in affected areas; trends in access to safe drinking water in affected areas; trends in land cover; trends in productivity or functioning of the land; trends in carbon stocks above and below ground; and trends in abundance and distribution of selected species.

It was agreed that a special session of the CRIC will be held to address methodological issues and provide guidance on the reporting and review structure prior to COP13.

The decision taken to recognise and support further elaboration of the Science Policy Interface (which was established at COP11 as the mechanism to bring scientific advice to the parties) is an important one, not only for the challenge of assessing land degradation and restoration, but also for doing so in ways that also address the commitments of parties in the contexts of the UNFCCC and the CBD.

Decision (ICCD/COP(12)/L.4): the COP, inter alia: welcomes the adoption by the UNGA of the outcome document "Transforming our world: the 2030 Agenda for Sustainable Development" including the SDGs and target 15.3 on combat desertification, restore degraded lands and soils, including land affected by desertification, drought and floods, and strive to achieve a land degradation neutral world. The decision also:

- notes that the SDGs are integrated and indivisible and universally applicable and targets are defined as aspirational, with each government setting its own national targets;
- recalls that in striving to achieve SDG target 15.3 it is also important to address wider elements of the 2030 Agenda;
- recognizes the unique role of the UNCCD in addressing DLDD in affected areas and the importance of these efforts to parties in addressing SDG target 15.3 at the national
- and subnational level, while also recognizing that the full implementation of SDG target 15.3 will require contribution from other bodies and agencies and the Convention should seek to work cooperatively, respecting its scope;
- acknowledges that SDG target 15.3 addresses the Convention's objectives and that striving to achieve LDN would considerably contribute to the three dimensions of sustainable development and that this could potentially involve the development of national targets;
- endorses the IWG science-based definition of LDN as follows: "LDN is a state whereby the amount and quality of land resources necessary to support ecosystem functions and services and enhance food security remain stable or increase within specified temporal and spatial scale and ecosystems";
- recognizes that for the purpose of the Convention, this definition is intended to apply to affected areas as defined in the Convention's text; and
- decides that striving to achieve SDG target 15.3 is a strong vehicle for driving implementation of the UNCCD.

**More information is available at:**

**UNCCD: www.unccd.int**

**Drynet: www.dry-net.org**

**Further insight into UNCCD COP12 decisions further in this newsletter in the article:**
***Ensuring a sound scientific approach to achieving SDG 15*.**

## The role of NGOs in ensuring climate resilient societies

By Jessica Wilson

*In late October the Department of Water and Sanitation hosted a* Water and Sanitation Policy Dialogue on Climate Change. *Jessica Wilson of the Environmental Monitoring Group presented on the role of non governmental organisations in ensuring climate resilient societies.*

Non governmental organisations are uniquely positioned to play three critical roles in building a climate resilient society. Firstly they act as a catalyst for transformation; they create space for people to be active citizens and change their own lives. Secondly NGOs are pollinators; they connect and move within a dynamic network of people and organisations. They are perhaps unique in being able to integrate and connect different forms of knowledge and a range of issues across multiple geographic and political scales. For example NGOs meet policy makers or scientists and interpret what they learn to community activists, and vice versa. The third role that NGOs play is as part of a broader civil society movement. Civil society is the third "power" in society, holding government and business to account, and driving social change through public interest values (which include social equity and environmental justice).

As with sustainable development, resilience can be interpreted in many ways. Environmental justice organisations are looking at resilience that is *transformative* and not only about "bouncing back" to the pre climate change situation, as these conditions are what led to climate change in the first place.

Climate change adaptation needs to be "mainstreamed" so that it tackles key social, economic and environmental ills in the water sector, including unequal water provision, pollution and degradation of rivers and wetlands, insufficient water for livelihood activities, and alienation between people and water (rivers, wetlands, rain). Adaptation is not politically neutral; it's not only about capacity and infrastructure, but also about justice and real sustainable development. This means that there is a need to assess how resources are allocated and who makes those decisions.

Two case studies illustrate the role that NGOs play in building resilience: Goedverwacht and Makhaza.

*Photograph by Jessica Wilson*

**Goedverwacht community members participating in action research**

The Goedverwacht project looked at the usefulness of downscaled general circulation models (GCM) and hydrological models for community based adaptation. It was funded by the Water Research Commission, and conducted as a partnership between the Environmental Monitoring Group (EMG), Umphilo waManzi, and University of KwaZulu-Natal. Workshops and modelling resulted in a knowledge generation process that strengthened Goedverwacht community's analysis of development constraints and risks, with climate change placed within existing community challenges. The project helped people in Goedverwacht community take action on land tenure, alien vegetation clearing, water provision and local governance. Using local knowledge and networking with outside institutions was key to strengthening adaptation capacity.

Several years ago, a group of women in Makhaza became anxious about Water Management Device installation. These devices, known as *amafudo* or tortoises (because they hide in their 'shell' and you can't see what is going on), are programmed to release 350 litres of water per day to a household. Once a household has used its daily allocation, no more water is available until the next day. The City

of Cape Town was unable to respond to the women's proposal of an alternative and more humane form of local water care. The Makhaza women asked EMG to help them with a process of research, solidarity building and dialogue with the local authority (officials and councillors). They initiated the *Start Fresh Campaign* to fix leaks, cancel debt, pay for the water used and say no to *amafudo.*

*Photograph by Jessica Wilson*

**Makhaza Wetland, Cape Town**

This process highlighted the shadow side of water demand management, showing how it can be used in a punitive way to target low-income households. It also showed the inertia or lack of adaptive capacity of local government as an institution.

Both case studies used action research as the primary way of working. Learning, rather than generating knowledge, is at the core of an action research process. Emphasis is on the experiential rather than the analytical, and both researcher and subject take responsibility for investigating the current reality, taking steps to change it, and work with the outcomes.

Action research accepts that the process of research itself is a dynamic social process that, in addition to building knowledge, also exposes the relationship between the individual and the social. As clarity emerges, so people act and change. As they act and change, so relationships change and new variables come into play. Action research may have a clear direction but there is no end point. Critically, action research aims to be emancipatory – to release people from the constraints of irrational unproductive, unjust and unsatisfying social structures that limit their self-development and self-determination.

*Photograph by Jessica Wilson*


**Visual representation of Goedverwacht produced by community members as part of an action research process they were engaged in.**

Through its work with communities on water and climate change, EMG has developed elements that it considers critical to resilience:

- **Attitudes that are open and alive**; willing to face reality, to learn, share and cooperate (rather than remaining trapped in rhetoric, political posturing or denial); willing to try things (and fail, and try again); willing to participate, to take action.
- **Infrastructure and technology** that works, can be maintained, is easy to use and understand, is appropriate to place and people, provides reliable affordable quality services to all (not just some), is adaptive to changing climate, economy and society.
- **Trust, cooperation and self-organising**, within and between institutions, including state and citizen; participatory governance; systems of regulation, monitoring, feedback.
- **Adaptive learning and understanding**, at individual and institutional level: skills, climate change information, one's role in society as a 'change agent,' what works and what doesn't, systems for self/organisational improvement (adaptive learning).
- **Buffers and diversity -** having options, multiple sources of livelihood, social networks and support, diverse economy, risk-sensitive budgets that protect vulnerable people and infrastructures.
- **Policy and institutions that are transformative** and don't reinforce 'business as usual'

*Photograph by Rehana Dada*

**Meandering streams in the Drakensberg foothills**

**From discussion on a policy to guide water and climate change work, three key points emerged:**

- Government must act *with* communities not *on* them for socio-economic transformation;
- There must be an explicit link in water demand management to equity and justice, i.e. water demand management should be transformative and not entrench or exacerbate class divisions in level of water services;
- Resilience and adaptation need to be *transformative*, and not a means to return to business-as-usual.

**More information is available at:**

**Environmental Monitoring Group: www.emg.org.za**

## September focus on forests and industrial tree plantations

By Wally Menne and Rehana Dada

In mid September, a number of significant meetings were held in Durban in response to the World Forestry Congress 2015 (WFC2015). The Civil Society Alternative Programme of Events and Activities (CSAP) took place in parallel, and in the week prior, the Global Forest Coalition (GFC) brought together civil society organisation community representatives from around the world to discuss community driven approaches to land management and protection.

*Photograph by Mojalefa Rabolinyane*


**CSAP participants from South Africa and India**

GFC is coordinating and supporting a series of Community Conservation Resilience Initiatives (CCRI) which aim to develop and provide policy advice on support for community conservation, as a contribution to implementing targets developed under the Convention on Biodiversity. The CCRI programme involves a diversity of groups, from the Udege Indigenous Peoples in Russia and the Sulufuo and Fera Subua in the Solomon Islands, to communities in Uganda and Paraguay. Participatory assessments are being conducted of community conservation initiatives in about 20 countries.

The gathering also provided an opportunity for those present to develop a position on REDD (Reduced Emissions from Deforestation and forest Degradation), called the Durban Declaration on REDD. Communities and activists around the world are opposed to the implementation of REDD on lands that communities depend on, as the concept has been shown to lead to greater forest degradation and displacement of forest dependent communities.

The WFC had an attendance of about 4,000. Its main outcome was the Durban Declaration which acknowledges the importance of forests for food security, livelihoods, resilience, and energy. It also promotes integrated approaches to land use in addressing drivers of deforestation and conflicts over land use. The WFC was criticised heavily for its promotion of the intensification and expansion of industrial timber plantations, which the conference referred to as “forests”. Anne Peterman of the Global Justice Ecology Project pointed out that there was also clear promotion of genetically engineered trees.

Almuth Ernsting of Biofuelwatch raised concern about the use of trees for biofuels: “It was devastating to see the World Forestry Congress drive more demand for biofuels and with it forest destruction and devastating impacts to communities, biodiversity and women. There were many promotional events and discussions about turning wood to liquid fuels and expanding the use of wood in power stations and industrial installations. What they are really talking about is expanding industrial tree plantations”. She said that biofuels are a driver of the development of genetically engineered trees: “This poses a major threat to natural ecosystems and forests, and this is a threat that is not well understood. So this is not a form of renewable energy, but really another very destructive form of energy”.

*Photographs by Mojalefa Rabolinyane*



**Speakers at CSAP included Nnimmo Bassey of the Home of Mother Earth Foundation in Nigeria (left), Sibongile Mtungwa of Women's Leadership and Training Programme in South Africa (centre), and Winnie Overbeek of World Rainforest Movement in Uruguay (right).**

The CSAP was organised by the Timberwatch Coalition together with its local and international partners, with the intention of promoting alternatives to the industry-focused options presented at the WFC. As a starting point, there was strong opposition to use of the word "forest" to refer to timber plantations. Wally Menne of Timberwatch said: "In nature there are no monocultures. Industrial tree crops of any kind are not part of any natural continuum - no one in the world would call a sugarcane plantation a grassland." He also pointed out that timber plantations are not suitable for climate change mitigation, and instead result in increased emissions.

Guadalupe Rodriguez of Rainforest Rescue said: "There is a need to ask the FAO to change its definitions of forests because the definition they are using supports the destruction of forests all over the world. We are asking for recognition that tree plantations are not forests, and to start a process to create a new definition of forests that is defined by communities, not politicians". Rainforest Rescue and its partners coordinated a petition across the world that collected over 100,000 signatures in support of this demand.

Andrew St Ledger of the Woodlands Trust talked about the impact of plantations on Irish peoples: "The Irish are a forest people who lost their home and their culture due to early colonisation, and linked to that colonisation is the word 'plantation'. The abuse of language we are witnessing with regards to forests is something we are familiar with. The Irish were pushed off their lands to make way for plantations – and others are now experiencing that in other parts of the world. There's a direct link to taking over land for plantations and removing the ability of local peoples to sustain themselves."

Brian Ashe of GeaSphere talked to displacement being linked to plantations: "Plantations are industrial operations, they are not forests. And employment in the industry is declining. Mechanisation is increasing and along with this is the phenomenon of the people employed in the industry becoming redundant. We're seeing this in the Western Cape where people were dispossessed of their jobs and are now in the process of being dispossessed of their land. In KwaZulu-Natal, people were forced off their lands and into informal settlements."

CSAP organiser, Mojalefa Rabolinyane, said: "The future is for the youth, and throughout this week it was the youth who were fighting for what is theirs. We need to show that we mean business, and that we can effect change".


**More information is available at:**

**Timberwatch Coalition: www.timberwatch.org.za**

**Global Forest Coalition: www.globalforestcoalition.org**

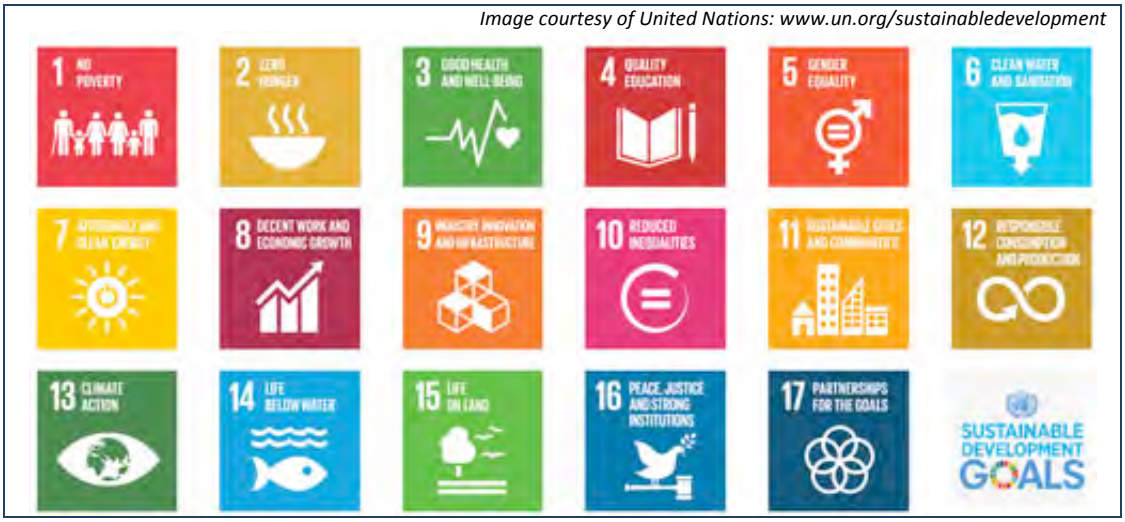
**World Forestry Congress: www.fao.org/world-forestry-congress**

## Sustainable Development Goals adopted

By Felix Kwabena Donkor and Rehana Dada

In late September, the 2030 Agenda for Sustainable Development was adopted at the United Nations Sustainable Development Summit. It is presented as a plan to "strengthen universal peace in larger freedom", recognising that poverty eradication is a global challenge and an "indispensable requirement" for sustainable development. A key aspect of the agreement is the commitment to Sustainable Development Goals (SDG), which build on the Millennium Development Goals (MDG).

*Image courtesy of United Nations: www.un.org/sustainabledevelopment*




The MDG are a set of eight goals that were committed to in 2000, with the intention of reducing extreme poverty by the end of 2015 through addressing income poverty, access to improved water, primary education, and child mortality, while enhancing gender equality, education, and environmental sustainability. Success in meeting the MDG has been diverse across goals and regions, but overall they are considered to have been a significant boost to development. However, they are also criticised variously for their limited emphasis on sustainable development, their concentration on human development instead of economic growth, and their omission of matters such as peace and security. They also focused only on developing countries. As the MDG deadline approached, there were calls to draw from the lessons learn, and the concept of the SDG emerged.

In its preamble, the 2030 Agenda commits to "end poverty and hunger, in all their forms and dimensions", "protect the planet from degradation….sustainably managing its natural resources and taking urgent action on climate change", "ensure that all human beings can enjoy prosperous and fulfilling lives", "foster peaceful, just and inclusive societies which are free from fear and violence", and mobilise resources through global partnerships. The agreement commits parties to 17 SDG, and within them, 169 targets. The SDG are intended for all nations.

Although the SDG have been widely lauded, they are not free from criticism. A report by International Council for Science (ICSU) and the International Social Science Council (ISSC), released in February this year, states that some of the SDG need integration, while others are duplicated and lack concrete measures. Measures in tackling one goal will influence achievement of others, and there is therefore a need to take advantage of the trade-offs. For example, overcoming hunger is not possible without also achieving access to safe drinking water and sanitation. The report considers that only 29 per cent of the targets are well defined and based on current scientific evidence, and 17 per cent are weak.

Patrick Bond of the University of KwaZulu-Natal, also levies heavy criticism for a number of reasons, one of which is the inadequacy of how poverty is measured. Currently extreme poverty is measured as people living on less than USD1.25/day, which provides a count of 1,2 billion people. However, he says, USD1.25/day is a minimal allowance that covers food only and does not include shelter, clothing and health care. If poverty is measured by the USD5/day proposed by the UN Conference on Trade and Development, the poverty headcount rises to 4,3 billion people. Bond also criticises the 2030 Agenda for not addressing the reasons that poverty emerges, the institutions that create those problems, and the relationship between wealth and the challenges of poverty and ecological degradation.

The UN Sustainable Development Summit was held in New York. It was co-chaired by Prime Minister Lars Lokke Rasmussen of Denmark and President Yoweri Museveni of Uganda. *Transforming our world: the 2030 Agenda for Sustainable Development* was adopted on 25 September 2015.

**Sustainable Development Goals**

1. End poverty in all its forms everywhere
2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
3. Ensure healthy lives and promote well-being for all at all ages
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
5. Achieve gender equality and empower all women and girls
6. Ensure availability and sustainable management of water and sanitation for all
7. Ensure access to affordable, reliable, sustainable and modern energy for all
8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
10. Reduce inequality within and among countries
11. Make cities and human settlements inclusive, safe, resilient and sustainable
12. Ensure sustainable consumption and production patterns
13. Take urgent action to combat climate change and its impacts*
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

**More information is available at:**

**UN Sustainable Development www.un.org/sustainabledevelopment**

**University of KwaZulu-Natal Centre for Civil Society: http://ccs.ukzn.ac.za**

## Ensuring a sound scientific approach to achieving SDG 15

By Noel Oettlè

That global ecosystems and soils are going down the tubes at an unprecedented rate is well-established fact. As efforts and resource allocations intended to reverse the trend become greater, it is vital that the global community develops a sound idea of what it is that we should be measuring and what these measurements imply.

Human institutions and scientific thinking inhabit the world of silos, with too little thinking across the boundaries. The array of UN environmental agreements tends to perpetuate this, despite all of the emphasis placed on 'synergies between the conventions'. A formerly eroded landscape covered in trees might seem, to some, to represent worthy restoration, even if the trees are all of one species, originate elsewhere and have a negative impact on hydrology. Without a common approach to measurement of sustainable land management and restoration we will not progress towards Sustainable Development Goal 15: 'Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss'.

*Photograph by Wally Menne*

**Industrial tree plantation near Richards Bay, South Africa**

This concern was addressed by the UNCCD at COP 11 when the Science Policy Interface (SPI) was established. The goal of the SPI is to facilitate a two-way dialogue between scientists and policy makers in order to ensure the delivery of policy-relevant information, knowledge and advice on desertification, land degradation and drought (DLDD), including the measurement of degradation and restoration.

The SPI's mandate and scope of activities are designed to strengthen the work of the scientific community working on drought, land degradation and desertification (DLDD), including the UNCCD's Committee on Science and Technology (CST). Twenty scientists from around the world serve on the SPI, along with a representative of civil society.

The tasks of the SPI include mainstreaming participatory processes, including problem identification, and selection, assessment and monitoring of potential interventions. The SPI is also charged with ensuring that the thematic assessment on land degradation and restoration (LDR) conducted by the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) is of relevance to the UNCCD. This work is undertaken in collaboration with the Intergovernmental Technical Panel on Soils (ITPS) of the Global Soil Partnership (GSP), and supports efforts towards the development of a more systematic approach to measuring and monitoring the trends and impacts of DLDD, as well as the impacts of sustainable land management (SLM) solutions.

At COP12 the SPI presented an approach entitled "Monitoring the contribution of sustainable land use and management to climate change adaptation/mitigation and to the safeguarding of biodiversity and ecosystem services' to the CST. It explores the scientific basis for the contention that SLM can contribute to climate change mitigation and adaptation and the safeguarding of biodiversity and

ecosystem services, including the synergy among current monitoring approaches and a common tool for assessing resilience. It argues that SLM is pivotal to obtaining multiple global benefits simultaneously, and creates a 'win-win-win' situation for achieving the goals of all three Rio Conventions. However, it cautions that the incentives (and disincentives) for adopting SLM practices that maximise these global benefits need to be identified, and practical methods for increasing SLM adoption (and reducing barriers) need to be tested and then made widely available.

The scientific rationale is that SLM practices enhance biodiversity on agricultural land and minimise adverse impacts on natural ecosystems, thus contributing to climate change mitigation and the conservation of biodiversity on-farm and off-farm. Managing land degradation through SLM constitutes an intersection of interests between the Rio conventions and the Sustainable Development Goals (SDGs), and promoting the sustainable management of agro-ecosystems will help tackle these major issues.

In practice, this is not so simple to implement. Synergies between the three Rio Conventions* may seem obvious. For example: changes in land productivity, changes to the resilience to climate change, changes in land use that reduce emissions and changes in relevant biodiversity components. However, the synergistic (across-Conventions) steps for scoping, mapping, prescribing, acting, monitoring and assessing, and enabling (generating support) are less obvious.

One approach to maximising the synergies between the three Rio conventions is to ensure the integration of the monitoring and evaluation aspects that are relevant to the three conventions.

The SPI proposes that among the six UNCCD progress indicators, three are land-based and highly synergistic with the other conventions. There is much scope for synergy in the joint implementation of the three Rio conventions. Integration of monitoring and assessment frameworks with respect to land and the implementation of SLM strategies will be beneficial to the goals of the three conventions.

The SPI proposed that making this integration operational should begin with the three UNCCD land-based progress indicators, and associated essential variables, guidelines and outcome indicators embraced by UNFCCC and CBD. It argues that full integration and accounting of these indicators is both essential and feasible.

*Photograph by Rehana Dada*

**Degraded estuary on the west coast of South Africa**

However, as currently formulated, the three progress indicators alone do not capture the complexity of land dynamics or the benefits of SLM. The value of these indicators is thus dependent on the conceptual framework within which they are applied and interpreted. The SPI has therefore developed a conceptual framework that will be proposed to UNFCCC and CBD as a way to devise and adopt a common land-based data collection, monitoring and assessment platform using a multi-tier approach with a core set of global indicators complemented by nationally developed indicator systems. The intention is that this multi-tier platform would address the information needs of decision-makers at various operational scales.

**If you would like more information on the proposed framework, please contact Noel Oettlé at dryland@global.co.za**

* United Nations Convention on Biodiversity (CBD); United Nations Framework Convention on Climate Change (UNFCCC); United Nations Convention on Combatting Desertification (UNCCD)

## Climate News

**IPCC elects new Chair and bureau**

At its 42nd session in early October, held in Dubrovnik, Croatia, the Intergovernmental Panel on Climate Change (IPCC) elected Hoesung Lee as its new Chair. It also elected a new 34-member Bureau to lead its work on the Sixth Assessment Report, and a new Bureau for its Task Force on National Greenhouse Inventories.

At a press conference Hoesung Lee said: "I want to ensure that the IPCC remains a dynamic institution that provides relevant information - not only to policymakers, but also to business, civil society and ordinary citizens". When asked about the inclusion of traditional knowledge in the next assessment report, he answered: "IPCC assessment is a scientifically rigorous assessment and peer reviewed journals are what deserve the attention of scientists and what we are going to assess. ….. the new bureau will have to give some thought to the best way to approach such a request so that the IPCC can benefit from incorporating some of the valuable information that may be available".

Hoesung Lee is from the Republic of Korea. He has a PhD in economics, served on the boards of a number of economic, climate change and environmental institutions, and worked in industry and for government. He has served on the IPCC since 1992, co-chairing Working Group II for the Second Assessment Report, and acting as a lead author and review editor for subsequent reports. He served as a vice-chair since 2008.

**More information is available at: www.ipcc.ch**

**New waste management plan for South Africa**

Minister Edna Molewa of the Department of Environmental Affairs announced that South Africa will implement a Paper and Packaging Industry Plan, with the intention of both reducing waste in landfills and taking advantage of the economic potential of paper waste. She said that the plan will enable separation waste at source. A 2011 showed that South Africa generated 108 million tons of waste in that year, recycling 10 per cent and storing the rest in landfills.

**Food insecurity expected to worsen across Southern Africa**

A report produced by the Food Security and Nutrition Working Group for Southern Africa estimates that about 13 million people are currently food insecure, and food insecurity is expected to worsen. This is a result of current El Niño conditions which is causing most of the region to experience lower than average rainfall, combined with a 21 per cent decrease in cereal harvest in 2015 and a depreciation in local currency. Poor households in some parts of the region have already depleted their own production stocks, and households in Zimbabwe, Malawi, Zambia, Madagascar, Lesotho and Angola are likely to experience acute food insecurity from October to December 2015. The El Niño event is expected to peak at the end of this year, during the normal planting and flowering season, and continue for the first quarter of next year. It is anticipated to be severe.

**More information is available at: http://unocha.org**

**Temporary wellheads used in Kenya to generate electricity**

In the process of constructing geothermal power plants, a number of wells are drilled, and these are usually left open for years until construction of the main plant is complete. The Kenya Electricity Generation Company (KenGen) is busy constructing Kenya's sixth and seventh geothermal power plants at the Olkaria site in the Rift Valley. It experimented with producing electricity from the temporary wellheads and was successful in producing 56 megawatts that could be injected into the national grid. Kenya has become the world's eighth largest supplier of geothermal energy, with a total installed capacity of 585 megawatts. KenGen has so far mounted eleven wellheads, and four more are under construction. The plants expected to be completed in 2018, adding a further 460 megawatts of geothermal energy. The country has an estimated potential of more than 10,000 megawatts of electricity from geothermal plants.

*Source: Inter Press Service, article by Isaiah Esipisu*

**Green buildings have higher occupancy and rents**

A recent study conducted in the US and Canada shows that environmentally friendly buildings have higher rents, higher occupancy rates and higher tenant satisfaction scores. The study was conducted by Guelph real estate, University of Guelph, and Maastricht University using data from the 2004 to 2013 period from 148 buildings in Canada and 143 in the United States. On average, rentals in buildings that met energy efficiency and sustainability standards drew rents that were on average 3,7 per cent higher, with occupancy rates 18,7 per cent higher in Canada and 9,5 per cent higher in the US. Tenant satisfaction scores were 7 per cent higher in Canada and energy consumption per square foot was 14 per cent lower in the US.

**Review of how evaporation occurs**

Simulations conducted by the Institute of Physical Chemistry of the Polish Academy of Sciences show that our predominant beliefs of how evaporation takes place may need to be reviewed. The widely used Hertz-Knudsen equation states that - at a given temperature - the rate at which a liquid evaporates depends on the difference between the actual pressure in the system and the pressure that the system would be at if it was in a state of equilibrium. The simulations show, however, that the rate of evaporation may not be as closely related to the pressure of the vapour as the Hertz-Knudsen equation states. With water vapour being a more abundant greenhouse gas than carbon dioxide, and climate change being influenced by evaporation, this research may have implications for projections and understanding. The research was published in *Soft Matter*. As with all science, results need to be repeatable and indisputable before they can be considered "fact".

**New research programmes focused on African climate**

Future Climate for Africa, a joint programme of the UK Department for International Development and Natural Environment Research Council, has awarded grants to five new research projects with the intention of developing better climate information for Afri3ca and testing how new information can be used in decision making. AMMA-2050 (African Monsoon Multidisciplinary Analysis 2050) will improve understanding of the West African monsoon under climate change. FRACTAL (Future Resilience for African Cities and Lands) will improve knowledge of future climate trends in Southern Africa, and support policy makers in improving understanding and decision making. HyCRISTAL (Integrating Hydro-Climate Science into Policy Decisions for Climate-Resilient Infrastructure and Livelihoods in East Africa) focuses on decision makers and water management in East Africa. IMPALA (Improving Model Processes for African Climate) aims to improve understanding of African climate processes and mechanisms of change. UMFULA (Uncertainty reduction in Models for Understanding Development Applications) is intended to improve information on climate processes and extremes in Central and Southern Africa.

## Newsletter Credits

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Thanks to EurekaAlert and Inter Press Service.

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

To comment or contribute please email: info@adaptationnetwork.org.za

**Our deadline for the next newsletter is 18 November 2015.**