



**Community
Based
Adaptation:
Measuring and Enhancing
Effective Adaptation**

**9th International Conference
24-30 April 2014
Nairobi, Kenya**

Conference proceedings

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Background to the Conference Series

Community-based adaptation (CBA) recognizes that environmental knowledge, vulnerability and resilience to climate impacts are embedded in societies and cultures. This means the focus needs to be on empowering and supporting communities to take action based on their own decision-making processes.

Increased resilience to climate stresses can be achieved by enabling communities to enhance their capacity to cope with climate extremes and surprises, such as hurricanes, floods or droughts. Although CBA is an emerging area, efforts are being made to develop participatory methodologies, raise awareness of climate change, foster adaptive capacity and measure the impacts of adaptation activities undertaken.

Sharing this knowledge and experience from pilot activities amongst practitioners, policymakers, researchers, funders and the communities at risk is essential. In view of this, the First 'International Workshop on Community Based Adaptation (CBA) to Climate Change' was held in Dhaka, Bangladesh, in January 2005.

The Second International Workshop on CBA was held in Dhaka, Bangladesh, in 2007. Those present formed the CBA Exchange¹ to promote knowledge sharing on CBA activities. At the Third International CBA Conference held in Bangladesh in 2009 participants agreed to form a Global Initiative on Community-Based Adaptation (GICBA)² and to make the conference an annual event to improve knowledge sharing. GICBA is still an active forum for sharing CBA-related activities and information. The decision to hold the conference alternately in Bangladesh and another vulnerable country was also made.

Consequently, the Fourth International CBA Conference was held in Dar es Salaam, Tanzania in February 2010 in recognition of the vulnerability of African nations to climate change impacts. Nearly 200 people from 38 countries attended, and a two-day field trip preceded three days of time spent in the hotel sharing information (through presentations, posters, publication dissemination and evening CBA video sessions), debating, working in small groups and networking. This model of a field-based component of the conference preceding hotel-based discussions, has continued ever since.

The fifth International CBA conference took place in Bangladesh in 2010 with the theme 'Scaling Up: Beyond Pilots'. It focused attention on moving away from stand-alone projects and ensuring that best practices were accurately and systematically shared both horizontally across communities and vertically across levels of governance and action. The conference showed that CBA can also operate at scale, for example through mainstreaming into government processes, but with communities remaining central to planning and action. A total of 388 registered participants from 62 different countries attended the conference. Conference outputs included the Routledge book *Community Based Adaptation to Climate Change: Scaling it up*.³ Chapters from this book have been cited many times in the IPCC, thus bringing community and practitioner knowledge into a key policy making arena.

The 6th International CBA conference was held in Vietnam in April 2012. Over 320 people from 61 different countries attended, with many more attending the opening and closing sessions.

¹ www.cba-exchange.org

² www.weADAPT.org/gicba

³ Schipper, E. L. F., J. Ayers, H. Reid, S. Huq and A. Rahman (2014) *Community Based Adaptation to Climate Change: Scaling it up*. Routledge, London.

Over 30 co-sponsors and other contributing organisations provided support. In addition to formal plenary and parallel sessions on a number of sub-topics, the theme of CBA6 - communicating CBA - was addressed in dedicated communication-related sessions on blogging, working with the media, digital photo storytelling, using games to communicate risk, and methods and tools for working with children. Dedicated poster sessions and evening film sessions were also held.

Conference outreach was also dramatically improved compared to previous years. Live interviews were broadcast online each day and more than 50 interviews uploaded to YouTube. Delegates wrote nearly 30 blog posts and produced nearly 2000 tweets, using the Twitter hashtag #CBA6. The conference supported several developing country journalists, which resulted in a number of published media articles throughout the world. This commitment to conference outreach was continued as the conference series progressed.

Conferences routinely include a two- or three-day field trip to a number of sites preceding time spent in the hotel for more formal sessions. This provides experiential learning on how communities are coping with climate change impacts, and also allows conference participants to get to know each other better. At CBA6, conference delegates evaluated the different adaptation projects they visited on the field trip and awarded a special 'Solidarity Prize' of US\$5000 to the best one. This was a Save the Children project in the North of Vietnam in which children play a key role in disaster preparedness.

The seventh international CBA conference returned to Dhaka, Bangladesh, in 2013. The theme was 'Mainstreaming CBA into National and Local Planning' and over 30 government representatives attended and consequently formed a 'Government Network on Mainstreaming Climate Change.' The small cohort of government officials attending CBA6 also reported back. This was an indication of the growing levels of government interest and experience in CBA. Augmented outreach meant its daily communication-related outputs reached several hundred Virtual Internet Participants (VIPs) and the IIED CBA7 website was a hub for all CBA7 related activities, blogs and online video streams. Conference outputs included a special issue of the academic journal *Climate and Development*, entitled 'Community-Based Adaptation: Mainstreaming into National and Local Planning'.⁴

The eighth international CBA conference was held in Kathmandu, Nepal, 24-30 April 2014. The theme was 'Financing Local Adaptation' in recognition of the need to understand how best to finance the growing number of CBA project and programme activities. Roughly 450 people from 58 different countries attended, including representatives from governments and many of the large international and bilateral funds, donors and foundations currently supporting CBA. This included the Executive Secretary of the UNFCCC, Chair of the Adaptation Fund Board, and Prime Minister of Nepal. CBA8 concluded with the launch of the *Kathmandu Declaration on Financing Local Adaptation*, which saw delegates call for a radical shift in financial flows to ensure the most vulnerable communities can adapt to climate change.⁵

Following the field trips, the hotel-based conference sessions include high-level panels, formal presentations in thematic plenary or parallel sessions, poster and video sessions, debates, small group work and interactive 'out-of-the-box' sessions. Networking is strongly encouraged, as is publication dissemination. At CBA9, for example, all delegates received a USB containing monitoring and evaluation-related publications from a range of organisations.

⁴ All articles in the Special Issue are freely available for download here:

<http://www.tandfonline.com/toc/tcl20/6/4#.VGRWC01xmUn>

⁵ See: <http://pubs.iied.org/G03787.html>

This ninth and most recent conference was held in Nairobi, Kenya, 24-30 April 2015, in partnership with the African Centre for Technology Studies (ACTS) and hosted by the Government of Kenya. The conference theme was 'Measuring and Enhancing Effective Adaptation' and despite the technical theme more than 400 people from roughly 90 countries attended. Increasingly interactive sessions were run more like workshops than formal presentation-oriented formats. The resulting *Nairobi Declaration on Community-Based Adaptation to Climate Change* emphasised the importance of addressing the needs and interests of the poorest and most vulnerable in international agreements on sustainable development, development finance and climate change.⁶ This will be taken to COP21 and other key international fora by top Kenyan government officials.

Aims of the Ninth International Conference on Community-Based Adaptation to Climate Change (CBA9)

- Share and consolidate the latest developments in CBA best practice, policy and theory in different sectors and countries, in Asia and globally. Monitoring and evaluating effective adaptation was a key theme.
- Capture and disseminate this knowledge and experience more broadly, to CBA9 participants and through online web coverage and conference proceedings.
- Strengthen the existing network of practitioners, policy makers, planners and donors working on CBA at all levels by bringing them together at CBA9 and supporting knowledge sharing and collaboration.
- Enhance the capacity of practitioners, governments and donors to help those most vulnerable to climate change to improve their livelihoods.

In recent conferences, daily online communication-related outputs helped those who could not attend the conference in person follow proceedings remotely. More than 200 people logged in and actively participated in discussions during CBA7, and many more viewed web-based material. Media outlets mentioning the CBA7 conference at least 52 times in at least 12 countries during the conference month. More than 550 people registered to be 'Virtual Internet Participants' at CBA8. Available web-based material was viewed by more than 35,000 people. Media outlets mentioning the CBA8 conference at least 40 times in at least 13 countries. More than six hours of recorded video footage was produced. At CBA9 outreach included the following:

- A round-up, including participant views, experiences and photos, from the three days of pre-conference field trips.⁷
- Summaries, including opinions, videos and photos, from each day of the conference.⁸
- A playlist of video daily updates with IIED senior fellow Saleemul Huq.⁹
- A playlist of videos of the opening ceremony speeches.¹⁰
- A playlist of interviews with the leaders of the sessions and other delegates during CBA9, reflecting on key messages and lessons learned in each session.¹¹
- Posters that featured in a 'poster marketplace' summarising projects related to the conference theme. These were made available on IIED's Pinterest site (log-in required) or IIED's Flickr site.¹²

⁶ See <http://pubs.iied.org/G03919.html>

⁷ See <http://www.iied.org/cba9-highlights-pre-conference-field-trips>

⁸ For conference coverage and access to all these outputs see www.cba9.org

⁹ See <https://www.youtube.com/playlist?list=PL1iUHL94bWo72DgE6d69Q4LZB6h6vHcIL>

¹⁰ See <https://www.youtube.com/playlist?list=PL1iUHL94bWo4QIoRR0DScRQxRQNUxfvPW>

¹¹ See https://www.youtube.com/playlist?list=PL1iUHL94bWo4JTOHHBLzD0aOTq7_gfuuB

¹² See <https://www.flickr.com/photos/iied/sets/72157651622983056/>

- The programme of events to get more details on each conference session, and the identity of key speakers and panellists.
- A collection of images from the CBA9 conference and field trips.¹³
- A playlist of films shown in the participatory film session and a programme for the film sessions.¹⁴
- Subscribing to a Twitter list of conference attendees.¹⁵ The youth conference also had its own hashtag for sharing information through Twitter.¹⁶
- Getting individual perspectives on CBA9 from the personal Twitter accounts of IIED's experts who attended the event.
- A number of blogs from IIED staff and others attending the conference.

Outreach Summary from CBA9¹⁷

Posters: 47 posters uploaded to Flickr received a combined 13,928 views. The CBA9 posters album on Flickr received 1,479 views. The posters album on Pinterest received 1,048 views.

Photos: 123 individual CBA9 photos were uploaded to Flickr. The CBA9 photos album on Flickr received 249 views.

Storify: Five round-ups were produced (one of field trips, and four daily summaries), which were viewed a combined 761 times.

Vines: Eight Vines were produced which received a combined 1,614 'loops'.

Videos: 19 session and delegate interviews were produced, which received 802 views. Seven daily updates from Saleemul Huq were produced, which received 418 views. 14 speeches from the opening and closing ceremony were produced, which received 371 views. Eight films shown at CBA9 were curated into a playlist on IIED's YouTube channel.

Web pages: The main CBA9 page received 12,255 views. This provided logistical information and featured daily round-up news stories (featuring Storifys, video and brief explanatory content).

Press releases: Three press releases were viewed a total of 3450 times.

Blogs: Six blogs relating to CBA9 were viewed a total of 1412 times.

Social media: 289 original tweets (not including re-tweets) gained 321,167 organic impressions and 2,979 engagements. The main stories all appeared on Facebook, LinkedIn and Google+

Over the years, the conferences have been funded by a number of generous co-sponsors and contributing organizations, and also through individuals attending and paying a conference fee. Limited funding is sometimes available to bring selected participants from developing countries who could not otherwise afford to attend, but this has been increasingly difficult to secure in recent years.

¹³ See <https://www.flickr.com/photos/iied/sets/72157652237979881/>

¹⁴ See <https://www.youtube.com/playlist?list=PL1iUHL94bWo5POxMdJhhldz3kByr8l7ua>

¹⁵ See <https://twitter.com/IIED/lists/cba9-attendees>

¹⁶ See #YouthCBA

¹⁷ Correct as of 26 May 2015

CBA9 received support from a number of international and national conference co-sponsors, and also members of the National Organising Committee (NOC) who provided technical guidance and logistical support at the national level. These included: Kenya National Drought Management Authority (NDMA); Kenya National Environment Management Authority (NEMA); Kenya Ministry of Environment, Water & Natural Resources (MEWNR); Kenya Ministry of Devolutions & Planning (MD&P); Kenya Council of Governors; Kenya County Executive Committee for Environment and Natural Resources; CARE International; Transparency International; Pan African Climate Justice Alliance (PACJA); Kenya Environment and Science Journalists Association (KENSJA); Egerton University; Kenya Climate Innovation Centre (CIC-Kenya); Kenya Private Sector Alliance (KEPSA); United Nations Development Programme- Small Grant Programme (UNDP-SGP); United National Environment Programme (UNEP).

Each CBA conference aims to build upon the lessons learnt from previous conferences. As such, they no longer just answer questions around, 'what is CBA?', rather they discuss how to best scale-up, mainstream, finance, communicate, monitor and support CBA to reach the ever-increasing numbers of vulnerable poor people affected by climate change. In acknowledgment of the growing numbers of vulnerable urban communities struggling with climate change impacts and finding ways to cope, the theme for CBA10 in Dhaka in 2016 is likely to be 'Enhancing Urban Community Resilience'.

CBA9 Programme Summary

27th April	Inaugural Plenary session 1: Conference Opening and Welcome Speeches
	Plenary session 2: Measuring, linking and learning about adaptation effectiveness across scales: from communities to sub-national, national and global frameworks
	Parallel session 3: Climate Information Services for Effective Adaptation
	Parallel session 4: Gender and Vulnerable Groups
	Parallel 'out-of-the-box' session 5: Community Adaptation Indicators for Sustainable and Healthy Food Systems, Food Security and Nutrition
	Plenary 'out-of-the-box' session 6: Learning when Things Don't go According to Plan
28th April	Plenary session 7: Enhancing CBA through future agreements – the Kenyan perspective
	Parallel session 8: Harnessing Climatic Variability to Enhance Adaptation in the Drylands
	Parallel session 9: Government Monitoring and Evaluation of CBA
	Parallel 'out-of-the-box' session 10: Principles and radical options for adaptation – issues for assessing effectiveness
	Parallel session 11: Monitoring and scaling up Climate-Smart Agriculture practices for enhanced Food Security and CBA
	Parallel session 12: Role of the Private Sector in Enhancing CBA
	Parallel 'out-of-the-box' session 13: Learning through game playing
	Plenary session 14: Poster Market Place
	CBA short films
	Fun Adaptation Finance Night
29th April	Plenary session 15: Evaluating Ecosystem-based Adaptation Effectiveness
	Parallel session 16: Estimating Loss and Damage
	Parallel session 17: Tools and Techniques for Measuring Effective Adaptation and Resilience
	Parallel 'out-of-the-box' session 18: Climate Information Services for Effective CBA
	Parallel session 19: Indigenous Knowledge, Culture and Adaptation
	Parallel session 20: Do you have the Innovative CBA M&E 'Wow-Factor'?
	Parallel 'out-of-the-box' session 21: Exploring Ecosystem-based Adaptation with Participatory Exercises
	Plenary session 22: Poster Market Place
	CBA short films
30th April	Plenary session 23: Debate and Next Steps
	Plenary session 24: Conference Closing Session
	UNEP-hosted visit to the UN complex in Gigiri

Session Summaries

Inaugural Plenary session 1: Conference Opening and Welcome Speeches

Chair

- Saleemul Huq, IIED / ICCCAD

Session Speakers

- Ibrahim Thiaw, Deputy Executive Director, UNEP
- Atiq Rahman, Bangladesh Centre for Advanced Studies
- Simon Carter, Regional Director, IDRC
- Tom Owiyo, African Development Bank
- Vincent O'Neill, Ambassador of Ireland to Kenya
- Jean-Pascal van Ypersele, Vice-Chair of the Intergovernmental Panel on Climate Change (IPCC)
- Salaton Ole Ntutu, Maasai cultural leader, and Stephen Ole Kisotu, Medungi Conservation organization.
- Chief guest: Judy Wakhungu, Cabinet Secretary, Ministry of Environment and Natural Resources

Saleemul Huq inaugurated the conference, announcing that the conference theme is 'measuring and enhancing effective adaptation'.

Ibrahim Thiaw urged the CBA community to turn attention towards international negotiations on climate change, calling for a landmark agreement on adaptation financing at COP21 in Paris. Ibrahim noted that the world is currently largely unprepared to cover the costs of adaptation, citing findings from the 2014 Adaptation Gap Report, which suggests that under the worst case scenario the total adaptation costs for all developing countries could reach USD 250-500 billion/year by 2050. Ibrahim put forth the case for Ecosystem-based Adaptation (EbA), particularly in instances where the cost of technical solutions may be prohibitively high. He noted that in many cases nature-based solutions may be cheaper, more resilient, and provide multiple co-benefits. He highlighted that communities have been using ecosystems to deal with climate variability for hundreds of years, and thus have extensive knowledge that is often ignored by experts and scientists. Thus, he suggested that local and indigenous knowledge be integrated in assessments. Ibrahim described the landscape approach taken by UNEP, and how it are providing support to countries to develop EbA plans and programmes. Ibrahim noted that although tools for monitoring and evaluation (M&E) exist "we still need to learn a lot about how to monitor and evaluate efficiently and effectively". There is also a lack of evidence for environmental and social co-benefits of adaptation strategies.

Atiq Rahman outlined the imperative of focussing adaptation efforts towards vulnerable communities. He noted that while scientists and politicians have been discussing climate change, ordinary people have begun to take action based on their own local knowledge. Atiq described how only 14% of global adaptation financing is currently directed towards adaptation, and 86% towards mitigation. He advocated for a 50/50 distribution of funds towards adaptation and mitigation, with adaptation funds predominantly allocated to vulnerable and poor communities. He praised the efforts of the Nepalese government, who have committed 80% of adaptation funds to the local level.

Simon Carter outlined the climate change adaptation research that IDRC has undertaken over the last decade. He noted how IDRC's 'participatory action research' approach has enhanced linkages between vulnerable populations, researchers and scientists, allowing for the production of shared agendas, promotion of citizen science, and improved engagement with the local contexts and realities of communities. Simon noted the imperative of partnering with the private sector in order to mobilise capital and meet the vast need for adaptation finance. Simon also suggested that although M&E systems need to be improved, we need to "avoid reinventing the wheel", and redefine metrics to move past rigid assessment of standard indicators.

Tom Owiyo reported on the findings from the African Development Bank (AfDB)'s programme to track and report on climate investment from Multilateral Development Banks (MDBs). MDBs provided USD 23.8 billion in financing in 2013 to address the challenges of climate change, 80% of which (USD 18.9 billion) was dedicated to mitigation, and 20% (USD 4.8 billion) to adaptation. He noted that only 20% of adaptation finances (USD 952 million) were delivered to Sub-Saharan Africa. Tom argued that the private sector needs to play a greater role in providing adaptation financing. He noted that the AfDB are ready to support financing for CBA, and that they already have the African Climate Change Fund and The ClimDev Special Fund, which provide opportunities for bankable adaptation projects. He also noted that the AfDB are also investing in developing the knowledge base for adaptation, for example, through their collaboration with WWF to produce a report on 'African ecological futures'. Tom also described AfDB efforts to join the Green Climate Fund's (GCF) seven newly accredited agencies in order to become a key multilateral implementing agency to channel much-needed funding to the continent.

Vincent O'Neill noted that the recent earthquake in Nepal was a reminder of the vulnerability of local communities to climate change. He described how Ireland and Kenya are co-chairing negotiation processes in New York for a new global agenda for sustainable development. The former president, Mary Robinson, is now the UN special envoy on climate change, and plays a global role in advocacy for climate justice. Vincent shared his experiences of working on Ireland's development cooperation programme in Malawi, including the importance of bringing local people into decision-making processes, recognising their tacit knowledge, and responding to their expressed needs. He noted how the vulnerability of communities tends to be multi-faceted, and that we need to situate responses to climate change amongst other development needs such as food security, education and responding to HIV/AIDS. Vincent advocated for moving past a 'silo mentality', and thinking and responding to climate change in an integrated way.

Jean-Pascal van Ypersele delivered a keynote address on findings from the IPCC's 2014 Fifth Assessment Report on the science of climate change. He noted that human influences on the climate system are clear, and impacts are already discernible. Continued emissions of greenhouse gases will increase the likelihood of severe, pervasive and sometimes irreversible impacts on humans and ecosystems. He reiterated that although many people may consider 2°C of global mean average temperature increases to be small change, it can actually lead to massive global changes, which will be particularly severe in local vulnerable "hotspots". He suggested that although both rich and poor countries will be affected, the poor are disproportionately vulnerable. Although the threat of climate change is increasing with rising greenhouse gas levels, humanity has the means to limit climate change and build a more sustainable and resilient future. What remains to be done is to achieve this. Adaptation is already occurring, but cannot be seen as separate from mitigation efforts. He noted that urgent mitigation is needed to reduce risk, and to make the adaptation challenge more achievable.

Salaton Ole Ntutu and Stephen Ole Kisotu thanked the conference organisers for welcoming local communities around Kenya. They stressed that we all are "from the same house as nature", and that although they respect and believe in science, Maasai families still understand that "we

learn about global warming from our animals, and follow our cultural traditions”. They noted how global warming not only threatens their land, but their culture, and that culture must be respected. They believe that climate change is not just about finances, but also about connections to plants and animals. They concluded that only what is believed to be sacred will be protected.

Judi Wakhungu outlined the actions being taken by the Government of Kenya to address climate change, including launching a National Climate Change Strategy in 2010, and developing a National Climate Change Action Plan to operationalise the strategy, in which a high priority is placed upon stakeholder participation. She noted efforts to enhance institutional capacity to address climate change, efforts to mainstream adaptation considerations into development practice, and adoption of a low-carbon resilient development pathways. Judi explained how climate change is a process, which not only requires clear strategies, but patience, and sufficient time spent listening and partnering with vulnerable communities.

Saleemul Huq wrapped up the session by noting that in the latest IPCC report, that many of the citations on CBA were produced from this CBA community of practice and conference series publications. He provided an overview of the tangible outcomes from previous conferences, and the strategic efforts of the CBA community of practice to improve adaptation practices. He noted the importance of assessing whether adaptation finances are reaching vulnerable communities.

Plenary session 2: Measuring, linking and learning about adaptation effectiveness across scales: from communities to sub-national, national and global frameworks

Facilitator

- Susannah Fisher, IIED

Session Presenters

- Clare Shakya, DFID UK
- Jason Spensley, Climate Technology Centre and Network (CTCN)
- Lisa Junghans, Germanwatch
- Timo Leiter, GIZ German Development Agency
- Hugo Remaury, Adaptation Fund

In this session, presenters tackled the complex issue of measuring, linking and sharing knowledge about adaptation effectiveness between frameworks at different scales. IIED has been developing frameworks to measure adaptation, and has identified (along with many other researchers and institutes) the need to connect across scales - an emerging question in the adaptation field as CBA grows in popularity. Susannah framed the session around four questions:

1. How can lessons from CBA be shared and linked to wider frameworks and systems?
2. What degree of measurement and linkages are needed for maximum learning and accountability?
3. How can effective sub-national adaptation be tracked and measured within national systems?
4. How can global finance frameworks support and learn from effective CBA?

The first speaker was Clare Shakya from DFID UK’s Climate Response programme, which is financing many CBA programmes. Regarding the first question, she posed the question of how

DFID's work on CBA could add value to other overseas development assistance. She suggested that funders should use existing frameworks (such as sustainable intensification or poverty alleviation) from the group they are working with to broach the topic of adaptation, developing indicators associated with a theory of change. She stressed that rigorous analysis and evidence from smaller scales makes it much easier for groups at higher scales to listen. On the second question, Shakya stressed the importance of connections over collections: that it is most important to work with others and connect lessons learned in a network, instead of producing lots of reports that no one knows to read. She discussed the importance of knowledge management, and also of paying attention to who is learning: it is important to prioritize the learning of partners, communities and stakeholders. Regarding project design, she recommended an iterative programming approach that allows for course correction as learning occurs.

Next, Jason Spensley offered two insights related to the first question. First, he discussed linking adaptation knowledge and solutions with global frameworks. One such framework is CTCN, which is hosted by UNEP. The mechanism has the mandate to catalyse technology, development, and innovation for adaptation, and has been operating for a year. To help facilitate day-to-day adaptation, he stressed the need for a clear menu, framework, and taxonomy of adaptation by sector, enabling environments, and community-based design considerations. Jason's second insight was about the importance of private sector engagement and investment in CBA. CTCN is working to articulate new investment opportunities and catalyse private sector investment for adaptation. He gave examples of large-scale local-scale investment from micro-finance institutions that are so successful because their investments are resilient: micro-finance groups are already well-established in the rural sector. He ended his presentation with an invitation for more CBA projects to join the CTCN community.

Lisa Junghans is a policy officer for adaptation with Germanwatch, and works closely with the board and secretariat of the Adaptation Fund (AF). She addressed question three in her presentation. She has been tracking sub-national adaptation for more than five years and is associated with the AF's NGO network, a coalition of ten partners that follow and accompany AF-funded projects. She stressed the need to look beyond the AF for adaptation funding and to encourage an interplay of different agencies.

Timo Leiter, Advisor on Climate Change and Sustainable Development with GIZ, works with governments and NGOs on adaptation. He began his presentation by asking: how do we know if a society or country is better adapted? He drew from GIZ's work with 30-40 countries on national adaptation M&E systems. He focused on question three and the importance of having sub-national indicators. He spoke about three different ways of linking adaptation M&E systems: (1) using standardized metrics that can be aggregated from the local to the national to the global level, such as the Adaptation Fund's impact indicators or South Africa's database of adaptation projects; (2) context-specific metrics under a common framework, giving a successful example from Mexico, where the national level identifies priority monitoring fields but states define how to monitor each; and (3), informal links, in which learning is shared through workshops and information is included in national adaptation assessments. A paper detailing Leiter's approach will be published in September 2015 in *New Directions for Evaluation*.

Hugo Remaury spoke about the M&E framework developed by the AF for both the portfolio and the project level. At the portfolio level, the results framework prioritizes learning across the portfolio, using project-level data to track key indicators from data collected on the ground. At the project level, site-specific indicators are chosen by project managers to reflect site-specific objectives. Project performance reports are then submitted that both encourage transparency and learning.

The second half of the session was run as a ‘fishbowl’: audience members came up to the two empty chairs on stage and asked questions or started a discussion with the panellists. One speaker raised the need for funders to make room for failure in climate change adaptation because it is important to learn by doing. As a response, Clare Shakya agreed, saying that she wanted to see more high-risk, transformational projects go forward. Another audience member, who has been an expert in M&E for more than 20 years, highlighted that the panel was mostly about practitioners measuring communities, but stressed that communities should be measuring projects instead, and, most importantly, that communities already know how to do that. The onus is on ‘us’ to understand their measurements. In response, Timo Leiter agreed and discussed the challenges of capturing those context-specific indicators at different scales. Other questions asked by the audience covered topics ranging from the importance of small-scale, local private sector initiatives in adaptation; the importance of land rights and culture; and the cyclical nature of learning.

Parallel session 3: Climate Information Services for Effective Adaptation

Facilitator

- Evans Kituyi, IDRC/CARIAA

Session Presenters¹⁸

- Maurine Ambani, CARE International - Adaptation Learning Programme
- Richard Ewbank, Christian Aid
- Nicholas Maingi, World Meteorological Organisation

Theme leaders for roundtable discussions:

- Joseph Daron, UK Met Office
- Godfrey Mujuni Rwamahe, Uganda National Meteorology Authority
- Fahad Saeed, Sustainable Development Policy Institute, Pakistan
- Henry Tapindwa Mucedzi, Practical Action, Zimbabwe
- Dinanath Bhandari, Practical Action Nepal
- Modathir Zaroug, University of Cape Town, South Africa

Evans Kituyi introduced the session, noting the challenge of scaling up initial efforts to provide more targeted climate services through pilot projects, including on climate-smart agriculture, in many parts of the developing world. He posed the main session question: what factors favour or hinder a smooth and sustainable transition from innovative pilots to large-scale adoption of climate information services in communities? He emphasised the importance for project champions to identify and integrate key success factors (KSFs) at the design stage for successful scaling up. He then introduced the keynote speakers.

Richard Ewbank outlined initiatives using climate information services (CIS) managed by Christian Aid and partner organisations (Centro Humboldt; Nochari, Movimiento Comunal; Nicaraguense) from the dry corridors of Eastern Nicaragua. These aim to empower communities to start measuring their own climate, using a range of methods from simple rain gauge systems to predict better planting dates, up to longer-term approaches involving regional climate modelling to develop five-year crop planning scenarios. He highlighted the need to work

¹⁸ Arun Shrestha, ICIMOD, Nepal was initially a keynote speaker but was not able to attend due to the earthquake in Nepal; the session extended their best wishes to him, his family and colleagues.

very closely with key institutions like the Meteorological Services; the need for multi-sectoral teams (community development staff, farmer groups, computer scientists and climate scientists); promoting and sharing results that work through a range of formats (e.g. radio, television and newsletters); and not assuming we know what information farmers want. Citizen science, which involves monitoring by local community members and can be much more than just using rain gauges, is a growing area to be connected back to the national system.

Maureen Ambani shared experiences from multi-sector and multi-stakeholder pilots on CIS in Africa, including work by CCAFS, and CARE International's focus on better use of seasonal forecasts. Regarding dissemination of climate information, she noted that in Kenya, this started with building the capacity of Kenya Meteorological Services to provide more useable information, and working with the UK Met Office to develop scenarios at the county level or lower, with a focus on the users. Intermediaries like NGOs and community leaders working on, for example, disaster risk reduction (DRR) and water, play a critical role in creating better linkages between stakeholders (communities, policy makers, donors, private sector), but require additional capacity development. Key lessons were (i) the importance of understanding users' needs - what climate information will actually inform their decisions, giving them a voice for widespread understanding and demand (upscale and outscale); (ii) the need for intermediaries to clarify different roles to enhance the effectiveness of CIS at reaching the local level; and (iii) the importance of institutional and budgetary support for integrating CIS into policy and adaptation planning.

Nicholas Maingi responded to the presentations by referring back to the key session question. He identified the following critical success factors: engagement in a participatory process, including all the key stakeholders; ensuring relevance to the local level (context specific); testing innovation under operational conditions; intermediaries or other stakeholders/project champions advocating for funding for financial support beyond the pilot stage by ensuring national departments are fully aware of the utility of CIS and can include this in budgetary allocations. He provided a brief introduction to the Global Framework for Climate Services (GFCS), which seeks to provide tailored weather and climate information at different scales that may be combined with non-meteorological data to create useful products.¹⁹

Session participants then broke away into small groups to discuss six themes:

- Design of pilot projects
- Role of intermediary actors
- Sustaining effective institutional arrangements
- Investing in capacity building
- Financing the transition and beyond
- Role of ICTs

Many lively discussions emerged, with a remarkable symmetry between tables discussing different themes. Some key cross-cutting points emerging from the group work and plenary discussion were:

Information gaps, boundary agents and capacity development: information gaps exist in terms of coverage of climate observation systems, and in terms of information reaching farmers in the appropriate forms and at the right time. A key entry point identified was to build the capacity of agricultural extension officers to understand the information provided by national meteorological services. There was broad agreement on the importance of widespread capacity

¹⁹ The GFCS works on four themes: agriculture and food security; water; health, and disaster risk reduction (DRR).

development for users and service providers. Concerning the role of intermediaries, many participants highlighted the need for a platform that integrates all stakeholders, to facilitate the strongly endorsed participatory and multistakeholder approach. Fiona Percy said that as a new resource for decision makers, if CIS is to add value, there is a need to understand the limitations of the information. This relates to the need to build adaptive capacity, which entails making decisions in an uncertain future.

Scaling up and sustainability: An emerging theme for sustainability was training local facilitators to build the capacity of the local communities, which in turn requires the resources or staff to build this capacity. Amanda Bourne commented that language barriers proved challenging to overcome, initially. Transitioning from pilots to larger interventions requires robust evidence, and a process on the part of donors to recognise when pilots are too small for CIS, as well as the need in general to reach more people. The lack of opportunities for donors to scale up excellent small-scale pilots to the national level was noted. Innovative financial approaches, such as making innovators / entrepreneurs an integral part of the project from the pilot stage, can play a key role in transitioning the pilots.

Combining local/indigenous knowledge and scientific climate information: Participants stressed that this is a two-way process, involving sending information downwards and back upwards from the ground. The contribution of western science might be better valued if it not only allowed farmers to manage risks but also highlighted opportunities to be harnessed from climate change. Local and scientific information could combine better through a collaborative research approach that brings about the synthesis of knowledge. This would also increase the quality of knowledge in the CIS value chain, which in turn would contribute to sustainability.

Climate information products and ICTs: There has been progress on developing climate products, as opposed to climate data, but many challenges remain. These include the risks of misinterpretation of the data products, which could result in significant maladaptation, as well as issues around access to the information and willingness to pay for it. For example, Bettina Koelle noted that the Climate Information Portal had been very useful in obtaining long-term forecasts to support community planning, but that it was necessary to critically interrogate such products and ensure good understanding of the nature of the underlying data, and thus of the limits of the information. The latter is linked to the perceived usefulness of the information. Poor and marginalised communities will need government subsidisation of the costs.

Lindsey Jones of ODI provided a brief wrap-up to the session, in which he highlighted a scoping study for Future Climate for Africa (FCFA) on the uptake of medium- to long-term (5 - 40 years or beyond) climate information, which found very little uptake of this information in government planning. He listed the following key constraints: the uncertainty associated with and lack of prioritization of longer-term climate information; pressing social, political and economic priorities; short-term (3-5 years) political cycles; and boundary agents being focused on seasonal forecasts and not longer-term climate information. He concluded by raising the issue of the ethics of promoting longer-term climate information: who is pushing this information, and how?

Parallel session 4: Gender and Vulnerable Groups

Facilitator

- Pia Treichel, Plan International

Session Presenters

- Sujan Piya, Practical Action, Nepal
- Lincoln Kariuki Mwaniki, United Disability Empowerment, Kenya
- Vositha Wijenayake, CAN South Asia
- Yordanos Tesfamariam, National Union of Eritrean Women (NUEW) / University of Regina, Eritrea
- Belinda Makadia, Africa Youth Initiative on Climate Change, Kenya Chapter

This session examined what it means to be vulnerable to climate change, and why some groups or individuals are more vulnerable than others: what contributes to their vulnerability, what causes it, and what exacerbates it. The session started with an interactive activity ‘The Game of Life’, which tangibly demonstrated that even interventions that are perceivably ‘perfectly neutral’ will play out within existing power structures, and thus such interventions can have adverse consequences for vulnerable groups if they are not aware and sensitive.

The six panel members then shared their experiences of working with vulnerable groups on CBA activities:

Pia Treichel reported on an action research project in the Philippines that sought to develop M&E indicators that were able to measure the effectiveness of adaptation from the perspectives of local communities, with a focus on vulnerable groups such as children (child-centred M&E).

Sujan Piya discussed efforts to strengthen the adaptive capacities of marginalised Dalit communities in Nepal, with a focus on livelihood diversification, and improving their access to markets, services, the private sector and formal institutions.

Lincoln Kariuki Mwaniki talked about the need to empower Persons with Disabilities (PwD), to recognise the value of their participation, and to remove the barriers to their participation.

Vositha Wijenayake noted that analyses suggest that only about 20% of National Adaptation Plan (NAP) processes have been gender sensitive. She described initiatives, including the Nairobi Work Plan, to bring community-based knowledge and mainstream gender sensitivity into the NAP process through multi-stakeholder participatory involvement. She described how civil society organisations can be a resource for bridging gaps in policy making, and M&E of adaptation policies and interventions.

Yordanos Tesfamariam described how farm women in Eritrea are key agricultural producers, however they are not considered to be primary farmers, and thus do not have equal access to resources provided by the Ministry of Agriculture. She suggested that gender equality in agricultural policies is necessary to ensure food security in Eritrea.

Belinda Makadia explained that children and young people make up the largest proportion of the African population, for whom climate change poses an urgent threat for which they are largely not responsible. Their lack of decision-making power often exacerbates their vulnerabilities. However, young people have much to offer in terms of climate change actions, and engaging with young people can enhance the sustainability of CBA activities.

The session then moved on to group discussions of how CBA interventions can be enhanced by the inclusion of vulnerable groups, and how the participation of vulnerable groups in CBA activities can be measured. Groups focussed upon three different categories of vulnerable groups: children and young people, women, and ethnic minorities. The groups suggested many reasons why vulnerable groups should participate in adaptation decision-making and action:

- Increases buy-in for actions, helping to ensure sustainability;
- Brings different perspectives;
- It is their right to be included;
- Understanding their adaptation needs will improve capacity to design appropriate interventions;
- Increases impact by reaching more of the local population. This is particularly relevant for children and young people, who often comprise more than 50% of the population in developing countries;
- We can capitalise on the energy and enthusiasm of young people;
- Early involvement of children and young people will help to internalise actions, which means less investment to engage them as adults;
- Children and young people will become adults in a changed climate – it's their future, they are tomorrow's leaders;
- Children and young people are often technologically savvy, and innovative;
- Ethnic minorities can bring indigenous knowledge and other unique skills.

The groups suggested how the participation of vulnerable groups in adaptation decision-making and action could be enhanced:

- Vulnerable groups must be engaged in project design. They can provide input into the design of specific indicators;
- Work with relevant ministries in country for their support and buy-in;
- Need to remember the feedback loop – report back to communities too;
- Utilise participatory M&E approaches that include good representation of vulnerable groups: spend time, ensure cultural understanding and culturally appropriate ways of engaging, use local languages and local frames of reference, qualitative and quantitative indicators, and tie in to existing monitoring systems;
- Need segregated data (gender, age, disability etc.) for design and implementation;
- Use social media to encourage/incentivise/include youth participation;
- Need accurate baseline to know breakdown of community and vulnerable groups within community before intervention begins.

The session then opened up into a group question and answer session. Some of the key questions that came up were:

- How can existing M&E systems be changed to include and account for the needs of the most vulnerable? How can we make this more than a 'tick-the-box' exercise?
- In many cases, gender sensitivity has been mainstreamed into national-level policies and programmes, but there is often a gap between policy and practice. How do we bridge the gap between policy and practice?
- How can we achieve sufficient inclusion of marginalised groups, given that their participation can be very expensive, and donors are interested in 'value for money'?
- What should be the role of men in empowering women?
- What are the obstacles for measuring participation of people with disabilities?
- How can we connect the knowledge systems of vulnerable people with the mainstream?

Some of the key session findings included:

- There is a need to secure prior and informed consent, and have a robust understanding of the local cultural context 'before you go in'. This includes awareness of gatekeepers, gender dynamics, power dynamics, language barriers, and accessibility of vulnerable groups;
- The marginalisation of vulnerable groups cannot be effectively tackled by isolated approaches. Rather, these are cross-cutting issues that need to be mainstreamed;
- We need to think about what local people value, and design solutions that are culturally relevant and locally acceptable;
- You cannot empower women by disempowering men. Many gender-related issues cannot be tackled by just involving women, men must also be part of the solution;
- Gender is not just about women, it is about men and women. If women are to benefit then it should not mean that men are disadvantaged in the process;
- It is not useful to say that children are more vulnerable. We should not compete, but rather look for inclusive CBA practices that reduce the vulnerabilities of all groups;
- In order to better include vulnerable groups in participatory decision-making processes, we need to focus on providing them with enabling technologies, and seek support from the private sector to achieve this;
- Focussing M&E upon vulnerable groups can facilitate organisational learning;
- Existing structures, such as community-based organisations and local gatekeepers, and community plans should be plugged into in order to understand existing community interests and needs. This can give 'value for money', rather than needing to hire expensive consultants;
- We must recognise that although experts can speak on behalf of vulnerable groups, they do not necessarily represent these people;
- Rather than dismantling existing M&E systems and creating new ones ('reinventing the wheel'), we need to focus on facilitating change to existing systems used by governments, donors and NGOs;
- We need to change the way that we look at vulnerable groups, and the language that we use to describe them. Rather than seeing them as victims, and people with hindrances, we need to see them as resources, and as agents of change.

Parallel 'out-of-the-box' session 5: Community Adaptation Indicators for Sustainable and Healthy Food Systems, Food Security and Nutrition

Facilitators

- Cristina Tirado von der Pahlen, Institute of Environment and Sustainability, University of California Los Angeles
- Benjamin DeRidder, FAO, Ghana / UNDP GEF-SGP

Session Details

Cristina Tirado von der Pahlen opened the session with an overview of why it is important to integrate nutrition into climate change adaptation. Climate change has an impact on food and nutrition security, and even though adaptation interventions can lead to increased productivity, nutrition outcomes are not necessarily met. There is therefore a need to start a dialogue and establish partnerships between the nutrition and the climate change communities to integrate nutrition outcomes into adaptation and climate-smart agricultural practices. The Minimum Dietary Diversity for Women (MDD-W) is an indicator for nutrition that is particularly relevant for climate adaptation in the agriculture and social protection sectors. The session focused on

discussing and identifying how these indicators could be included in CBA projects and initiatives. Specific session objectives included:

- Discussion around the importance of nutrition sensitive and gender responsive CBA and how community adaptation strategies, projects and initiatives in the agriculture and social protection fields can contribute to achieving nutrition indicators.
- Identifying what is needed to incorporate nutrition indicators such as the Minimum Dietary Diversity for Women (MDD-W) and associated budgets into community adaptation strategies, projects and initiatives.

Cristina Tirado von der Pahlen asked each panellist how they could include nutritional indicators in their own work. Benjamin DeRidder explained how there is significant potential for incorporating nutritional indicators into FAO's existing work including in community level DRR programs. Delfin Ganapin, Global Coordinator of UNDP-GEF-SGP, maintained that social protection should be the focus of CBA and that there is a need to understand what populations will need in the future and to examine enabling environments. He explained the importance of focusing on empowerment and the role of land and resource rights and of talking about indigenous peoples, women and children, as they are often the most vulnerable. Estibalitz Morras, IFAD, argued that it is important to find ways of measuring nutrition as what does not get measured does not exist to decision makers and therefore will not be addressed. Nutrition needs to be better integrated into adaptation programmes and the results should be better linked with nutrition outcomes. Finally, she maintained that if something isn't working it is important to find ways to demonstrate why.

Following the question and answer part of the session, participants self-selected into three breakout groups: two focused on agriculture and one on social protection. The groups were asked to answer three questions:

1. Do you find nutrition indicators, such as the Minimum Dietary Diversity for Women (MDD-W), or budgetary allocations to improve nutrition in adaptation plans, are relevant for community adaptation?
2. How can community adaptation strategies, projects and initiatives in the social protection field contribute to achieving nutrition goals such as MDD-W or other nutrition indicators?
3. What do you need to incorporate nutrition indicators such as MDD-W into community adaptation strategies, projects, initiatives in the agriculture, social protection and DRR/disaster risk management (DRM) sectors and to allocate a budget for this?

Key results from the discussion session included:

Relevance of nutrition indicators for community adaptation: There was consensus that nutrition indicators could be useful in many adaptation initiatives related to agriculture, social protection, health, disaster risk reduction, disaster risk management and other fields. Historically, the inequality in nutrition existing in many developing countries has been reinforced through agricultural production systems and we should aim to use indicators to address this. For example, in Nigeria food production focused on highly nutritive crops for local consumption before the war while after the war production shifted to products for export with less nutrient value. Including nutrition indicators in adaptation strategies related to agricultural production systems and technologies, fisheries, aquaculture, forestry etc. can contribute to resilience. The fact that community adaptation needs consider agricultural production, land management, culture and nutrition was stressed. Considering dietary diversity indicators is an ambitious but necessary goal at community, local and national levels.

Integration of nutrition indicators into agriculture-related community climate change adaptation strategies, projects and initiatives: Participants shared examples from different

communities adapting to diverse climate impacts in Peru, Uganda, Gambia and the Philippines. In Peru traditional/wild potato varieties tend to be better adapted to climate change and some initiatives are trying to integrate modern and traditional farming methods. Climate change has also presented an opportunity, allowing farmers to diversify their crops with quinoa and grow crops higher up than before. Climate change affects aflatoxin occurrence in many developing country crops. Aflatoxins compromise food safety and may affect children's growth. In Uganda, differing post-harvest management practices have been found to affect food quality, such as the presence of aflatoxins. This can be avoided with good agricultural practices. In Gambia, tensions exist due to an imbalance between local consumption and cultivation for exports. Long-term planning is important and the examination of trade-offs such as lower yields in return for more forested land. In relation to the integration of nutrition indicators into adaptation planning, participants agreed that engagement with government was necessary to link agriculture with nutrition and to develop solid policies. Local level capacity building is fundamental, including providing education on nutrition and economic empowerment to enhance production systems. Finally, it was suggested that nutrition indicators should be incorporated into National Adaptation Programme of Actions (NAPAs) and NAPs.

Integration of nutrition indicators in social protection related community climate change adaptation: The last group discussed nutritional indicators in the context of social protection and looked at how nutrition can be addressed within the context of adaptation and sustainable development. The discussion initially focused on diversifying crops. In the Philippines, for example, different rice varieties have different purposes and it is important to search for varieties that can maximize nutrition. Community-owned seed systems are nutrition-sensitive and good food security and nutrition may depend on access to seeds. Seed diversity could be an indicator of nutrition. However, this can be a challenge with crops like maize, which is relatively new to the African continent. The importance of finding a balance between feeding one's family and deriving an income from growing crops was raised. In Tanzania, increased incidence of malnutrition occurred due to a thriving market despite productivity increases. The importance of strengthening indigenous knowledge and bio-cultural heritage as a foundation on which to bring in modern science was also raised. For example, in Northern Kenya, women are preserving vegetables for consumption during the dry season. Participants suggested that access to water, sanitation and hygiene (WASH) is integral to ensuring proper nutrition, and that WASH indicators should therefore be introduced into projects. The importance of addressing land and resource rights was also raised by one participant who maintained that without these two things food cannot be grown. Finally, the issue of displacement and resettlement was discussed.

Towards the session end, two Maasai leaders explained how nutrition is being addressed in projects in their communities. They explained that 75% of the diseases treated in the health centres are related to malnutrition. The community is trying to address these challenges through various initiatives. It suffers water shortages and there is a project to maximize water available by growing food in boxes. There is also a programme to provide nutritional education to community health workers. The impacts of climate change on health, particularly for women, children and the elderly, have become obvious through community outreach meetings. Many medicinal plants are grown in their village and these may be affected by climate change.

Closing the session, the facilitators said that the outcomes would be incorporated into a report including guidance on how to integrate nutrition indicators into community adaptation projects and programmes.

Plenary ‘out-of-the-box’ session 6: Learning when Things Don’t go According to Plan

Facilitator

- Bettina Koelle, Red Cross / Red Crescent Climate Centre

Session Details

The CBA conference ‘out-of-the-box’ sessions continue to gain popularity and have certainly cemented themselves as a powerful tool for this community of practice, to reflect and learn from experience. This session, led by Bettina Koelle, concluded the first day of conference and focused on learning from failure, which is arguably more important than sharing and learning from success.

The instructions were different, “sit next to someone you haven’t spoken to yet”. And immediately there was a hive of activity. The idea was simple but eloquently powerful. By forcing session participants to sit next to people they did not know, they would be able to learn and reflect more effectively! How was this going to be achieved?

To achieve the learning and reflection outcomes, participants engaged in a fun and very exciting ice-breaker. “Close your eyes, look down at the table and then, on instruction, look up and either look straight ahead, to the left or to the right.” The idea being that you should make eye contact with someone else, and if your eyes lock shout “jeepers!”

A second warm-up game was played. With the main point of this session on ‘real sharing’, this exercise was very intimate and required specifics from participants’ professional lives to be omitted. Each participant contributed a personal story to their table. This story often included a situation (a failure) and then an outcome (a success) relating to what they had learnt. Others around the table whistled (if they had had similar experiences to those in the stories) and stomped their feet on the floor (if they thought what was shared was important).

In the final stages of the session, one representative from each table was elected to share a story from their table. The stories reflected a wide-range of anxieties and failures. This was the most powerful part of the session. Stories were shared openly but anonymously, and most plenary participants found they could relate to one or more of the stories being discussed. This highlighted the commonalities we all face as a community of practice and the importance of dialogue to ease these anxieties, failures and stresses.

This session was a first in recent CBA history. It was very powerful and deeply self-reflective. The sentiment was reflected quite well by this statement “when things don’t go according to plan there is an opportunity”, and reflection can help to surface these opportunities. So what can you do after the noise of CBA9 dies down? Bettina called on participants to set aside time each day to reflect on their practices for no more than a few minutes.

Plenary session 7: Enhancing CBA through future agreements – the Kenyan perspective

Facilitator

- Charles Mutai, State Department of Environment, Kenya

Session Presenters

- Keynote speaker: Stephen King'uyu, Climate Change Secretariat, Ministry of Environment and Natural Resources
- Godfrey Wahungu, National Environment Management Authority (NEMA)
- Irene Karani, LTS Africa, Kenya
- Elvin Nyukuri, African Centre for Technology Studies (ACTS)
- Carolyne Manei, University of Nairobi

A variety of state and non-state actors from Kenya spoke in this session. The high level panel focused on the state of financing, adaptation and mitigation of climate change in Kenya. The panel observed the emphasis and biases that exist within the UN climate regime, notably continuous emphasis on mitigation financing and less on adaptation. Because of this bias, vulnerable populations in developing countries have continued to face climate change risks on a noticeable scale, and their vulnerability to the threats of climate change has been exacerbated. A lack of implemented adaptation interventions has intensified this problem. Inadequate finance for M&E means that quantifying the benefits of an adaptation intervention, and hence implementing further adaptation projects, loses out to its more easily quantifiable cousin: mitigation. This highlights the differences between mitigation and adaptation: adaptation is highly nuanced and mitigation less so. Throughout his speech, Charles Mutai emphasised the clear lack of finance available for adaptation within Kenya and other vulnerable developing countries. This lack of adaptation finance translates into minimal, if any, adaptation interventions being implemented on the ground, thus exacerbating existing vulnerabilities.

While mitigation is the most favoured approach to reducing climate change vulnerability levels, the international community should remember that adaptation is pivotal in the 'here and now' despite the fact that it has its own challenges. Analysis of the National Climate Change Action Plan (NCCAP) indicates that 96% of all financial inflows were directed towards mitigation activities with only 4% allocated for adaptation. Two key learning outcomes from Kenya's NAP process were:

- Finance is a barrier to national adaptation planning.
- Mainstreaming climate issues into national policies poses a challenge for developing countries.

Stephen King'uyu asserted that adaptation plans are poorly integrated, largely because external donors, specifically bilaterals and multilaterals, drive the agenda. He used the example of food security and adaptation to demonstrate this point. He suggested that NAPs might be able to reverse this trend but that consideration should be given to how to target and facilitate involvement of all funding sources. In this regard the example of the 2003 Maputo Declaration was helpful.

There are a number of capacity gaps within Kenya. Firstly, engaging the private sector in adaptation action and financing. To remedy this, state actors need to fully understand why buy-in from the private sector for adaptation has been lacking. Secondly, the lack of an effective early warning system is required. This would collect much-needed data and inform the

development of suitable indicators. Key lessons from Kenya and potential ways forward include the following:

- Get the necessary buy-in from all levels.
- Target the real / local community needs.
- Address the data gap.
- Integrate local / indigenous knowledge.
- Emphasise inclusive decision making.
- Allocate resources.

Stephen emphasised that 2015 represents a once in a generation opportunity for developing countries to redress the imbalance of financial flows for adaptation, and there are a number of opportunities for this to occur. Firstly in September at the Sustainable Development summit, and later in December at COP21, in Paris. In both instances developing countries, which are most vulnerable to climate change, have a tangible opportunity to secure adequate adaptation finance.

Reiterating Stephen's comments, Godfrey Wahungu emphasised the need to close the gap that exists between mitigation and adaptation needs, stressing that the ultimate aim of the UNFCCC and donors should be to develop a balanced response to mitigation and adaptation.

The role of technology, youth and the private sector in Kenya was then addressed. Research and technology are key for mitigation strategies and interventions. Investing in research initiatives/projects/pilots, and building technology infrastructure is fundamental if the country is to achieve a low-carbon resilient economy. Collaborative research between government research institutions, the private sector and civil society organizations is required. For example, academic institutions and technical colleges provide the ideal context for scholarly research and inquiry, linking science and other disciplines investing in climate change. CBA9 has made an effort to convene a parallel conference to bring youth voices into the CBA arena, a group that would push the technology agenda forward.

The private sector on the other hand continues to provide support for advancing research and development of technologies but at a minimal scale. Kenya has a legislative framework for public-private partnerships, which provides a clear indication of possible avenues for engaging communities in advancing research and technology. The need to design tools and technologies that are context relevant is evident. Some of the challenges that hinder the rapid uptake of these technologies are the cost, which makes diffusion hard. The impacts of tax breaks and subsidies also continues to be felt at the national level. In addition, many technological products and innovations never successfully make it to the stage of commercialization in Kenya for various reasons, such as the rift between the innovator and the institution in terms of who owns the patent. Regulations impede production, and communities hardly know who to work with on their innovative ideas. There are also incidences of new technology failure because of cultural practices, particularly cooking practices.

Following with the theme of communities and indigenous groups, the discussion then changed trajectory focusing more closely on indigenous knowledge and technology and the challenges these face with acceptance and uptake. Carolyn Manei reminded participants that the migration of children from rural to urban areas is a serious threat to the propagation of indigenous knowledge within communities. New opportunities are arising through the innovative use of ICTs, however, in this case radios, which are being used to transmit local knowledge across the country and into cities where many of the rural young find themselves.

Irene Karani reiterated the issue raised by Charles and Godfrey regarding the inadequacies of adaptation finance but also referred to under-financed M&E. In order to enhance the credibility of adaptation interventions in Kenya she has been aggressively pursuing Monitoring, Reporting and Verification (MRV)+ activities, where the + represents the synergies between adaptation and mitigation. The key lesson from this approach is that it is absolutely essential to collect data from both the bottom and the top. The importance of bottom data collection was emphasised, where communities have developed their own indicators which need to be fully captured.

A number of questions were then asked by participants attending the session. Responding to a question about how important civil society involvement in these processes is, Stephen comprehensively explained how within Kenya there is one country for all areas of society. To move forward we must work together and not fight each other. Civil society organisations, for instance, know when to partner with and criticise the government, and they have a wealth of experience that the government may lack. This also applies to the private sector.

Responding to a query about the role of devolution in advancing CBA, Stephen stated that devolution needs to be valued and respected and that effective rapport between all of the institutions involved in devolution is needed. Elvin Nyukuri added that whereas devolution is still at the nascent stage, there is tangible evidence that government structures provide a good opportunity for CBA in this context. Voices that are barely represented at the UNFCCC negotiations are beginning to emerge through the process of devolution.

Increasing the prominence of CBA and indigenous knowledge in the text to be agreed at COP21 will be important. Stephen reassured participants that as the parties negotiate the text, early indications suggest that it will contain lots of references to CBA. This provides a window of opportunity for improved ways to measure indigenous knowledge and integrate it into low and high level planning. Irene commented that at the national level there is a steering committee of indigenous people to help capture their concerns and voices, and Stephen noted that new documentation is required to address the gap between science and indigenous knowledge.

Parallel session 8: Harnessing Climatic Variability to Enhance Adaptation in the Drylands

Facilitator

- Caroline King-Okumu, IIED

Session Presenters

- Keynote speaker: Saverio Krätli, Consultant, IIED
- Nitya Sambamurti Ghotge, ANTHRA, India
- Yanbo Li, Yunnan University, China
- Kirsty Wilson, LTS International UK
- Rajeswari Raina, NISTADS, India

This session explored how climate variability in the drylands can be harnessed to enhance adaptation and productivity. This requires a departure from dominant narratives of development and the 'climate proofing' of dryland agriculture, where climate variability is usually seen as a threat to securing food production and livelihoods. This dominant approach is premised on the need to make the environment more stable and uniform (for example through irrigation). The problem with this is that efforts to induce stability in dryland environments that are naturally prone to instability have often ended up reducing resilience rather than increasing

it. Adapting to variability in the drylands, on the other hand, involves finding alternative opportunities that may not be possible in more temperate and stable environments.

Rethinking adaptation to variability in the drylands has implications for development policies and programmes, as well as their associated monitoring and evaluation frameworks. This is because many of the tools and approaches currently used for climate resilient planning and M&E have been designed for contexts where stability and regularity can be assumed and where most or all of the value produced by farmers is captured in monetary transactions. Using such tools and measures in the drylands overlooks unpredictable environmental conditions, informal economies and non-monetized transactions, all of which play a critical role in dryland production systems. Unsurprisingly, desired results tend not to be achieved and measured through such approaches.

A keynote presentation by Saverio Krätli illustrated the need to understand the structural significance of variability in the drylands. Saverio reflected on the tendency for rainfall to be unevenly and unpredictably distributed across dryland areas – falling in concentrated bursts and unpredictable patterns over time and space. At the landscape level, there may be sufficient water to support human populations and their livestock, so the problem is not necessarily one of scarcity, but of distribution and spatial scale.

As long as pastoralists are able to migrate across the landscape to find water and pasture, there is no need for the rainfall to be spread evenly. In fact, it is better to have water resources and vegetation concentrated in pockets of the landscape where animals can drink and graze. But if the dryland landscape is sub-divided, or other less mobile production systems are introduced within it, a false sense of water scarcity will be introduced. Efforts to ‘solve’ this water scarcity ‘problem’ in one place e.g. by transferring in irrigation water from other areas will likely exacerbate it elsewhere, and may increase the effect of scarcity across the landscape as a whole. The result is similar to the misguided reaction of a driver who feels his car skidding, and so hits the brakes -thereby causing a disaster.

Fodder plants are more nutritious at certain stages of development than they are at others. For example, a patch of rangeland will have more biomass but be poorer in nutrients after germination than it was before. Extra rainfall on young grass at the end of the rainy season causing germination may create more biomass, but decrease its nutritive value for livestock rather than increasing it. If rains fell at uniform intervals and were distributed evenly across the landscape, all grass would develop beyond the stage of optimal nutritive value everywhere at the same time. However, because the rain falls in uneven spatial and temporal patterns, herders can select the grasses that are at the most nutritive stage for their livestock, and then move to find others reaching the same stage at different times.

Saverio returned to the automotive analogy to point out that one vehicle is not the same as another because they are often designed for specialized contexts and uses. Just as we would not measure the performance of a farm truck and a racing car using the same parameters, so neither should we measure the attributes and productivity of a drought-tolerant dryland cow in the same way that we measure those of a Friesian cow. But strangely, just such a one-size-fits-all approach tends to be applied in rural development projects for the drylands. These tend to measure progress using agricultural production statistics that are collected using standards and methods developed in temperate areas. Participants in the session observed that the inherent variability in the drylands includes not only climatic variability, but also other forms of diversity, unpredictability and non-linearity affecting human populations and social phenomena, as well as natural species. The need to understand and adapt to this variability is therefore more immediate and fundamental to the dryland experience than the additional challenges that are emerging with ongoing climate change.

To further demonstrate how resilience or enhanced adaptive capacity is not simply a case of 'coping with disturbance', but actually gaining from it, evidence from China, India, Kenya and the Sahel was presented and discussed by selected panellists and members of the audience. These interventions illustrated how pastoral and dryland crop farmers in Africa and Asia have created strategies and institutions that, when unhindered, can turn unpredictable variability into a resource that enhances productivity, rather than suffering it as a problem. First, Nitya Sambamurti Ghotge shared the findings of a case study focusing on the experience of the Maldhari pastoralists from Gujarat, India, who migrated to escape a drought in 1972. They left their state and legal identity behind, to find pasture, fodder and a new livelihood in a neighbouring state that had also suffered in the drought. In their new informal situation, they managed to produce enough milk to create a surplus that could be turned into sweets, generating additional income through the informal market. Picking up on the themes of resilience, independence and innovation highlighted by Nitya, session participants identified other examples of autonomous adaptation by dryland communities, including strengthening of the customary institutions for rangeland management in Isiolo County, Kenya.

Yanbo Li then discussed experiences from China's drylands. She raised two questions: How to estimate productivity of agricultural system in drylands, and what is the proper scale of management of drylands? We heard again that farming is more successful from the perspective of output per hectare of land, but pastoralism is more efficient at using and conserving water, a vital feature for sustainable land use practice in drylands. Landscape-level management is necessary to manage rangelands. Pastoralists whose land had been subdivided and distributed amongst households decided to re-join their lands together and remove fences to achieve the scale of land areas that would give them flexibility to adapt to variability. Commentary on the importance of the scale of land-holdings, tenure and government interventions affecting them that featured in this presentation stimulated discussion amongst the session participants of experiences in Kenya, and other countries where dryland communities have faced legal constraints to adaptation. Controversies surrounding the definition and assessment of productivity that were described in this presentation also stimulated discussion amongst the session participants.

The challenges of M&E for a project led by Farm Africa and Mercy Corps for DFID's Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) programme were then discussed by Kirsty Wilson. The project aims to increase the scale of investments in drylands. Challenges in outlining an M&E approach included the diversity of target groups (including rural pastoralists, settled farmers and ex-pastoralist migrants settled in peri-urban areas) as well as the rangeland dynamics and variability, and pastoralists' timeframes for managing risk, which do not match project timeframes. Traditional measures of livelihood project impacts – such as income and assets would not yield useful data given that dryland communities use stocking, de-stocking and other types of trade to respond to the spatial and temporal rainfall variability in their areas. A resilience index based on tracking rainfall levels and Normalized Difference Vegetation Index (NDVI) using remotely sensed data and the assessment of impacts through subjective measures of 'future confidence' were therefore developed. Session participants identified experiences from participatory monitoring in the Kenyan rangelands.

Rajeswari Raina used illustrations of mixed cropping from Telangana state in India and Kitui County in Kenya, to argue that there are major differences in the ways in which dryland farming communities understand variability differently to the State (and its public sector research and administration of agriculture). While farming communities understand the diversity and variability of production systems, and design their production systems accordingly, the State often designs schemes to overcome variability and homogenize diversity. This can be understood as 'agriculture versus the environment'. However, by learning with and helping dryland people to maximise their productivity and resilience, we should rather acknowledge the

essential variability and diversity of the drylands, and begin to see ‘agriculture in the environment’.

Parallel session 9: Government Monitoring and Evaluation of CBA

Facilitators

- Nanki Kaur , International Institute for Environment and Development
- Saskia Daggett, Africa Climate Change Resilience Alliance, OXFAM

Session Details

The session explored the role of government monitoring and evaluation (M&E) systems in supporting investment in climate change adaptation (CCA) by facilitating in-depth discussions with representatives from several countries. The facilitators noted that national governments are beginning to implement CCA and mainstream it into national development plans. National M&E systems not only help shape CCA strategies, but also allow governments and other actors to track the effectiveness of adaptation investments. Ensuring the effectiveness of investment is particularly important in the context of CCA, since funds remain limited and, in some cases, difficult to access. To this end, session participants sought to better understand how government M&E systems can shape and track investment in CCA.

The session began with short pitches from representatives from the governments of Nepal, Bangladesh, Zimbabwe, Mozambique and Sudan. Each speaker described the M&E systems used by their national governments. They then invited participants to join them in small breakout groups to discuss challenges, opportunities and ways forward. The group discussions were organized around three key questions:

- 1) Which government systems are used to monitor and evaluate investment in climate change adaptation?
- 2) What are the opportunities and challenges provided by the use of these systems?
- 3) How do we strengthen opportunities and address challenges? What are some solutions and ways forward?

The group responses to the discussion questions are below:

Which government systems are used to monitor and evaluate investment in climate change adaptation?

Participants reported that national M&E frameworks are often project-based and attempt to integrate adaptation into development planning. They tend to use both impact (medium-term) and result (long-term) indicators. Some government systems use participatory monitoring to feed local indicators through the provincial level to the national level, and many rely on government-managed data collection agencies (e.g. meteorological departments) to gather information.

What are the challenges and opportunities provided by the use of these systems?

Some of the key challenges related to the non-existence, incompleteness and/or low quality of data available to governments in monitoring and evaluating adaptation efforts. Participants also identified the lack of information about community needs and the absence of long-term climate impact modelling as challenges to effective M&E. Insufficient international and national

financing for M&E, as well a lack of technical capacity, also inhibits the implementation of effective M&E. Participants identified the lack of coherent national M&E frameworks, inadequate standards for monitoring and assessment, and coordination gaps between different actors as key challenges. Several groups discussed political constraints – such as corruption and a lack of political will – as well as the difficulty of aligning stakeholder priorities as barriers to improving M&E for adaptation.

Opportunities identified by the discussion groups included opportunities for making data more widely available, learning lessons from completed adaptation activities and improving collaboration between stakeholders at different levels. Participants also noted that the ongoing development of National Adaptation Plans creates opportunities to revise M&E processes in a way that makes the business case for private sector involvement and which mainstreams M&E for adaptation in development agendas.

What are some solutions and ways forward?

Participants proposed a number of ways to overcome existing challenges to national systems for monitoring and evaluating adaptation. Participants called for monitoring systems that are hybrid (i.e. which use multiple methods and incorporate the interests of multiple actors) and developed with input from actors at all levels. Several groups suggested creating national fora in which governments, NGOs and community-level groups can share information and collaborate on monitoring activities. The goal of these fora would be to elevate the visibility of community-developed indicators, allow local M&E indicators to be merged with national evaluative frameworks and enable actors to set priorities for climate change adaptation collectively and in the interests of vulnerable groups. Participants also suggested making data available to local-level actors and simplifying data collection techniques. M&E strategies should also incorporate issues beyond adaptation (for example, disaster risk reduction) and identify no-regret initiatives. Groups called for improved access to the Green Climate Fund, more effective use of alternative finance streams (such as microfinance) and better tracking of national investments in adaptation. Participants identified capacity building at all levels as an important solution, and, specifically, recommended efforts to strengthen the role of the media in M&E in order to hold governments accountable and to raise public awareness of adaptation efforts. In general, participants stressed that governments should improve long-term planning for adaptation and development, and that international climate change policy should require governments and other stakeholders to develop more coherent adaptation frameworks and improve systems for monitoring and evaluating adaptation efforts.

Parallel ‘out-of-the-box’ session 10: Principles and radical options for adaptation – issues for assessing effectiveness

Facilitators

- Raja Jarrah, Southern Voices on Adaptation
- Simon Anderson, International Institute for Environment and Development (IIED)
- Herbert Mwalukomo, Southern Voices on Adaptation

Session Details

This engaging session was attended by over 100 participants. Simon Anderson opened the session with a presentation on the basics of radical adaptation, which he said is about climate and development and thinking ahead. He said that what we are doing at the moment is largely about incremental adaptation, which tends to be at a smaller scale and to address current

climate variability. This is important, but not enough. Radical adaptation puts emphasis on the end goal. Some examples of radical adaptation from the current work that IIED is doing relate to managing internal migration, social protection systems and the climate finance landscape.

Participants asked several questions after the concept of radical adaptation was introduced. The first was on how radical adaptation differs from adaptation. The answer was that radical adaptation concentrates on the ends rather than the means and that it is based on the principles of environmental justice and getting help to those who need it. When asked whether or not radical adaptation is reactive or proactive, Simon replied that it is more about preventing climate-induced poverty tipping points. One participant responded that radical action is not always welcomed by local people.

A presentation by Herbert Mwalukomo followed, which introduced the Joint Principles for Adaptation (JPA).²⁰ These are as follows: (1) the planning process is participatory and inclusive, (2) public funds for adaptation are utilised efficiently and managed transparently and with integrity, (3) all government sectors and levels of administration have defined responsibilities and appropriate resources to fulfil them, (4) local adaptation plans developed through community-based approaches are a core element, (5) the resilience of women and men who are most vulnerable to climate change is built, (6) there is a balance between the investment of physical infrastructure and the building of skills and capacities and (7) plans respond to evidence of current and future climate change impacts. This led into a breakout discussion at each table guided by a facilitator who posed three questions to each group:

1. What needs to be done to make adaptation far-reaching and far-sighted?
2. How does this go beyond usual adaptation practice?
3. How do the attributes identified by our group challenge the ideas of good adaptation practice (as represented by the JPA)?

After over 30 minutes of breakout discussions the groups then re-joined for a plenary style discussion to report back. The discussion covered all three questions simultaneously. A range of suggestions for making adaptation more far-reaching and more far-sighted were suggested. Several suggestions covered the need for more holistic approaches to addressing climate change. One group recommended working at the landscape or ecosystem level and breaking down the silos of disaster risk reduction, climate change adaptation, humanitarian assistance and development. Another suggested the need for more flexible policies and plans to allow for uncertain futures and to consider long-term planning. One group maintained that we need to go beyond talking about adaptation and towards talking about how to make whatever else we are doing climate adaptive. Another group suggested that all adaptation should have mitigation co-benefits and visa-versa. Several responses focused on the need to address the underlying conditions of vulnerability. It was suggested, for example, that radical adaptation should be political and that power shifts will be needed to ensure inclusive decision-making and to avoid undemocratic decisions. Communities should be involved in monitoring and evaluation, which should lead to empowerment. In extreme situations, culture may need to be challenged. Another group suggested that it's all about sustainable development in the end while another said that the 'true costs' of economic growth must be incorporated. Another group suggested that religion has a role in radical adaptation, though there was insufficient time to explore this further. Finally, practical suggestions for undertaking radical adaptation were received, including the need for more financial resources and enhanced institutional capacity.

Several groups agreed that by being proactive, undertaking long-term planning and avoiding *ad-hoc* interventions, radical adaptation is going beyond 'business as usual' adaptation. Several

²⁰ The Joint Principles for Adaptation is a work in progress. They will be updated during 2015 and launched at COP21 in Paris. The latest version is available at www.southernvoices.net

groups suggested that basing radical adaptation on an understanding of political economy could provide a means through which it could go beyond usual adaptation practice. Another group suggested that radical adaptation should be risk-protected development. This is another way in which it could transcend incremental adaptation. Finally, one group argued that the most radical adaptation will also have the most winners and losers and we will need to understand who they are and make provisions to address inequities.

A number of comments were received on the Joint Principles for Adaptation, including some gaps identified and potential additional principles to be included. One group asked where the multi-generational accountability for implementation was in the principles. Another suggested that the JPA only address climate change and need to be broader and include other players from different sectors. Another group argued that the JPA assume that there is good government but if our plans are to be implemented then the government may not be an ally. Another group recommended adding criteria to give communities power to form movements. Another group suggested that the JPA do not sufficiently consider political economy issues and factors underlying vulnerability. Another group suggested that they are guidelines for good adaptation practice, but not radical adaptation.

Parallel session 11: Monitoring and scaling up Climate-Smart Agriculture practices for enhanced Food Security and CBA

Facilitators

- James Kinyangi, CCAFS
- Estibalitz Morras, IFAD

Session Presenters

- Christopher Henderson, Practical Action
- Lucia Zirigiza, IFAD, Rwanda
- Vijayasankaran Perumpilavil Sivarama, Samaj Pragati Sahayog, India
- Pham Vu Bang, IFAD
- John Mbaria, Nation Media Group Ltd, Kenya
- Caitlin Corner-Dolloff, International Center for Tropical Agriculture (CIAT)

Estibalitz Morras started this session on the connections between CBA, climate change, agriculture, and food security, by highlighting the breadth and depth of experience that the panellist came from. This spanned three continents, seven countries, and multiple disciplines and approaches to community-based agricultural adaptation to climate change. The session offered an exciting opportunity for these specialists to share their skills and experiences with each other and with the audience.

The first presenter, Christopher Henderson, was tasked with addressing the question: 'How can we ensure that Climate-Smart Agriculture (CSA) is relevant to adaptation, especially community-based adaptation (CBA) and marginalized and smallholder farmers?' He began by highlighting the importance of CSA as a tool for achieving urgently-needed adaptation in agriculture - despite contention over the term. The new Global Alliance on CSA, a global network around CSA offers an important opportunity to mainstream community- and environment-based agricultural adaptation, particularly agro-ecological approaches. Agroecology optimizes the way farmers use both their natural and human capital, and is a key way that CSA and CBA can come together. Chris also discussed Practical Action's approach to measuring the success of CSA, which involves measuring: the capacity people have to experiment; the knowledge they

have access to; the amount of choice they have for the technology they use based on their traditions and experiences. This, Chris says, is the key to adaptation.

Lucia Zirigiza addressed the question: ‘How can we engage local communities in planning and monitoring climate risks?’ The IFAD projects that Lucia works on in Rwanda called ‘Post-Harvest and Agribusiness Support Project (PASP)’, focuses on land husbandry, irrigation, and post-harvest activities. She described how post-harvest drying facilities acted as CSA infrastructure. These drying facilities are important adaptations because they can prevent the loss of produce during (increasingly difficult to predict) rains. She also pointed out that the Rwandan national strategy on climate change contains sector-wide indicators and is implemented through consultations with communities. Most Rwandan farmers are organized into cooperatives, and planners approach them and work with grassroots groups and local government to develop adaptations. Finally, she spoke about their climate information initiatives, which communicate seasonal and weekly forecasts in local dialects.

Pham Vu Bang addressed the question: ‘How can CBA be a part of the solution to climate change adaptation in agriculture?’ He focused on key lessons learned from his experiences working in Vietnam on IFAD’s Mekong Delta Project. First, referencing the stories CBA9 participants had been hearing about learning from failures in communities, Pham Vu Bang spoke about the importance of respecting local knowledge in projects and letting communities decide how best to adapt to the challenges they are facing. He explained how investment decisions are made based on those conversations. Second, he described the work IFAD is doing for co-financing community-led adaptation projects. Finally, he highlighted that CBA and CSA can be used as a means for promoting peer-to-peer learning in and between communities.

John Mbaria addressed the question: ‘How has modernization affected traditional patterns of resource use and community resilience?’ Based on his experience as a farmer, John began by reminding attendees that many practices promoted by CSA have been used by farmers in Africa traditionally for many years. He described how ‘modernity,’ which he defined as the shift from collective to individual priorities, and towards Western philosophies and management systems, has created economic and cultural shifts that have reduced the resilience of pastoralists in Kenya. One example of this was that Western education systems portrayed traditional practices as outdated, and inspired a cultural shift away from them. He recommended the documentation and sharing of local knowledge and the integration of appropriate long-held community resource-use norms and practices into local government and national policy processes.

Vijayasankaran Perumpilavil Sivarama (who goes by ‘Vijay’ for short) addressed the question: ‘What are the opportunities of CSA in South Asia?’ He emphasized the importance of making agriculture resilient to extreme events: his organization focuses on severe droughts and intense rainfall. To address both issues through one intervention, Vijay’s organization builds earthen dams that store water from excess rainfall to be used during water shortages. But Vijay stressed that for any intervention on water at the community scale to succeed, it must look at the issue comprehensively, from the ecological (such as seeds and soil) to the political and economic (such as farmers’ access to credit) angles. The role of the state is critical, and a reform of public investment in India’s agricultural economy is needed to make the country climate-smart.

The final panellist, Caitlin Corner-Dolloff built on presentations from the first five presenters, focusing on the question: ‘What frameworks can be used to ensure national priority-setting for investment in CSA?’ She reiterated Vijay’s call for massive investments in CSA at the local, national and global scale, and the importance of integrating the voices of impacted people into planning. She shared four lessons from CIAT’s work in Guatemala. First, it is useful to develop a baseline of CSA practices that farmers are already doing. Second, CSA is highly context-specific and it is important to use indicators that are developed by stakeholders but that are linked to the three pillars of CSA (adaptation, poverty alleviation, and mitigation). Third, rapid

implementation and rapid feedback mechanisms are required. Finally, it is important to link CSA frameworks with national adaptation planning and broader initiatives.

During the question period, participants asked questions and made comments on topics ranging from the role of mitigation in CSA, the overlap between CSA and CBA, the importance of information and extension services. One of the most interesting conversations was about the role of public investment that Vijay brought up in his presentation. A participant asked him to expand on what was 'climate unsmart' about prior public investments in India, and what he would like to see in the future as an alternative. Vijay responded that public investment was drastically reformed during the Green Revolution in India, and that to be climate-smart in the future it must take into consideration the specific needs of vulnerable farmers in local states and communities. Another conversation was sparked between a participant and Caitlin Corner-Dolloff about the mitigation co-benefits of CSA. Corner-Dolloff responded that thinking about benefits and trade-offs in the context of multiple adaptation options can make it easier to decide between options.

In conclusion, the session participants emphasized the need to up-scale CSA practices that are working and to identify the barriers to adoption of CSA technologies and practices. The need to document and synthesize the experiences shared by participants was also highlighted as a way forward.

Parallel session 12: Role of the Private Sector in Enhancing CBA

Facilitator

- Colin McQuistan, Practical Action

Session Presenters

- Keynote speaker: Suresh Patel, Kenya Private Sector Alliance
- Serah Nderitu, Climate Innovation Centre - Kenya
- Alicia Rondón-Krummheuer, Frankfurt School of Finance & Management
- Madan P. Pariyar, International Development Enterprises (iDE), Nepal
- Galiné Yanon, University Cheikh Anta Diop, Senegal
- Activity facilitator: Brian Harding, SNV

Colin McQuistan opened the session urging participants to look for connections between communities and the private sector. Suresh Patel then explained how Kenya is expected to lose USD 1.2 billion by 2030 due to climate change impacts, and how business opportunities can help with filling this gap or avoiding losses. International partners can assist in the following ways:

- Adaptation assistance should not be given based on a GDP or per capita income of the country. Instead consider developing a weighted index for adaptation to reflect different adaptation vulnerabilities.
- Capacity building is needed for the private sector in Africa to participate in appreciable numbers at COPs.
- Financial support for establishing the Pan Africa Private Sector Alliance for Climate Change (PAPSACC).

Serah Nderitu gave a brief presentation on the Climate Innovation Centre in Kenya, some of the technologies it has developed, the support it gives to small and medium sized enterprises (SMEs) and how it measures success. The Centre aims to make adaptation businesses bankable.

Pilots include developing water efficient technologies, solar irrigation pumps, drip irrigation, drought-resilient rice varieties and hydroponics technology. The Centre supports SMEs by providing seed funding, access to facilities, information, mentoring and policy support. Indicators for measuring success include measuring the number of jobs and businesses that are commercializing.

Madan P. Pariyar explained iDE Nepal's commercial pocket approach. This is an innovative concept which brings farmers, private sector, traders and other market stakeholders together to enhance CBA. Key features include the creation of enough production in a rural community to establish: (i) a community-managed collection centre for market access, and (ii) local private sector marketing inputs, equipment and the provision of embedded services. iDE has developed more than 200 commercial pockets serving over 150,000 households (750,000 people). The approach is being mainstreamed by the Government of Nepal and donors. Commercial pocket farmer organizations provide inputs to the Local Adaptation Plans of Action (LAPA).

Alicia Rondón-Krummheuer explained how the Frankfurt School of Finance & Management, a UNEP collaboration, builds capacity across the private sector from microfinance institutions to donor banks. The School helps partners to identify risks, threats and impacts, to limit future loan losses and to combine adaptation with clean energy solutions.

Galiné Yanon explained how the adaptive capacity of farmers in Senegal is so low that insurance provides them with a new incentive to reduce their losses. The insurance available is based on rainfall, yield and satellite data such as rainfall and precipitation.

Brian Harding then facilitated a break-out group component of the session. He explained how different skills and knowledge need to be brought together for adaptation to be successful. He introduced the idea of a global adaptation ecosystem. The session then broke into groups addressing six key stakeholder groups. Group members were asked to identify key actors, incentives for the private sector to get involved with them and the information/data needed to measure whether they deliver for communities at risk from climate impacts. Feedback from the groups was as follows:

Policy stakeholders: key actors identified were development partners, media, national and local governments, and civil society organisations. Incentives for the private sector to engage with them included: subsidies on taxes and discounts, public-private partnerships, creation of an enabling environment for infrastructure, land tenure issues, and public procurement considering social and environmental criteria. Measures for assessing whether they deliver for communities at risk included: baselines for productivity and social data, weather-related information, market information, resources mapping, risks and vulnerabilities.

Finance stakeholders: key actors identified were financial institutions, insurance companies, investors, government and entrepreneurs. Incentives for the private sector to engage with them included: risk reduction/management, reform of policy/financing regulations, taxation issues, bulk loan schemes, guarantee schemes, ethical/ecosystem incentives. Indicators for measuring whether they deliver could include return on investment and profit.

Market stakeholders: key actors identified were producers, retailers, traders, distributors, advertisers, importers, brokers, banks, community business facilitators and policymakers. Incentives for private sector actors to sustain markets and market chains include security of supply, profit (a premium for added value, brand image and a license to operate), climate risk management and subsidies. Indicators for measuring whether they deliver included value chain metrics, goals and services uptake, demand and the extent of need.

Human capital stakeholders: key actors identified were NGOs, government, research institutes and community institutions. Incentives for the private sector to engage with them included: market availability, enterprise incubation by actors, low production and labour costs, and co-funding. Indicators for measuring whether they deliver included: the number of people trained, income generated from skills gained, success stories from other similar zones.

Support stakeholders: key actors identified were government, universities and technical institutions, industry associations, and NGOs who could provide valuable support for private sector uptake of adaptation activities. Incentives for the private sector to engage with them included profit, competition, subsidies, tax incentives and corporate social responsibility. Indicators for measuring whether they deliver included technical expertise, economies of scales achieved, number of communities helped and the sustainability over time.

Culture stakeholders: key actors included religious, political and traditional leaders and the communities themselves. Incentives for the private sector to engage with them included: innovations that promote positive cultural norms for CBA, tourism and good relationships between the private sector and CBA activities. Indicators for measuring whether they deliver included the level of acceptance, success stories and the number of households with improved livelihoods.

During the discussion component of the session, several participants questioned the motive for private sector participation in CBA and its ability to uphold ethics, equality, human rights and social justice requirements. Some were concerned that we are blindly embracing the private sector in CBA. Critical to success will be the need to build trust, with a public private partnership model proposed as a possible solution.

In closing, Colin mentioned that the private sector is a vehicle for certain adaptation activities, not necessarily a solution to all problems. Scaling up is what it does well and that is what we need to replicate in CBA projects that have worked. That being said, we the CBA community need to be the voices for vulnerable communities and direct how money is spent, catalyse innovation and be unafraid to fail. In the end, adaptation has to deliver for the most vulnerable and those most at risk. This is in the mutual interest of both the private sector and communities.

Parallel 'out-of-the-box' session 13: Learning through game playing

Facilitator

- Pablo Suarez, Red Cross / Red Crescent Climate Centre

Session Details

Conventional 'PowerPoint' approaches to training workshops on M&E have tended to lead to confusion, boredom and disengagement. In this session, participants were advised that by being challenged, "pushed to the tolerable limit of confusion", and stepping out of their comfort zones, they may be able to enter 'a place where magic happens' - where it is possible to genuinely rethink the way that M&E is conceptualised and implemented.

Participants were immersed in a fun and challenging experiential learning activity: a game about managing, monitoring and evaluating investment decisions in a changing environment. The game triggered a lively, candid conversation that sought to enhance participants' understanding of how to address M&E issues in the context of CBA. With a limited budget, teams of players had to formulate CBA projects, and then implement them by allocating resources to

more or less risky choices (depending on climate conditions). Teams came to understand how M&E activities can shape investments, and how some get ‘thorny’ outcomes, while others will get the ‘roses’ of winning development. You can find out more about the experiential learning activities - ‘games’ - that the Red Cross / Red Crescent have developed on their website.²¹

Based on the lessons learnt from this activity, participants were requested to Tweet one M&E challenge, and one solution to address the challenge. Key insights that emerged from the session were that:

- Existing M&E frameworks and indicators do not always provide information that is useful for facilitating learning. Existing M&E systems need to be improved, so that they can generate information that is useful for future decision-making to enhance adaptation effectiveness.
- M&E should be a learning experience, and not just reporting on self-fulfilling prophecies.
- Effectiveness is often measured by indicators that communities do not feel are relevant.
- Local communities should be engaged to participate in the development of M&E indicators.

Plenary session 14: Poster Market Place

Facilitator

- Hannah Reid, IIED

Session Presenters

- Keynote speaker: Charles Nyandiga, UNDP GEF Small Grants Programme
- Adame Hamadi, GEF, Small Grants Programme
- Amanda Bourne, Conservation South Africa
- Asha Sitati, UNEP
- Bruno Haghebaert, Global Network of Civil Society Organisations for Disaster Reduction
- Caitlin Corner-Dolloff, International Center for Tropical Agriculture
- Carolyne Manei, University of Nairobi
- Denia Syam, Mercy Corps Indonesia
- Dilli Ram Bhattarai, Tribhuvan University, Nepal
- Efrain Bámaca, Universidad Rafael Landívar
- Henry Tapindwa Muchedzi, Practical Action
- Jin-ho Chung, University College London
- Karen Price, CARE Peru
- Krasposy Kujinga, Okavango Research Institute
- Krystyna Swiderska, IIED
- Mayowa Fasona, University of Lagos
- Modathir Zaroug, University of Cape Town
- Ngo Thanh Son, Vietnam National University of Agriculture
- Sunita Singh, State Forest Department, India
- Yordanos Tesfamariam, University of Regina, Canada
- Mamadou Mohamed Touré, IFAD
- Marie-Clarisse Chanoine, IFAD

²¹ See <http://climatecentre.org/resources-games/games>

Following the brief poster presentations, conference participants circulated freely amongst the posters, asking questions and discussing poster contents with those who had presented. All posters are available for viewing on IIED's Flickr site.²²

CBA short films: Participatory Film Analysis

Facilitators

- Charles Tonui, ACTS
- Pablo Suarez, Red Cross / Red Crescent Climate Centre
- Wangare Kiruma, NEMA

Session Details

Participants engaged in participatory analysis of the following films²³ presented in this session:

	Film title	Short description	Presented by
1	Guardians of Diversity	Indigenous farmers from Bhutan and China visited the Andean Potato Park in Peru in April 2014.	Krystyna Swiderska, IIED
2	Adaptation Fund Direct Access - by the Adaptation Fund Secretariat	Experiences from the 17 National Implementing Entities (NIEs) under the Adaptation Fund.	Wangare Kirumba, NEMA
3	Kenya's Mau Forest - More Than Trees	Alternative sources of energy to save the Mau - a collaboration of actors.	Elizabeth Khaka, UNEP
4	Keekonyoike Slaughterhouse	Turning slaughterhouse waste into biogas.	Sarah Nderitu, Climate Innovation Centre, Kenya (CIC-K)

Fun Adaptation Finance Night

Facilitators

- Pieter Terpstra, WRI
- Annaka Peterson Carvalho, OXFAM America

Session Details

The session opened with an adaptation finance quiz that tested participants' knowledge of adaptation financing institutions, recipients and amounts. The quiz highlighted problems with existing data on adaptation finance. It also emphasised the difficulty of monitoring and verifying ongoing adaptation projects and reaching reliable conclusions about the extent and effectiveness of adaptation financing. Some other issues related to tracking adaptation finance include misreporting of adaptation activities and double counting.

²² See <https://www.flickr.com/photos/iied/sets/72157651622983056/>

²³ Films can be viewed here:

<https://www.youtube.com/playlist?list=PL1iUHL94bWo5PQxMdJhhldz3kByr8l7ua>

Many questions remain about adaptation finance. The Adaptation Finance Accountability Initiative (AFAI) is an attempt to determine how much adaptation finance is available, where it is going and whether or not it is reaching vulnerable communities. AFAI experiences tracking adaptation finance have been published in a set of guidelines,²⁴ and the results of the tracking studies will also be published in the coming months.

Why track adaptation finance? The amount of money available at the national level remains unknown, and building resilience requires that funding is directed and utilized effectively. Tracking also improves accountability. The principles of accountability for tracking adaptation finance flows used by the AFAI are transparency, ownership, responsiveness, participation and equity.

How do we track adaptation finance? The AFAI outlines five steps for tracking finance:

- (1) analyze the national climate change adaptation context;
- (2) analyze international adaptation finance data;
- (3) map funding flows;
- (4) set tracking objectives and select funds for national tracking (in-depth tracking requires focusing on a select number of funds); and,
- (5) design tailored tools for local tracking.

Information about adaptation finance can be used to influence policy and practice, as well as raise awareness, translate the needs of vulnerable communities into action, encourage governments to improve climate change efforts, hold donors and governments accountable for their use of adaptation funds and support governments to carry out their adaptation mandate.

The session facilitators concluded their presentation by stressing the importance of accountability and encouraging those working on climate change adaptation to take a closer look at how adaptation funds are being allocated and used.

Hannah Reid from IIED then provided an overview of a study being conducting by the International Centre for Climate Change and Development (ICCCAD) and the Stockholm Environment Institute (SEI) on tracking adaptation finance. The design for the study emerged out of a concern that adaptation financing was not reaching the most vulnerable – one of the central tenants of the Kathmandu Declaration, which outlines several principles for adaptation finance (including effectiveness, equity, justice, transparency, participation, among other principles) and demands that 50% of adaptation finance reach the most vulnerable. The study will assess the quality and quantity of adaptation finance delivery in several countries, and will seek to identify indicators of successful finance. The study will produce tools for tracking finance and contribute knowledge to the Global Initiative on CBA (GICBA).

The group discussion clarified some details of the ICCCAD/SEI project, including the research partners (the Global Environment Facility Small Grants Programme national coordinators), how indicators will be used to compare funds and the funds that will be assessed. Participants raised the issues of double counting and labelling, and Pieter Terpstra described how activities like HIV/AIDS reduction and bee-keeping might or might not be considered adaptation depending on the process by which those activities are designed. One participant described the way adaptation finance data has been used to influence the national budget of the Philippines, and Pieter noted that some NGOs are not very open with their data and suggested that data sharing might be an area for improvement amongst NGOs.

²⁴ Guidelines are available here: <http://wri.org/publication/tracking-adaptation-finance>

Plenary session 15: Evaluating Ecosystem-based Adaptation Effectiveness

Facilitator

- Hannah Reid, IIED
- Elizabeth Khaka, UNEP

Session Presenters

- Keynote speaker: Keith Alverson, UNEP
- Salaton Ole Ntutu, Maasai cultural leader
- Stephen Ole Kisotu, Medungi Conservation organization
- Wiliam Atu, The Nature Conservancy, Solomon Islands
- Lili Ilieva, Practical Action
- Paul Nteza, UNDP Uganda
- Rosemary Mukasa, United Nations Environmental Assembly (UNEA)

Hannah Reid opened the session with an overview of Ecosystem-based Adaptation (EbA), which she stressed is about helping humans adapt through the use of nature. She said that if done properly EbA should have a strong social component and likewise when CBA is done properly it should have a strong ecosystem component. Though work on EbA has been on-going for several years it is now time to move beyond the good stories and start filling the knowledge gaps to understand the costs and benefits and whether or not it has limits and boundaries. The panel brought together representatives to discuss M&E of EbA from the local to the global level.

A keynote speech by Keith Alverson launched discussions on evaluating the effectiveness of EbA. His key message was that quantification is not imperative in order to understand the EbA effectiveness. Keith argued that separating development and adaptation is counter-productive and that the development challenge is in fact part of the adaptation challenge. Following the keynote speech, a facilitated discussion took place with questions posed to each of the panellists, starting with a focus on EbA at the local level, and moving to the national and then the global level.

To the question of what monitoring and evaluation activities have been undertaken to assess climate change induced changes to the natural environment and how this information has been collected at the local level, Salaton Ole Ntutu described some ways that monitoring and evaluation is being done in his community. This included looking at stars, the smell of the air, the sounds of birds and animals, red ant behaviour, cattle dietary changes and the direction of the wind. Stephen Ole Kisotu said that in his community this information is disseminated through community information networks and at ceremonies, markets and meetings, and is used in planning to offset livestock losses and protect water sources such as streams. Wiliam Atu explained how in Samoa, information about climate change from the natural environment is used to bring communities together to map the most important local places such as important fishing grounds or cultural areas with the aim of enhancing livelihood opportunities.

When asked what further help is needed to do local level monitoring and evaluation of EbA activities the need to engage with international communities – such as the scientific community - to help create networks that assist communities with ecosystem management was highlighted by Stephen Ole Kisotu, who also said that resources (such as phones and rain gauges) are needed to enhance M&E programmes and build on what communities already have. Wiliam Atu added that M&E should be ongoing and integrated into government policies and plans. He stressed that communities in the Solomon Islands can't afford 'grey adaptation' and that 'green adaptation' is therefore their only option.

Lili Ilieva explained the need for EbA to strengthen its social aspects and for CBA to strengthen its ecosystem aspects when asked for her thoughts on what experience from the EbA community of practice can teach us about how to measure EbA effectiveness. She suggested that the community of practice helps identify some of the challenges and possible solutions in communities such as the need for a common approach to M&E. When asked to share lessons from the UNDP-funded Mountain EbA Programme on how to monitor and evaluate EbA at the programme level, Paul Nteza emphasized the importance of stakeholders owning the process and taking it forward and for the importance of EbA programmes being multi-disciplinary in nature. He also stressed the need for vulnerability assessments of ecosystems as well as of social systems. Some of the challenges experienced by the Programme included limited capacity at the community level, shifting institutions, mandates and governance frameworks and mainstreaming into government processes.

Rosemary Mukasa of the United Nations Environmental Assembly reported some of the EbA work that has been done at the global level including a resolution by the UN General Assembly calling on UNEP to integrate EbA into national and international activities. She explained that the resolution requests UNEP to report on the implementation of the resolution. She stressed that global M&E of EbA is only as good as the national level M&E on which it is based, and that we all need to challenge our governments to implement effective EbA.

A spirited discussion followed during which Keith's assertion that EbA should not be quantified was challenged. The question of how EbA effectiveness can be evaluated if we are not going to assign values was asked. One audience member argued that there is a risk associated with not quantifying ecosystem services as they may not be factored into national adaptation planning. Another mentioned the difficulty with measuring the effectiveness of whole systems. It was stressed that EbA needs to be undertaken from the perspective of those who are most vulnerable. However, another audience member responded that it is also important to take into account the needs of donors and bilateral agencies and to create networks that provide bridges rather than "islands that isolate communities". It was suggested that there are specific indicators that can be identified at the local level which can add up to a bigger theory of change that can be used to show donors the benefits of EbA. A final recommendation was that a more holistic approach is needed to manage ecosystems and that policies should be integrated.

Before the session came to a close, panellists were given an opportunity to provide take-home messages. Salaton Ole Ntutu said that in his community they believe that we are one stem with a lot of branches and that we are all part of a village. Though science and technology have a role we have to remember that we are all from a village and we can all fight global warming from our villages. Stephen Ole Kisotu stated that those who don't care for the environment are "ecological terrorists". Keith Alverson emphasized the importance of aligning technology, knowledge and finance to ensure that tools get to where they are needed. Paul Nteza argued that we need to think about what a resilient ecosystem and community look like and at how to ensure this is realized. The parting message from Rosemary Mukasa was that "local is global and global is local" and we have to get the links right.

Parallel session 16: Estimating Loss and Damage

Facilitator

- Mark Abkowitz, Vanderbilt University, USA

Session Presenters

- Lawrence Flint, Sus-Dev Africa
- Stephanie Andrei, International Centre for Climate and Development (ICCCAD) at the Independent University of Dhaka, Bangladesh
- Kees van der Geest, United Nations University Institute for Environment and Human Security, Germany
- Erin Roberts, King's College London
- Karen Price, CARE Peru

Mark Abkowitz began the session by answering why loss and damage estimation is important to the adaptation process. He stressed the need for donors to be connected to the communities whose programmes they are funding. Donors are also interested in knowing what type of investment they are getting, and measuring effectiveness needs a baseline and a benchmark to make judgements on how effective returns have been. The session posed various questions to the speakers, each followed by questions and feedback from the audience.

Lawrence Flint explained the need to base our definition of loss and damage on the impacts of climate related stressors that have not been adapted to or mitigated to. He stressed the link between adaptation and loss and damage and the limits to adaptation. The economic and non-economic dimensions of loss and damage make it harder to define and assess. Inevitably loss and damage have a climate change and a non-climate change component to them and that is what makes it difficult to set a baseline.

Lawrence mentioned that different events are happening right here in Kenya, such as floods, and it is important to look at what is happening on the ground and not just focus on international negotiations. Internationally agreed guidelines on measurement, reporting and verification (MRV), as with all climate impacts and adaptation, is missing. Paris this year will have to address how we deal with loss and damage and the institutional relationships with adaptation.

In reality, loss and damage is being addressed on three temporal levels: in advance of events, event management, and post-event recovery and rehabilitation. The debate is now about enhancing resilience. Research on resilience needs to focus on the anticipatory elements of loss and damage. Initiatives like the Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) programme are essentially about addressing loss and damage, so the donors are there, they just want to avoid framing the issue around compensation.

Stephanie Andrei shared further insights into the definitions of loss and damage. Loss and damage occurs along a spectrum, and can take different pathways. One of them is when adaptation is maladaptive and increases vulnerability. Some losses have non-market values and there therefore needs to be a reframing of how adaptation is currently measured. Although there is no formal definition of loss and damage, the urgency of the issue has encouraged the parties to adopt a mechanism - the Warsaw International Mechanism on Loss and Damage. Loss and damage in the end, cannot ignore mitigation.

According to Kees van der Geest, the central point of loss and damage should be adaptation limits - soft and hard. These limits can change when technology changes. To study loss and damage, we don't need to reinvent the wheel: the focus is not so much on what is lost, but how and why. New methods for assessing the issue should measure what is measurable and understand what is not. We should work to qualify those losses and damages that are not measured. Kees and his colleagues are currently working on a handbook on measuring extreme events and slow onset processes.

Erin Roberts explained how loss and damage can be avoided through adaptation and mitigation. Loss and damage can also be seen as a transformative process, but transformation can have opportunity costs and we first need to address and understand it. She highlighted some challenges going forward: understanding what areas/people/systems are at risk of loss and damage, addressing the lack of tools or knowledge of tools to address loss and damage, finite resources and opportunity costs and limits to adaptation. Opportunities include: avoiding loss and damage through mitigation and adaptation, addressing the underlying drivers of vulnerability, integrating disaster risk reduction (DRR), adaptation and sustainable development and transformation. Loss and damage has caused a shift in thinking - integrating adaptation and DRR better. This can help facilitate comprehensive risk management approaches.

Karen Price explained how estimating loss and damage is not easy. There are research gaps, for example there is a lack of research and available data on tropical glaciers and the formation of new lakes. Tools based on hydrological data are important to understand the impacts on the ground for such issues.

Key issues emerging from the discussions included the need to define loss and damage as unavoidable as well as not avoided due to poor planning / policy. Policy is vital in these discussions. What communities previously considered acts of God, they now know is human intervention. The real impacts of loss and damage are far in the future and many are preventable. We need to prevent the worst case scenarios from materializing. Annex 1 countries trying to undermine loss and damage discussions will limit adaptation. Migration from loss and damage is itself a failure and we need better indicators for transformation.

Another key issue that emerged from discussions is whether it is desirable to frame the issue of loss and damage at the political level or move towards technical solutions. There is a duality to loss and damage: real life (what is experienced on the ground) and the politics surrounding it. How we address it is the most important thing for communities. The framing of loss and damage is extremely important to practitioners. We need to ask how we can use loss and damage to motivate work with local and national governments.

Parallel 'out-of-the-box' session 17: Tools and Techniques for Measuring Effective Adaptation and Resilience

Facilitator

- Tom Downing, Global Climate Adaptation Partnership (GCAP)

Session Assistants

- Timo Leiter, GIZ German Development Agency
- Bruno Haghebaert, GNDR
- Sian Oosthuizen, Institute of Natural Resources NPC

- Sonja Ayeb-Karlsson, United Nations University Institute for Environment and Human Security (UNU-EHS) / Environmental Migration, Social Vulnerability and Adaptation section (EMSVA)
- Hany Shalaby, CER, Egypt
- Joachem Hatizivi Nyamande, Irish Aid - DOMCCP, Zimbabwe
- Adnan Kareem, GCAP

Instead of focusing on particular methods for measuring or enhancing effective adaptation, this interactive ‘out-of-the-box’ session explored a system for understanding the diverse contexts in which adaptation takes place. Tom Downing introduced his view of adaptation as a journey, involving a series of guideposts or way-finders that can help practitioners navigate the often winding path towards resilience. Understanding the context of a project, community, or problem is an important first step that allows practitioners to choose the adaptation approach that will be most successful.

Tom defined four contexts for CBA that served as the basis for this session. These contexts are on a spectrum of ‘messiness’ or complexity, and are as follows:

1. Chaotic contexts are, in colloquial terms, a situation that has ‘hit the fan’ - characterized by a rapid pace of change and an urgent, pressing problem, making it difficult for practitioners to establish an evidence base or think about long-term objectives. An example of a chaotic context for adaptation is working in conflict zones or areas of intense social crisis.
2. Complex contexts are those with a high degree of ‘surprise’ or uncertainty. They could easily tip over into chaos and are characterized by multiple stakeholders with competing objectives, significant consequences for action or inaction, and patchy or contested knowledge about ways forward. An example of a complex context would be an area of contested land management with stakeholders at multiple scales.
3. Complicated contexts are just a little bit messy. A practitioner is able to know the inputs and outputs of a project, but the process to reach objectives is unclear or inconsistent, which means one cannot predict an outcome with total confidence. Most community-based situations are somewhat complicated.
4. Simple contexts are predictable: a practitioner can be confident that doing X will lead to Y, and he has a solid evidence base for action. An example is working with supply chains.

The session was divided into two parts: a case study based game played in breakout groups, and a larger knowledge- and experience-sharing discussion.

In the breakout groups, participants were given hypothetical community case studies and asked to pretend to be an advisor or community partner focused on CBA, and to categorize their case study into one of the four ‘contexts’ based on a scoring system. Criteria used to help with this included: the complexity of data available, the scale of impacts, the social scale, the degree of consequence, and the wealth of past experience to draw upon. For example, one case study was called ‘Mangrove Managers’ and outlined a conflict between ‘Carmen’, who uses a small mangrove plot for subsistence and small-scale income-generating tourism, and a palm oil company that wants to develop the area for plantations. Given a summary of the interests of stakeholders, pre-conditions, and a few ‘success scenarios’, participants debated where the case study would fall on the context spectrum, eventually agreeing that because of the wide range of stakeholders at different scales, and the local/ecological consequences of interventions, the context was ‘complex.’

After allowing groups to reach their decisions, representatives from simple, complicated, complex and chaotic case studies were asked to share their justifications and decision-making processes. Interestingly, no group had found a simple case study. Instead, most fell into the complicated or complex categories.

To ‘harvest the wealth of experiences’ within the room, the facilitators asked participants to share specific tools, methods, or frameworks for adaptation that might be applicable in these different contexts. Highlights from this included: using role-playing games in complex situations with a range of stakeholders, which relieves the tension of conflicts and helps stakeholders step into each other’s shoes; speaking with community members about the successes and challenges of previous projects in their community; and developing contingency plans for when projects inevitably deviate from their course.

To conclude the session, Tom discussed the implications of different contexts for CBA, emphasizing that complexity is a reality that cannot be avoided. Instead, practitioners must use the best tools and methods that will allow them to successfully navigate that complexity. They must also use evaluative indicators that are compatible with the degree of complexity.

Parallel ‘out-of-the-box’ session 18: Climate Information Services for Effective CBA

Facilitation Team

- Lead facilitator: Fiona Percy, Adaptation Learning Programme (ALP), CARE
- Romanus Gyang, ALP Ghana
- Mwendu Kusewa, CARE Kenya
- Mutuma Stanley, ALP Kenya
- Richard Ewbank, Christian Aid
- Sanoussi Ababale, ALP Niger
- Bernard Cantin, IDRC/CARIAA
- Elizabeth Carabine, Overseas Development Institute
- Dinanath Bhandari, Practical Action, Nepal
- Irene Karani, LTS Africa, Kenya
- Christina Connolly, DFID Africa

Session Details

Fiona Percy introduced the session, explaining that it was an interactive conversation about the value of climate information services (CIS) for supporting decision making in CBA. Participants included people from three different (but not mutually exclusive) categories: producers of CIS; end users of CIS; and intermediaries, constituting the majority. In groups, participants discussed a common set of questions, in terms of five different sub-themes: (1) Working with uncertainty and probability; (2) Adaptation decision making tools; (3) Combining knowledge sources; (4) Service delivery to vulnerable people; and (5) Monitoring the value and benefits of CIS. The questions/issues explored in relation to each sub-theme were:

- a) What good practices and success factors are emerging for climate information to be effective and useful for vulnerable people to adapt to climate change?
- b) What are the key challenges or barriers which are reducing the value or effective use of climate information for adaptation?
- c) What insights, issues and questions are emerging on CIS for adaptation amongst development and adaptation practitioners, users and producers of climate information?

Groups captured key points on coloured cards, which were then collated and organised on boards. Richard Ewbank provided a high-level summary of the card groupings, emphasizing the ongoing challenge of understanding who produces and who uses the knowledge generated and demanded by CIS. He related this to issues of trust, for example with respect to downscaling of projections. A critical theme emerging from the discussions was the question of sustainability, given the projectised nature of many CIS initiatives. Communication strategies and ICTs have potential but also bring problems, including how to address language and accessibility challenges and reach down to the most vulnerable communities. Local knowledge is key to helping people to understand climate science, but the science must be conveyed within the context of local knowledge, rather than the converse. Bill Leathes of the UK Met Office added a key question on how to synthesise and aggregate all the information collected at the local level, so that it supports policies and national/provincial programmes.

The following lists contain selected and synthesised key points from the discussions.

Good practices and success factors:

- Challenges relating to uncertainty are being overcome to some extent by presenting ranges (e.g. how precipitation distribution might change over the year), rather than an average of scenarios. Multi-stakeholder forums, such as those used in participatory seasonal climate scenario planning, allow for climate information and levels of uncertainty to be interpreted collectively leading to more nuanced decisions.
- Combining ICTs and social media with the engagement of local leaders (i.e. using and promoting champions) helps to secure buy-in for seasonal forecasts etc. Innovative ICT approaches include that of IRI in India, involving soil and moisture sensors linked in a Bluetooth mesh. Such approaches are beginning to turn the system upside down because they enable extrapolation upwards to get a better picture of the climate system.
- Involving the local community in data collection is a way to improve quality, trust and uptake of CIS products, obtain real-time information to inform immediate decisions, and promote empowerment. There are an increasing number of experiences with locally-generated science / citizen science from different parts of the world.
- Combining messages from meteorological services with information gathered from field demonstrations and farms is more effective (e.g. work by FAO combining Climate Field Schools with Farmer Field Schools). This also provides opportunities for experiential and looped learning.
- There are some good practices in institutionalising CIS for long-term sustainability, for example in Mali, where this has occurred for many years.

Key challenges or barriers:

- Issues of power are inherent in CIS production. Climate models (regional climate models and downscaled models) are derived from global information, and institutions with the capacity to develop and further downscale this information are rarely located in the global south where the most vulnerable communities are.
- Local communities have become development dependant. They devolve power / decision making to external actors who tell them when and what to plant and when to harvest, instead of relying on local knowledge and 'rainmakers'. This dependency syndrome can reduce community motivation to use CIS and undertake adaptive responses, as they know there will be aid if harvests fail.
- Understanding uncertainty. Simplification of seasonal forecasts and other CIS products, or mis-reporting by the media, distorts messages. This raises questions regarding the

further marginalisation of vulnerable groups, who may lose assets - and trust - by responding to inaccurate information.

- The need to engage with the private sector was emphasised. This could increase trust in model downscaling. Increasing station coverage could also fill data gaps so that country grid cells are better covered.
- Communicating/presenting information in a useful way remains challenging. For example, SMS is used to disseminate climate information but it is unclear exactly how many people access and use it.
- Sustainability. The often short-term nature of intermediary project support is a major barrier to sustainability and to scaling up.
- Monitoring challenges is fundamental. This encompasses how to monitor and how to choose which indicators to use. Ways forward include investing in youth to create, use and monitor CIS, and use of social networks and kinships in monitoring (storytelling).

Insights, issues or questions:

- There is an ongoing shift away from a sole focus on the content of CIS to process and system issues. These relate to how to build bridges between the conversations that communities are having and those the scientists/meteorologists are having to allow for co-exploration of effective systems for the future.
- An increasing trend, albeit linked to projects, is that communities value CIS and no longer see weather events solely as acts of God. CIS provides a resource that allows communities to understand and spread risk.
- While local and indigenous knowledge is highly valued by communities but often ignored by scientists, seasonal forecasts can complement local/indigenous knowledge. The latter can be seen as locally grounded and informed whilst meteorological office products are developed at the macro-scale using more scientific forecasting methods.
- Many participants felt that communication was the most important issue. A key question is how to make communication between different actors more responsive and respectful. Simplifying messages does not mean removing uncertainty, but rather emphasising uncertainty in a more meaningful way to local communities.
- Uncertainty in climate projections should be re-cast as the need to manage risk and hedge bets. This is analogous to dealing with economic uncertainties such as predicting foreign exchange rate fluctuation.
- Local science is useful not only for generating data, but for community empowerment and learning more about livelihood responses to climate trends and events.
- To overcome dependency syndrome, the spirit of innovation must be re-invigorated within communities.

Climate information services are becoming recognized by scientists and practitioners as a useful and vital resource for adaptation decision making at all levels. CIS can inform CBA for short-range, seasonal and long-term plans and it has potential for large-scale reach and impact. The quality and relevance of climate forecasts and projections are still developing, however, and predictions contain high levels of uncertainty. They are usually not locally specific and are relatively inaccessible in a useful form for local actors. Systems for delivering useful CIS to communities and measuring their effectiveness are still in their infancy. Session participants shared emerging successes. These include multi-stakeholder platforms for collective interpretation of seasonal forecasts to inform decisions on adaptation and risk reduction actions, innovative use of mass media and ICTs in ways that allow for two-way communication including sharing of local knowledge, and community methods for recording weather such as using rain gauges.

One of the more important insights co-generated through participant discussions was that effective communication and trust between producers and users of climate information is critical to success. Meteorologists need skills in presenting information and uncertainties simply, which respond to the information needs of the end users. They need systems for listening to and learning from users and intermediaries in addition to communicating their messages. Innovation and joint design is needed to find communication channels which reach the most vulnerable men and women. As users start to benefit from more usable CIS, their information needs will also grow and develop, requiring scientists to continually develop new information products, and better ways of downscaling information to be more locally specific. Systems which allow for regular interactions and conversations between producers and users are needed. These can be linked to seasonal forecasts and local planning cycles.

Taking time and strengthening adaptive capacity to understand, interpret and use climate information will bring dividends in the form of more balanced and informed responses which integrate socio-economic development and risk management. This will result in more robust and climate resilient interventions. This will need advanced CIS systems, which provide a wide range of scenarios and options, and a better understanding of how they apply in different contexts and timescales. Forums where all actors can learn from each other and share community observations, aspirations and local knowledge can be combined with scientific information and methods. These will be critical elements of successful systems.

Parallel session 19: Indigenous Knowledge, Culture and Adaptation

Facilitator

- Krystyna Swiderska, IIED

Session Presenters

- Keynote speaker: Alejandro Argumedo, Asociacion ANDES, Peru
- Yiching Song, Centre for Chinese Agricultural Policy, Chinese Academy of Science
- Reetu Sogani, Lok Chetna Manch, India
- Chemuku Wekesa, Kenya Forestry Research Institute
- Patrick Kirkby, University of Tasmania, Australia
- Abu Syed, Bangladesh Centre for Advanced Studies
- Delfin Ganapin, UNDP-GEF Small Grants Programme

This session explored the role of indigenous knowledge (IK) and culture in climate change adaptation, and how to assess the effectiveness of IK-based adaptation. Krystyna Swiderska noted that adaptation can either follow the wisdom of people who have been living in harsh and variable environments for thousands of years, or ignore it and use modern technologies designed for stable environments. IK offers strategies for conserving water, soil, biodiversity and ecosystems, and a wealth of crop and livestock varieties which are often more resilient than modern equivalents. It provides a holistic worldview that stresses the links between the different components of socio-ecological systems. This can assist understanding of the indirect impacts of climate change. The concept of 'biocultural heritage' focuses on the inter-dependence and links between indigenous knowledge, biodiversity, landscapes and cultural values. Indigenous cultural values and customary laws have values related to conservation, equity and solidarity at their core. Moreover, preserving biocultural heritage strengthens community capacity to innovate, which is more important for resilience than any single technology. The Smallholder Innovation for Resilience (SIFOR) project has identified a number of effective

biocultural heritage-based innovations developed in response to climate change. Science should support the adaptation strategies of communities rather than replacing indigenous knowledge.

Alejandro Argumedo described the fundamental importance of traditional knowledge, concepts, values and worldviews for effective adaptation by Quechua people. He retold the ancient Andean prophecy of the condor (which represents the heart/spirituality) and the eagle (the brain). This states that in the future, rationality (i.e. science) will drive spiritual values (i.e. indigenous knowledge) almost to extinction, but that one day traditional and scientific knowledge will have the opportunity to co-exist. The climate crisis provides an opportunity to respectfully link indigenous knowledge and modern science in order to develop new solutions to climate change. To explain the role of culture in adaptation, Alejandro outlined the Quechua 'ayllu' system. This consists of the 'human and domesticated,' the 'wild' and the 'sacred' realms. The goal of the ayllu system is to achieve holistic living/well-being through reciprocity and balance between the three ayllus. The SIFOR baseline study used this framework to identify innovations and factors that influence them. It found that those people who live close to the ayllu paradigm often monitor their surroundings more carefully and are thus the first to innovate and adapt. Andean potato farmers traditionally use the flowering of plants, the behaviour of birds and wildlife and the reading of the stars in making their predictions about the coming rainy season. Environmental stewardship is essential for these bio-indicators to work. Examples such as this abound in indigenous societies where local beliefs play a significant role in solving problems related to climate change and variability and drive adaptation processes. Alejandro gave several examples of how relations of mutual care between humans and the environment are fundamental for resilience of indigenous farming communities.

In the Potato Park, five Quechua communities conserve 1300 native potato varieties. These are critical to reducing the risk of crop failure. On-farm conservation sustains potato evolution and improvements in responses to climate change. The Potato Park collaborates with scientists for the repatriation of native potatoes and through participatory plant breeding work to create new climate adapted varieties. These examples illustrate that both culture and collaboration with scientists are important for effective adaptation. Alejandro explained how a "decolonizing research methodology" based on indigenous concepts and worldviews has empowered Quechua farmers to design strategies for adaptation. The UN Declaration on the Rights of Indigenous Peoples should be used as the basis for identifying indicators of effective adaptation, since rights to knowledge, seeds, land and culture will enable adaptation processes to continue. An International Network of Mountain Indigenous Peoples has been established to strengthen adaptive capacity through knowledge sharing.

Yiching Song described the importance of preserving biocultural heritage in Naxi farming communities in Southwest China. The SIFOR study has demonstrated how traditional seed varieties, food cultures, irrigation systems and customary laws are very important for effective adaptation. The ability to save seeds is essential for remote mountain farmers. As in Peru, balance between the natural and human spheres is also very important for resilience and adaptation.

Reetu Sogani then described how communities have used their traditional knowledge of crops and ecosystems to improve food security in India. Traditional knowledge, biodiversity and culture are very important for adaptation in the Himalayas, where there are many landslides. Communities here have also incorporated scientific information into traditional practices in order to reduce vulnerability. However, unplanned and un-ecological developments are turning extremes into disasters.

Chemuku Wekesa then explained how communities in coastal Kenya are increasingly growing traditional crop varieties and cassava because they are more pest and drought tolerant. They are planting different varieties together to reduce risk. He also described how cultural values

like reciprocity, collectiveness and solidarity, and cultural practices, like ceremonies, allow nearby communities to exchange information and work together to adapt to climate stress.

Patrick Kirkby noted that cultures contain implicit worldviews, values, motivations and norms that are not always recognised. Values relating to egalitarianism and reciprocity are very important for adaptive capacity, but some cultural values (like gender norms) can also contribute to vulnerability. Organizations also have cultures, which can inhibit community leadership.

Abu Syed provided several examples of how traditional knowledge and local perceptions can be used to supplement the science of climate change and improve climate modelling. He described how communities in Bangladesh provided GPS readings and how models generated were based on information provided by communities.

Delfin Ganapin explained that community-based projects tend to be more sustainable than large projects, because of community ownership. This could be a good indicator of what makes effective CBA. Adaptation has to be long-term to be called an 'adaptation project'. Culture is the 'glue' that binds a community. Delfin also announced the creation of a Mountain CBA Partnership Network to address the vulnerability of indigenous communities in mountain regions.

Session discussion focused on how to include indigenous communities in formal decision-making on climate change. Alejandro noted that he has been asking the UNFCCC Secretariat to establish an office for indigenous peoples. He stressed the need for full and effective participation of indigenous peoples in CBA conferences. Krystyna noted the need to mainstream culture into development policies to avoid negative impacts, and for CBA to explicitly focus on both IK and culture, and biodiversity and ecosystems – i.e. on biocultural heritage as a whole.

Parallel session 20: Do you have the Innovative CBA M&E 'Wow-Factor'?

Facilitator

- Tom Tanner, Overseas Development Institute, UK
- A. Arivudai Nambi, World Resources Institute, India

Session Presenters

- Peterson Mucheke Mwangi, CARE International
- Aditya Bahadur, Overseas Development Institute, UK
- Anna Colom, BBC Media Action
- Sazzad Hossain Miah, Practical Action, Bangladesh
- Kairos Dela Cruz, Institute for Climate and Sustainable Cities, Philippines
- Lindsey Jones, Overseas Development Institute, UK

Tom Tanner and Arivudai Nambi, complete with bow-ties, hosted this fun session, which was oriented towards learning about approaches that go beyond convention, either conceptually or methodologically, to address the range of challenges facing the M&E of adaptation. The session provided opportunities to those who are pushing the frontiers of knowledge, innovation and practice, to showcase their approaches, in order to move CBA into the next era of action and learning.

The session was run using an entertaining gameshow format. Each presenter gave a six-minute 'sales pitch', to convince the audience why their approach was innovative and how it unlocked some of the previous challenges of CBA M&E. The audience then voted on which was the most compelling initiative based on whether it was 'exciting, effective and useable'. Sales pitches included:

- Peterson Mucheke Mwangi presented on 'Reflecting together for learning and enhanced accountability'. This entailed innovative experiences with attribution/contribution of learning via regular multi-stakeholder reflections. He highlighted the utility of quarterly learning and reflection meetings, using a set of five M&E learning and reflection questions.
- Aditya Bahadur presented on the 'Resilience Navigator' tool,²⁵ which allows users to find a relevant (existing) resilience framework or to create their own. The tool lets individuals decide what sector, scale, conceptual/operational framework, evidence base, and indicators of resilience they want to use.
- Anna Colom presented on the Radio for Resilience programme in Tanzania and Amrai Pari in Bangladesh, showing how media has contributed to individual and collective action, and to greater community preparedness. Results from Bangladesh, through the use of a TV show, indicated a very high level of cooperation. Work across seven countries has assessed how climate change is affecting populations using interviews, focus groups, in-depth interviews and community assessments. The impact evidence generated reinforces the importance of the subjective approach.
- Sazzad Hossain Miah presented work using their V2R+ approach²⁶ on the role of local 'resilience agents' in communicating climate-related information to local communities. The approach worked with local digital information centres to translate nationally disseminated weather and flood information onto community-level display boards. The resilience agents then worked to disseminate this information and link up residents with a local expert pool (including, for example, agricultural and livestock extension officers) to help them plan their livelihood and preparedness activities.
- Kairos Dela Cruz presented on 'The plumber', or how his organisation has tracked more than US\$ 700 million in adaptation finance in four countries. He explained how tracking finance was like plumbing - trying to look for the leaks and sources and following where it is going. Much M&E is currently undertaken at the end of projects, but Kairos would like to change this. He presented the Adaptracker tool, a simple way to aggregate M&E information, and to make information more accessible and easily interpretable.
- Lindsey Jones presented on 'Dialling up resilience'. This mobilises ICTs to assess individual subjective perspectives on resilience at an unprecedented scale. It has the potential to revolutionise the M&E process by using mobile phone-based ICTs to answer short/simple questions, with a text message and call centre-based approach to track responses in real-time and significantly reduce costs. The project proposes a new way of measuring resilience by allowing community members to assess their own resilience by responding to ten simple questions.

The audience then voted for the winning candidates in two rounds, based on three questions: 1) is it exciting? 2) do you think it works? 3) and would you use it? The first round of voting was followed by a question and answer period, after which those who voted for the bottom three contestants were asked to cast a second vote for their second preference. Questions addressed to the candidates included:

²⁵ See http://bwa-presentation.co.uk/odi_reviews/index.php

²⁶ See www.practicalaction.org/v2r

- Robert Kay from Australia asked Aditya whether his initiative was just a once-off and whether it could be sustainable. A similar question was addressed to Kairos. The response was that in both cases the systems will be updated, but in Kairos' case, they want more stakeholders involved, especially government.
- A speaker from Mozambique asked Lindsey whether this mobile phone technology is something that is happening, or just a dream. What would be the costs of the calls and SMS's, or would these be free? Is the information stored on a server for accountability? Lindsey responded that this is happening, but on small-scale, for example by the World Food Programme. The SMS response system is free. Implementing this system is cheaper than household surveys, but not 100% accurate. Due to the personal nature and sensitivity of information collected, it has to be anonymous.
- Fiona Percy from CARE asked Lindsey how people who could use this information to strengthen resilience would be able to access it. A further question concerned whether there was a feedback mechanism back to people who had submitted data. The ensuing discussion acknowledged that these were issues that required ongoing development, including ensuring gender equality.

In summary, some key emerging points from the discussion were:

- Collective analysis and interpretation of results is useful and effective, and it helps to develop workable and replicable solutions.
- Tracking subjective perceptions of resilience can provide a richer understanding of people's adaptive responses than only focusing on more objective measures.
- A range of cheap, effective and innovative methods for M&E are being developed. While these sometimes lack accuracy, they can promote M&E at scale and should be seen as complementary to more formal and traditional M&E methodologies.
- Development of new and innovative M&E methods for CBA can play a role in holding governments accountable and pushing them to be responsive and take significant action to help people reduce their vulnerability and build adaptive capacity.

At the end of the voting process, by a very narrow margin, Kairos came in third, Aditya came in second and Lindsey came first. The Wow factor trophy was awarded to Lindsey by Cosmas Ochieng of ACTS, Kenya, who noted that all of the methods presented were exciting, useable and effective. He emphasised that the purpose of M&E was for accountability, learning and management, with the necessary long-term aim of securing effective adaptation.

Parallel 'out-of-the-box' session 21: Exploring Ecosystem-based Adaptation with Participatory Exercises

Facilitator

- Shaun Martin, WWF US

Session Details

This participatory session involved a group exercise, an informative presentation, and group case study analysis followed by discussion. The session helped participants better understand the principles behind ecosystem-based adaptation (EbA) and the criteria donors and other organizations might use to award EbA projects.

Highlights of the activity included a group brainstorming exercise where participants drew on their knowledge of EbA and CBA and discussed which of the four categories - EbA, CBA, neither

or both - the different projects placed before them on cards would fit into. Shaun then provided his answers with the various groups and a robust discussion followed where participants gave their arguments for selecting their answers. Shaun highlighted the fact that different people have different interpretations of EbA and CBA and as we enter partnerships with donors and other organizations, we need to know their perspectives and have a common understanding of EbA to deliver on projects.

Shaun described three ways in which nature relates to adaptation: ecosystem-centric adaptation (helping nature survive or adapt in a changing climate, otherwise known as climate smart conservation), ecosystem-friendly adaptation (helping people adapt without harming nature) and EbA (ecosystem-based adaptation, which falls in between ecosystem-centric and ecosystem-friendly adaptation). All three are needed to help communities and nature adapt.

Shaun's presentation provided valuable insights into the principles of EbA. EbA starts with the needs of people, but works only when nature is able to adapt. EbA helps people adapt to a changing climate by using nature and sound natural resource and land management principles to ensure that needed ecosystem services are available. CBA and EbA work best when done together; they are complementary.

A case study exercise followed based on a project brief describing climate smart reforestation. Participants assessed the project from a donor's point of view, looking at the project's merits and weaknesses, and whether or not it could be classified as an EbA project. Participants then made recommendations to improve the project, addressing the elements that were missing in the project design. Key elements that emerged from the discussion on how to make the reforestation project more climate smart included:

- Addressing the underlying causes of vulnerability in the area.
- Looking at plant species that will survive in a changing climate both now and in the future, and planting mainly native species.
- Landscape level planning that includes erosion control and flood protection.
- Taking note of new pests or diseases in the area that could affect the trees and taking measures to control them.
- Providing access to reliable weather forecasting information so community members can take special measures to prepare for drought, floods, etc.

Plenary session 22: Poster Market Place

Facilitator

- Hannah Reid, IIED

Session Presenters

- Christopher Gordon, Institute for Environment and Sanitation Studies, University of Ghana
- Lucian Damiba, WaterAid
- Martin Nyambe Sishekanu, Climate Change Secretariat, Zambia
- Mohamed Siddig Suliman, Practical Action Sudan
- Nkulumo Zinyengere, University of Cape Town
- Patrick Kirkby, University of Tasmania, Australia
- Paul Nteza, UNDP – EbA
- Heather Masekwa, Southern Voices on Climate Change

- Pia Treichel, Plan International, Australia
- Reginald Sithole, Practical Action
- Chris Henderson, on behalf of Roberto Montero, Practical Action Peru
- Sazzad Hossain Miah, Practical Action Bangladesh
- Sian Oosthuizen, Institute of Natural Resources NPC
- Dave Steinbach, IIED
- Sophia Irepu, CORDAID - Partners for Resilience
- Sujan Piya, Practical Action
- Susannah Fisher, IIED
- Udo Höggel, Centre for Development and Environment, CDE
- Winifred Chepkoech, Humboldt University
- Yangailo Tryson, PPCR – Uganda
- Zenón Porfidio Gomel Apaza, Instituto Tecnológico de Costa Rica
- Zinta Zommers, UNEP

Session Details

Following the poster presentations, a short award ceremony for the winning CBA9 posters was held. Prizes were awarded by Penny Urquhart, who judged the posters according to their content, relevance to the conference theme, linkages across scales, and visual appeal. The winners of the poster competition were as follows:

First: Sophia Irepu, CORDAID - Partners for Resilience

Partners for Resilience (PfR) Uganda

Introduction

Communities in Uganda are faced with different hazards like droughts, floods, animal and human diseases and in some cases livelihoods which have had an enormous impact, claiming lives, eroding assets, and constraining traditional livelihoods such as pastoralism. PfR is contributing to building the resilience of communities by integrating climate change adaptation (CCA) and Disaster Risk Reduction (DRR) and ecosystem management and restoration (EMR). Using this integrated approach, communities strengthen their capacities to reduce the impact of disasters. PfR integrated approach.

Promotes integration of Climate Change Adaptation and Ecosystem Management and Restoration measures into Disaster Risk Reduction.

Based on the conviction that effective disaster risk reduction thrives on community driven adaptation and conservation of ecosystems to be achieved.

Hinged on the principle belief that healthy ecosystems can play a key role in hazard mitigation and prevention, while degradation enhances disaster risks.

Recognises the intricate link between climate change adaptation and Disaster Risk Reduction stemming from the impact of climate variability and extremes, leading to disaster risks.

Overview

- Joint partnership of five Netherlands humanitarian, development and environment organisations to reduce the impact of natural hazards on vulnerable communities.
- Project's vision is based on the central role of resilience as the means to effectively achieve development in disaster-prone areas and affected ecosystems.
- Aimed at three strategic objectives of building community resilience, strengthening civil society and policy dialogue.
- Project is being implemented in six districts of Apaka, Ouka, Katakwi, Nakapiripiri, Napak and Soroti, in Central and North eastern Uganda.

The PfR Vision Tree
Putting principles into practice

These building blocks are being implemented across the branches of the tree, from household to landscape level. The key practices are the roots, and provide working beyond 'business as usual'.

1. Working in different situations
2. Incorporating geographical realities
3. Strengthening institutional resilience
4. Strengthening community self-management
5. Stimulating learning
6. Fostering partnerships

Communities conduct participatory disaster risks assessments, design community action plans outlining measures to reduce risks identified, adapt to climate variability induced hazards and restore and manage degraded ecosystems and natural resources, using climate and ecosystem smart disaster risk reduction and adaptation measures

Learning from the Live Projects on the Ground Learning Cycles

MEASURING COMMUNITY ADAPTATION

Base year was 2011, hazard year 2013, year of measurement 2014/2015.

- The coping capacity of project communities compared to non-target communities
- Update and use of adaptation technologies introduced (small scale irrigation, drought tolerant seeds, energy saving stoves, etc.)
- Transfer and application of skills and knowledge acquired on adaptation mechanisms
- Relationships built over project period
- Actions, choices and decisions taken at different levels (individual, household, community, nation)

ENHANCING EFFECTIVE ADAPTATION THROUGH:

Resilience building (sustainably able to survive and recover from shocks), bounce back capacity through capacity building and people centered early warning early action systems.

Promotion and use of appropriate technologies (drought tolerant seeds, small scale irrigation, energy saving stoves, water harvesting and conservation).

Relationship building (model farmers, Village Loans and Savings Associations, cooperation farming, exchange and exposure learning visits)

Asset building (natural, financial, built human, social, cultural, political capital)

Sustaining livelihoods and incomes through livelihoods promotion and diversification

Natural resource management and conservation

All integrated for the resilience of families and communities

Sophia Irepu. Email: sircor@cordaid.net.

Second: Roberto Montero, Practical Action Peru

Transforming smallholder-private sector relationships to take agro-ecological community-based adaptation to scale: agroforestry coffee systems in Peru

Role of the Private Sector in Enhancing Climate Change Adaptation

More than half a million marginalised coffee growers affected by climate change now have a concrete opportunity to adapt to the effects of global change, thanks to the agro-ecological approach that has been developed over 10 years by Practical Action in the Peruvian Amazon.



1. The agro-ecological approach and communities

- Participatory analysis of farm plots in communities
- Formation of local promoters of agro-ecological techniques
- Implementation of agroforestry with eight integrated technologies
- Forming linkages with enterprises, cooperatives, NGOs and government



2. Agroforestry as a successful community-based adaptation strategy for coffee production

- Decreased impact of climate-change related diseases ('rust') from 72% to 17%
- Increased productivity (100%) and quality (from 78 to 82 points)
- Access to market with preferential prices due to quality and ecological production
- Reforestation of degraded areas with reduced erosion and positive downstream effects



5. Drawing on Practical Action's international experience with measuring change:

- Relationship Matrix, Bangladesh: measures changing relationships between SHFs and market actors along the whole value chain
- Could add greater detail on the benefits for all actors in the value chain – supporting changes at the provincial and national level



3. The challenge: scaling-up

What are we doing to transform relationships between smallholder farmers and the public and private sectors?

- Documents for evidence
- Participation in local and regional thematic discussions for sharing evidence
- In situ knowledge for NGOs, private enterprises and others, through site visits
- Meetings with government actors including the Vice Minister of Agriculture
- Interaction with the private sector: financing, cooperative association, sale of quality coffee
- Working to Practical Action's model for scaling up



4. Evidence generated by the San Martin project

- For communities: increased income, ecological and social benefits
- For the private sector: coffee quality and improved resource use
- Government and civil society: economic, social and ecological benefits, improved adaptive capacity

Contact

Roberto Montero
Programme Manager: Systems of Production and Access to Markets
Practical Action-Peru



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www.solucionespracticas.org



This project has been developed thanks to the help and financing of Fondo Empleo, Zurich Foundation, European Union, IICA, Peruvian Coffee Board, coffee producers cooperatives, and local and regional government offices.

Third: Bruno Haghebaert, Global Network of Civil Society Organisations for Disaster Reduction

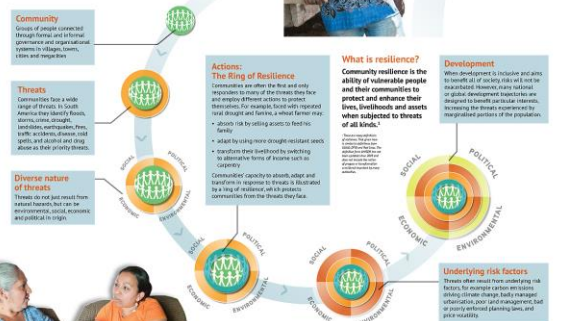
Measuring and enhancing effective adaptation. Learning about resilience from local people

Billions of people at the frontline face multiple threats, both extraordinary and everyday, that impact their lives and livelihoods. Many are poorly understood and understood. Local communities are often left to build resilience through self-organisation and self-reliance. They develop detailed knowledge of the threats they face, the consequences of these threats, communities' capacities to address threats, and the underlying factors that create adaptation.

barriers to this. This knowledge enables communities and individuals to absorb, adapt and transform: protecting and enhance their lives, livelihoods and assets. This local knowledge must be the starting point for action at all levels; whether it at the local, national or global. Frontline is a programme for gathering and sharing this knowledge to be used at different levels for monitoring and enhancing adaptation.

Adaptation and resilience

The resilience circle diagram, right, highlights the interrelationships between the threats communities face, the actions that communities employ to build their own resilience, the underlying risk factors that create barriers to action, and the development pathways that impact how actions are experienced by communities.



Frontline: How it works

Frontline is able to capture local knowledge from one-to-one conversations and aggregates this to local, national, regional and global scale. The programme has already gathered data from 13,000 respondents in 15 countries in South America.

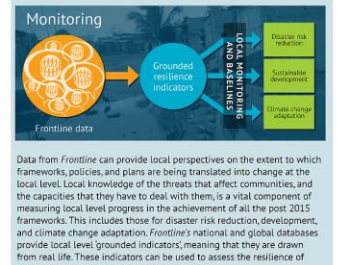
It starts with a conversation
The Frontline method starts with individual conversations with the holders of local knowledge: community members, civil society organisations, and local government officers. Each conversation is based on four basic questions:

- Threats:** What are the threats you face in your community?
- Consequences:** What impacts do these threats have on the lives and livelihoods of you, your household and your community?
- Actions:** What capacity do you and your community have to take action against these threats?
- Barriers:** What factors beyond your control lead to these threats?

From one conversation to many
Frontline has the ability to gather thousands of individual conversations together into local, national or global databases combining all responses. This information can be analysed by gender, age, location, and socio-economic group, amongst other factors.

At the Local Level: The consultations facilitate community reflection, resulting in wider dialogue and partnerships, and provide valuable evidence to guide local budgeting and action plans.

At the National and Global Levels: Frontline data can be used to create more appropriate and effective national policies and plans, ensuring that local level responses are both understood and considered. It can also be used as a monitoring tool for measuring progress in the post-2015 frameworks, including those for disaster risk reduction, sustainable development and climate change adaptation.



Data from Frontline can provide local perspectives on the extent to which frameworks, policies, and plans are being translated into change at the local level. Local knowledge of the threats that affect communities, and the capacities that they have to deal with them, is a vital component of measuring local level progress in the achievement of all the post-2015 frameworks. This includes those for disaster risk reduction, development, and climate change adaptation. Frontline's national and global databases provide local level 'grounded indicators', meaning that they are drawn from real life. These indicators can be used to assess the resilience of respondents at local, national and global level.

Frontline data can also be used to establish accurate risk and resilience baselines for the year 2015-2016, to inform ongoing monitoring of these frameworks.

Following the awards ceremony, conference participants circulated freely amongst the posters, asking questions and discussing poster contents with those who had presented. All posters are available for viewing on IIED's Flickr site.²⁷

CBA short films: Presentation and Q&A

Facilitators

- Charles Tonui, ACTS
- Pablo Suarez, Red Cross / Red Crescent Climate Centre
- Wangare Kiruma, NEMA

Session Details

CBA9 participants answered questions about their short films²⁸ presented in this session.

	Film title	Short description	Presented by
1	Cool Farming: Growing Plants in Africa without Soil	The use of hydroponics to grow food in Kenya	Sarah Nderitu, Climate Innovation Centre, Kenya (CIC-K)
2	Kisumu youth adopt modern agriculture methods	Youth adopt modern agriculture methods	Catherine Mungai, CCAFS
3	Animation videos	Education tool for children	Pia Treichel, Plan International Australia
4	Students Plant Mangroves at Lopahan Village, Manus Island, PNG	Students planting mangroves	Gabriel Kulwaum, TNC
5	Flood-stricken Nyando residents embrace smart villages	Communities embrace smart villages in flood prone areas	Catherine Mungai, CCAFS
6	The Mountain Communities Network and Bhutan declaration	Community network and declaration	Krystyna Swiderska, IIED
7	Collective action	How radio helps Tanzanian farmers	Anna Colom, BBC Media Action
8	CLIM-WARN Project video	Climate, early warning and communication	Asha Sitati and Zinta Zommers, UNEP

²⁷ See <https://www.flickr.com/photos/iied/sets/72157651622983056/>

²⁸ Films can be viewed here:

<https://www.youtube.com/playlist?list=PL1iUHL94bWo5PQxMdJhhldz3kByr8l7ua>

Plenary session 23: Debate and Next Steps

Facilitators

- Saleemul Huq, IIED / ICCCAD
- Pablo Suarez, Red Cross / Red Crescent Climate Centre

Session Presenters

- Adrian Fitzgerald, Irish Aid
- Atiq Rahman, Bangladesh Centre for Advanced Studies
- Pablo Suarez, Red Cross / Red Crescent Climate Centre

This session began with a lively debate between Adrian Fitzgerald and Atiq Rahman on the topic of ‘whose measurement counts?’ Moderated by Pablo Suarez, the debate explored the need to measure effectiveness: what should be measured? who should M&E activities ultimately serve? what friction exists between the end-member positions of top-down (‘government-centric’) and bottom-up (‘community-centric’) M&E?

Atiq Rahman took the position that “although everyone’s measurement counts, the communities’ measurement counts the most”. He suggested that friction lies between the interests of donors, who want ‘value for money’, and the interests of local communities. Atiq advocated for climate justice for vulnerable communities, and noted that such communities should be supported to build upon their inherent adaptive capacities, knowledge and practices. He highlighted the critical importance of urgent global mitigation efforts, noting that “mitigation is the best form of adaptation”.

Adrian Fitzgerald suggested that the key issue is not about “whose measurement counts the most”, but about “getting the mix right”. He noted that decision-making is about choosing one strategy or another, and that we need to face up to harsh decisions that will require trade-offs, and that this will require us to reconcile interests. He suggested that “communities in isolation cannot address climate change in isolation”, and that everyone must be involved, but only governments can provide the scale and coordination needed to reach everyone. He advocated for communities to be included in decision-making processes. Adrian suggested that robust M&E processes are needed to ensure that adaptation is effective, and that documenting and communicating the achieved results to citizens is necessary to ensure the future of effective climate finance application. He also highlighted the importance of mainstreaming climate change into development planning.

The key outcome of the debate was that existing M&E systems are too focused on serving the needs of governments, donors and non-governmental organisations. The needs of these institutional actors are inextricably linked with those of local communities, and both require information to know what works. There is a clear need for M&E systems to be more bottom-up, in order to more effectively serve the needs of local communities, and to evaluate effectiveness of adaptation actions based on local cultural perspectives.

Following the debate, Pablo reflected on the ‘out-of-the-box’ sessions on M&E games. The ‘wordclouds’ below show how session participants came to understand the concept of M&E differently by participating in these experiential learning activities. The ‘before’ wordcloud highlights that participants initially understood M&E to be the ‘mechanical’ processes imposed by donors, whereas the ‘after’ wordcloud focused more on what adaptation practitioners can or should do with M&E, highlighting the importance of learning, improvement and participatory engagement.

Before:



After:



Pablo then explained the results of a ‘pervasive game’ that was played throughout CBA9. This addressed the provision of drinking water pumps for communities. It demonstrated the effectiveness of self-organised M&E, when both communities and external actors have a shared vision.

Conference participants were then requested to share some of the key activities that they will take forward following on from CBA9:

- Representatives from the CBA9 Youth Conference presented an outcome statement from their meeting, as well as an artistic banner and poem.
- Representatives from nations ranging from Bangladesh to Zimbabwe described their keen interest in taking home lessons learnt from CBA9, and their willingness to take further action on climate change adaptation. See box below.
- The UNEP PROVIA programme noted that they are offering scholarships to developing country scientists to participate in the ‘Our Common Future on Climate Change’ event (May 2016), and COP21 (December 2015), both in Paris.²⁹ UNEP PROVIA also welcomed involvement in a survey to capture global case studies on good practice relating to communicating science into adaptive decision-making.
- Krystyna Swiderska (IIED) is creating a network on biocultural heritage, and how traditional knowledge and cultural values can be a resource in adaptation.³⁰
- Benjamin de Ridder (FAO) noted that FAO are starting up a Community of Practice on ‘Nutrition and Climate Change’, and are looking to partner with other organisations. They will be holding a side event on this theme at COP21.
- Caroline King-Okumu (IIED) noted that the Kenyan and UK Meteorological offices are planning a study to evaluate the costs and benefits of making climate information available to communities.
- Fiona Percy (CARE International) noted that as adaptation finance roles out in Africa, CARE is seeking to partner with others to provide ongoing collective learning, capacity building and training opportunities.

Government Group decision statement from CBA9

Government participants from: Bangladesh, Ethiopia, Gambia, Kenya, Malawi, Mozambique, Nigeria, Tanzania, Vietnam, Zambia, Zanzibar, Zimbabwe.

Key points:

²⁹ See <http://unep.org/provia/HOME/tabid/55173/Default.aspx>

³⁰ Contact: Krystyna.swiderska@iied.org

1. The Government Group Network on climate change mainstreaming met on the sidelines of CBA9. This included officials from more than 20 countries.
2. We agreed to the following:
 - a. To share the Nairobi Outcome document with colleagues in our Ministries in each of our countries.
 - b. To strengthen the Group's existing platform to regularly share information with Government Group members.
 - c. To organize a shared learning event which will develop a common understanding on one of the following key policy issues that was identified at our meeting:
 - i. The relevance of the NAP process to the local adaptation planning process.
 - ii. Mainstreaming, with a focus on scaling-up interventions that address the joint issues of climate change and poverty reduction (e.g. linking social protection and climate change to achieve this goal).
 - iii. Climate finance.
3. We will meet next year at CBA10 to:
 - a. Share country updates on key national issues related to international climate change planning.
 - b. Share the Group's main knowledge product that will be developed at our shared learning event, which will take place over the next 12 months.
4. On behalf of Government colleagues, we would like to take this opportunity to thank the organizers for facilitating our engagement at CBA9. This has provided us with an opportunity to learn and share on the important issue of M&E of CBA.

Saleemul Huq then provided an overview of the key outputs and outcomes of CBA9. He noted that the Kathmandu Declaration developed at CBA8 was successful in that 50% of the Green Climate Fund allocations have subsequently been directed to adaptation. He then presented the Nairobi Declaration, an outcome statement from CBA9, which advocates for vulnerable groups to be included in the process of developing goals, strategies for implementation, indicators and evaluative frameworks for adaptation. The Nairobi Declaration reiterates the key messages from the 2014 Kathmandu Declaration, which advocates for increased and accelerated finance for adaptation in poor and vulnerable communities, and the establishment of transparent mechanisms for monitoring adaptation finance. Saleemul Huq suggested that the Nairobi Declaration would be a key advocacy document to ensure that the needs and interests of those most vulnerable to climate change are reflected in the agreements reached in 2015 on the Sustainable Development Goals, Financing for Development, and on UNFCCC climate financing at COP21.

Nairobi Declaration on Community Based Adaptation to Climate Change

From April 27th to 30th, 2015, over 400 representatives from governments, civil society, the scientific community, and international and non-governmental organisations gathered in Nairobi, Kenya, at the 9th International Conference on Community-Based Adaptation (CBA) to climate change. CBA is a participatory, community-led and environmentally sustainable approach to adaptation that aims to strengthen the resilience of poor and vulnerable communities. At CBA9, participants discussed methods for measuring the effectiveness of adaptation to climate variability and change for the poorest and most vulnerable. Based on discussions, lessons learnt and outcomes of this conference, participants of CBA9 present the Nairobi Declaration, which states the importance of addressing the needs and interests of the poorest and most vulnerable in international agreements on sustainable development, development finance and climate change.

Climate change has and will continue to have disproportionately negative consequences for the

poor and vulnerable. These groups are already adapting and enhancing their resilience to the adverse effects of climate change. It is the responsibility of developed countries to support the adaptation efforts of poor and vulnerable groups. To this end, governments should promote approaches to climate change adaptation that build the capacity of local actors. They should also ensure that vulnerable groups are included in the process of developing goals, strategies for implementation, indicators and evaluative frameworks for adaptation.

Consistent with the 2014 Kathmandu Declaration agreed at CBA8, the CBA community reiterates the importance of securing additional, adequate and transparent adaptation financing, especially for community-level adaptation efforts. Global agreements must increase and accelerate finance for adaptation in poor and vulnerable communities and establish transparent mechanisms for monitoring adaptation finance. Governments should prioritize the needs and interests of the poorest and most vulnerable in their national adaptation planning processes and provide clear, timely and accurate reporting on the extent to which adaptation finance reaches vulnerable groups.

World leaders will meet this year to draft agreements on Sustainable Development Goals, Financing for Development and Climate Change under the UNFCCC. Leaders must ensure that these agreements reflect the needs and interests of the poorest and most vulnerable. Local, regional and national governments should also incorporate the principles of inclusiveness, community leadership and environmental sustainability into all of their plans for adaptation and development.

Saleemul Huq then noted several other key outcomes from CBA9:

- A group representing 30-40 government planning ministries across Asia and Africa have formed an action plan on climate change adaptation.
- The Global Initiative on Community-Based Adaptation (GICBA) will be revitalised over the next year. GICBA welcomes new additions to its Google Earth map of CBA activities.³¹
- There has been an informal agreement for 'South-South' collaboration between the governments of Bangladesh and Kenya on tackling climate change. This would involve a team of Bangladeshis visiting Kenya, and a team of Kenyans visiting Bangladesh.
- Expressions of interest are welcome for a special issue on adaptation M&E in a book or academic journal. Those interested in proposing a paper should email Hannah Reid.³²
- It was announced that CBA10 would be held in Dhaka, Bangladesh, in April 2016, with the likely theme of 'Enhancing Urban Community Resilience'.

³¹ See <https://weadapt.org/gicba>

³² Contact: hannah.reid@iied.org

Plenary session 24: Conference Closing Session

Chairpersons

- Saleemul Huq, IIED / ICCCAD
- Cosmas Ochieng, Executive Director, African Centre for Technology Studies

Session Speakers

- Victor Orindi, co-chair of the CBA9 National Organising Committee
- Fatuma Mohamed Hussein, National Climate Change Secretariat, Ministry of Environment, Water and Natural Resources, Kenya, and Adaptation Fund Board member.
- Youssef Nassef, UNFCCC Adaptation Programme Coordinator
- Julius Mbatia, CBA9 Youth Conference Representative
- Atiq Rahman, Bangladesh Centre for Advanced Studies.
- Joshua Wakahora Irungu, Governor Laikipia County

Cosmas Ochieng gave a vote of thanks to everyone who had helped organise the successful CBA9 conference. He informed participants that conference planning had begun the previous year and that during the conference week, a third of his staff from the African Centre for Technology Studies had dedicated their time to ensure the smooth running of the conference. He also thanked the National Organising Committee consisting of different stakeholders such as the Ministry of Environment, Water and Natural Resources (MEWNR), Kenya Private Sector Alliance (KEPSA), The Council of Governors of Kenya, United Nations Environment Programme (UNEP), United Nations Development Programme (UNDP) and the Climate Innovation Centre (CIC) among others. He mentioned that the National Organising Committee was co-chaired by Victor Orindi, and invited him to the podium to give a vote of thanks of behalf of the committee.

Saleemul Huq then went on to summarise what he believed had been achieved during CBA9 and the outcomes that would be taken forward. He shared how thrilled he was by the diversity of CBA9 participants. These represented 90 different countries. He thanked his numerous distinguished colleagues, who were able to take time out of their busy schedules to attend CBA9, not forgetting the 7,000 people who were not physically present at the conference, but were following proceedings from around the world on twitter and other social media platforms.

Saleem described what he felt were two highlights of CBA9. Firstly, improved engagement with the private sector. The private sector (including every farmer in Kenya) is now working with non-government and government agencies to take forward CBA ideas shared during the conference. Secondly, the growing attention given to nature-based solutions to climate change, or 'ecosystem-based adaptation', which can provide a triple win in terms of adaptation, poverty reduction and mitigation, especially in terms of reaching the poorest and most vulnerable.

Saleem explained how the Government of Bangladesh and the Government of Kenya have agreed to facilitate an exchange programme for a multi-stakeholder group to work on a south-south collaboration on climate change and find key activities to work on together.

He explained how in addition to the conference proceedings, a journal special issue or book on adaptation M&E will be published. Proposals for papers or chapters need to come in soon.

The youth representative, Julius Mbatia, then took to the podium and shared the following statement from the CBA9 parallel youth conference.

Outcome Statement from The Youth Conference on Community Based Adaptation (CBA) to Climate Change

We, the participants of the Youth Conference on Community Based Adaptation, working under the theme "Youth as a Catalyst for Enhancing Effective Community Based Adaptation" having deliberated on various sub themes at the Conference:

- a) Thank the Government and the people of the Republic of Kenya for hosting the Youth Conference on Community Based Adaptation and for their hospitality and warm welcome.
- b) Commend the Ministry of Environment, Water and Natural Resources of the Republic of Kenya for officially opening our Conference and expressing satisfaction with the fact that young people are being incorporated into the climate change debate and negotiation processes.
- c) Are grateful for the support received from all partners who committed their time and resources for the success of the youth conference.
- d) Recognize that climate change not only presents huge challenges but opportunities for youth e.g. technological innovations.
- e) Note that UNFCCC COP21 will be held in December 2015 in Paris France, and hence acknowledge the activities of the UN, intergovernmental organizations, private sector, youth, women, communities, governments and other stakeholders that address the global climate change challenge.
- f) Acknowledge the invaluable intellectual and practical contributions by policy makers and technical experts on community based adaptation.

Informed by:

- a) challenges that climate change poses on the macro and micro economies of our countries,
- b) opportunities and challenges faced by youth organizations involved in CBA including resource constraints, limited capacity and inadequate space for youth representation in policy and decision making processes, inadequate institutional mechanisms for youth engagement, the need for technological innovation for effective CBA actions;

Considering:

- a) the success of youth engagement in enhancing adaptation actions to climate change in several countries, the need for scaling out and up success stories such as the dew collection technology developed by a young person in Benin and presented at the youth conference,
- b) the commitment of youth organizations to significantly contribute to building climate resilient communities by strengthening rural entrepreneurship, and sharing experiences;

Resolve as follows to:

- a) Have youth CBA forums at upcoming CBA conferences,
- b) Present the outcomes of these fora to our governments, communities, private sector, and other stakeholders and at upcoming national and regional climate change and environmental consultations and meetings etc.
- c) Hold follow-up meetings with youth organizations involved in CBA to build youth national alliances on CBA.
- d) Have youth representatives meaningfully engaged and funded as government

delegations to all Conference of Parties (COPs) and other regional platforms on climate change.

To realize the stated resolutions, we the youth seek that:

- a) The Youth CBA Conference be convened in parallel to the main CBA conference, with a day designated during the main conference for youth affairs.
- b) Additional resources be mobilized for youth-led CBA initiatives, and mechanisms be reviewed to increase access to existing financial resources e.g. establishment of a youth climate fund.
- c) Our CBA capacity be enhanced through training, mentorship programmes and mainstreaming climate change and environmental education into national education curricula.
- d) Proactive youth-sensitive, multi-stakeholder planning be promoted.
- e) Participatory youth-inclusive approaches be used to develop effective community based climate information systems, technologies and innovations.

Fatuma Mohamed Hussein gave apologies for the Cabinet Secretary who had planned to attend CBA9 but could not due to other national commitments. She explained to the delegates that through her work with the National Environment Management Authority (NEMA) and the Adaptation Fund, she had first-hand experience of the importance of strengthening national institutions and community level participation in the National Adaptation Plan Process, which could in turn help Kenya access Green Climate Fund resources. She also mentioned that she supports a global framework to measure adaptation projects, and envisions CBA9 as having a key role in developing this framework. She made a request for further funding from the international community to support adaptation projects, particularly focussing on support and engagement with the private sector. Fatuma described commitment within the Government of Kenya to take community involvement in adaptation forward, alongside the other conference outcomes at both national and international levels. She also emphasized the importance of engaging youth in the next steps of CBA. Lastly, she appreciated that the CBA9 organising team had taken into account the devolved nature of Kenya's Government and that both county and national government were represented at the conference.

Youssef Nassef described his respect for the conference series and was very enthusiastic about its emphasis on learning and innovation. He explained the differing rates of movement for the different elements of climate change work, and the risk of CBA falling off the map. He emphasized the need for a critical mass to ensure that CBA continues to receive the attention and money it deserves. Youssef called on everyone at CBA9 to push forward with the CBA agenda and participate in the official UNFCCC negotiations (including all side events) leading up to the Paris 2015 COP in order to ensure that CBA remains in the negotiating text for National Adaptation Plans in the years to come. .

Atiq Rahman explained the importance of the CBA conference series for assisting and strengthening CBA processes and how wide-ranging the impacts of climate change are on communities across the world. He pointed out that mitigation must be done rapidly in order to allow for adaptation to be successful; the failures of mitigation are what makes CBA so fundamental today. Atiq also mentioned that nation states will be facing serious migration issues over the coming years, so adaptation must be done fast and now. He then outlined plans for the 10th CBA conference (CBA10). He introduced the next theme of CBA10 as 'Enhancing Urban Community Resilience' and welcomed delegates to attend CBA10 in Dhaka, Bangladesh, in 2016.

Joshua Wakahora Irungu officially closed the conference with thanks to partners investing in CBA models and projects in his county. As a representative of the Council of Governors of Kenya,

he reiterated how important it is for CBA to take into account the devolved governance model in Kenya.

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