SIDE EVENT OF THE EXCOM AT SB44

SHINING THE LIGHT ON NON-ECONOMIC LOSSES

CHALLENGES, RISKS & LESSONS LEARNED FOR ADDRESSING THEM

SUMMARY NOTE, JUNE 2016

INTRODUCTION

"Non-economic losses encompass a broad range of issues and therefore their understanding requires a range of expertise, and natural and social sciences including health, economics, human geography, anthropology, environmental psychology, amongst others".

WHAT ARE NON-ECONOMIC LOSSES?

The term economic losses can be understood as the loss of resources, goods and services that are commonly traded in markets. The term non-economic losses can be understood as the remainder of items that are not economic and are not commonly traded in markets. The absence of a market price is one of the main reasons why assessing non-economic loss is challenging, but their effect on human welfare is no less important.

BACKGROUND

COP 19 (2013) established the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts to address loss and damage associated with impacts of climate change, including extreme events and slow onset events, in developing countries that are particularly vulnerable to the adverse effects of climate change.

The functions of the Mechanism are:

- 1. To enhance understanding;
- 2. To enhance dialogue, coordination, coherence, synergies;
- 3. To enhance action and support.

In order to guide the implementation of these functions, Parties established the Executive Committee of the Warsaw International Mechanism for Loss and Damage (Excom). The initial two-year workplan of the Executive Committee was approved at COP 20 (2014).

Action Area 4 of the initial two-year workplan focuses on enhancing data on and knowledge of non-economic losses (NELs) associated with the adverse effects of climate change and identifying ways forward for reducing the risk of and addressing non-economic losses with specific focus on potential impacts within regions.

SIDE EVENT "SHINING THE LIGHT ON NON-ECONOMIC LOSSES: CHALLENGES, RISKS & LESSONS LEARNED FOR ADDRESSING THEM"

To raise awareness of the nature and extent of non-economic losses and how to integrate measures to reduce the risk of non-economic losses in comprehensive approaches to address loss and damage associated with the adverse effects of climate change², the Excom held a side event on 18 May 2016 in the margins of the 44th sessions of the Subsidiary Bodies in Bonn, Germany.

The agenda and list of invited speakers are contained below. The event also heard views through a roundtable discussion from a wide variety of participants in the audience. For further information on the side event, including promotion materials, and presentations delivered, please visit <u>surface.int/9546></u>.

¹ FCCC/TP/2013/2, Technical paper on non-economic losses in the context of the work programme on loss and damage (2013). Available at http://unfccc.int/resource/docs/2013/tp/02.pdf.

² Action Area 4, activity (a) of the initial two-year workplan of the Executive Committee. Available at <unfccc.int/8805>.

PART I	Ms. Shereen D'Souza	- Introduction to the Warsaw International
	Executive Committee of the Warsaw International Mechanism Ms. Olivia Serdeczny Climate Analytics	Mechanism and its Executive Committee - Overview of non-economic losses
PART II	Mr. Espen Ronneberg Secretariat of the Pacific Regional Environment Programme Ms. Marina Maiero World Health Organization Mr. Abias Huongo Least Developed Countries Expert Group Mr. Estebancio Castro Diaz International Alliance of Indigenous & Tribal Peoples of Tropical Forests	A range of practical examples on the ground. Each speaker will highlight challenges, risks, and lessons learned from national approaches and approaches at the national level.
PART III	Interactive roundtable discussion with audience participation Question 1: How national governments, international, regional and national organizations and communities could improve or develop integration of non-economic losses in the decision making processes and policies to reduce the risk of NELs? What are the challenges, risks, and approaches to address NELs? Question 2: How can the work of Executive Committee contribute to strengthening efforts to integrate measures to reduce the risk of non-economic losses in comprehensive approaches to address loss and	
	damage associated with the adverse effects of climate change?	

SUMMARY OF DISCUSSIONS

CHALLENGES AND RISKS

A range of views were heard from speakers and from the audience with regard to common, but also specific challenges faced by those seeking to address NELs. Topics raised under the heading of challenges were varied. Below is a summary of challenges and risks in addressing NELs which were highlighted during the discussion, including:

Monetisation: Decision makers often rely on monetary assessments of NELs in order to integrate them into cost and benefit analyses (CBA) when weighing different options to act. One such example was presented by the World Health Organization (WHO), which is embarking on the development of a specific methodology to quantify impacts on health. Placing a monetary value on non-economic items may lead to greater protection of these items, particularly where costs of action or inaction are being considered. Several speakers raised the limitations of such an approach, given the value judgments that have to be made in order to monetise a thing that could be lost. As put by one speaker: "We don't want to know the price of everything and the value of nothing".

Measurability: The value of NELs lacks a common unit of measurement, that is, they are considered incommensurable. Thus, monetization and integration into economic valuation has been challenging. Some standardised measurements exist for some things that tend to be non-economic in nature (e.g. for life or health) and some traditionally non-economic things are increasingly commonly valuated (e.g. ecosystem services). For other non-economic items, especially intangible items, measurement might be challenging (e.g. mental health, identity, cultural heritage, sense of place or indigenous knowledge).

Value can depend on context: How losses are valued differs across cultural contexts and value systems. For example, the estimate of the loss of value from melting glaciers will vary depending on who one asks, i.e. if one asks a tourist or a member of a local community. Due to their unique values systems, this is a challenge for indigenous peoples in particular. This is also a challenge for the communities and countries at risk for loss of territory, given the links between place and identity.

Burden-sharing: Another issue associated with addressing NELs is that of burden-sharing, in terms of the economic costs associated with managing NELs, so that they are not fully borne by the most vulnerable. The example was given of a government that compensates the family after the death of a family member, given the non-economic value and income-earning potential of the individual. Financial assistance to this end was deemed by some speakers and audience members as instrumental. However, as seen in the case

of indigenous peoples, a further challenge is that only a fraction of the funds pledged to their assistance actually reaches them, highlighting the importance of good governance for managing NELs.

Complexity: The challenge of complexity was identified not only in the manifestation of impacts, but also of identifying how human and natural systems are affected. For example, the combination of tropical storms, sea level rise, ocean acidification and fresh water depletion are drivers of a range of NELs, such as loss of cultural heritage and identity and loss of ecosystem services in the form of coral bleaching.

Uncertainty: While certain NELs are already being felt today, there is also great uncertainty, with regard to the nature, distribution and severity of future losses. In order to minimise further losses, the need to limit temperature rise as much as possible is paramount, particularly for the most vulnerable. This includes but is not limited to SIDS. On the other hand uncertainty around the extent of future losses might compel decision-makers to take action with alacrity, not only through mitigation, but also risk assessment, risk reduction (e.g. primary prevention in the health sector) and comprehensive risk management more generally.

Unavoided and unavoidable losses: A final challenge faced by the research community and decision-makers is that not all NELs have been avoided, nor will they all be avoidable. The question remains about what can be done once such losses are recorded and recognized as valuable.

LESSONS LEARNED

The speakers, as well as members of the audience, offered various lessons learned from different perspectives. These lessons covered issues relating to research, assessment and implementation. Below is a thematic summary of the key points raised by speakers and audience.

Analysis methods: Multi-criteria decision analysis, or other multi-objective analyses, use economic cost as one of several metrics. Here, the challenge remains in the merging of different types of information and knowledge, without giving economic or quantitative data too much weight. One example of alternative criteria for consideration in the protection of indigenous knowledge comes from the work of UNESCO³ under the Convention for Biological Diversity (CBD). Indicator data⁴ collected by UNESCO related to indigenous knowledge can provide information for decision-making on NELs. When LDCs conduct assessments, in most cases, they do not rely on economic statistics alone in order to identify urgent and immediate needs, citing that not everything that is important can or needs to be monetised.

Inclusivity: It is valuable to involve all major stakeholders, including segments of the population that are already vulnerable owing to geography, socioeconomic status, livelihoods, gender, age, indigenous or minority status or disability, in assessments, including through field consultations. Such inclusion can help to ensure their values and interests are reflected in priority actions that are identified and subsequently implemented. One can gain an understanding of what NELs actually mean to those affected and at risk. By involving all stakeholders, insights and new questions can develop, and practical solutions emerge. For example, in the case of indigenous peoples, such inclusion and field research is instrumental in understanding their unique way of life and can inform how best to communicate and address their needs.

Context-dependence: It is important to recognise the context in which NELs assessment methods are being applied. Assessment methods would need to be dynamic and to take context specificity into account, rather than working from a standard list of NELs categories. For example, experience from LDCs' approach to vulnerability assessments and adaptation planning yielded some useful lessons for understanding the context of NELs. Case studies⁵ show that starting assessments with key development themes (e.g. food

³ UNESCO resources and case studies in relation to cultural heritage and climate change. Available at swhc.unesco.org/en/climatechange.

⁴ CDB Indicators: land use and land use change, traditional occupations and languages.

⁵ FCCC/SBI/2015/INF.14, Information paper on the NAP Expo and the regional training workshops on national adaptation plans: experiences, good practices and lessons learned in addressing adaptation in the least developed countries (2015). Available at http://unfccc.int/resource/docs/2015/sbi/eng/inf14.pdf.

security, water security, etc.) is an effective means of assessing vulnerability and consequently encouraging sectoral ministries to take leadership on implementation.

Capacity-building: The need for technical, in-country capacity-building was highlighted as an effective means to address challenges arising from climate change, particularly for SIDS. Such capacity would be needed to understand and act upon the long-term, and often unpredictable consequences of NELs.

Education: In a similar manner, education was cited as needing to play a key role in minimising the extent of NELs. This was highlighted in particular with reference to minimising the risk of the loss of indigenous knowledge. A means to achieving this might be through the promotion of indigenous education, and the accommodation of a diversity of livelihoods and languages.

ISSUES FOR FURTHER CONSIDERATION

At the event, the audience voiced views on are a number measures that can be integrated in comprehensive approaches to reduce the risk of NELs; some of them are tried and practiced, while others are still under development. Beyond this, the speakers and the audience were asked to propose how the work of Excom could contribute to strengthening efforts to integrate such measures. A number of proposals were made, which are summarised below.

Catalyse action: The Excom has a role to play to catalyse action to address NELs at the national and international levels.

At the international level, speakers noted that the Excom could consider:

- Seeking inputs from UNFCCC Parties on how to address NELs, and what methodologies to employ towards assessing, monitoring and avoiding NELs;
- Supporting and complementing the work of different programmes, such as the Nairobi Work Programme, and their work for e.g. on the use of traditional knowledge.

At the national level, speakers noted that the Excom could consider:

- Entering into open dialogues with ministries of finance to ensure that these take NELs into consideration in their accounting, decision making and risk assessment;
- Enhancing action and support, including technical, capacity building and financial support to help countries understand long-term consequences of NELs and to develop national level solutions;
- · Promoting knowledge related to human mobility, for e.g. by supporting the inclusion of safeguards and human rights protection in mitigation, and adaptation policies and strategic frameworks including National Adaptation Plans (NAPs) and Nationally Determined Contributions (NDCs).

Collect information and conduct research: The gaps in data and the need for data collection were highlighted by a number of speakers and participants. In particular, there is a need to put in place better observation systems, e.g. for ocean acidification.

This would serve to gather data and to work towards better understanding complex interactions of climate impacts. The Excom also has a role in catalysing the development of the body of work on NELs by catalysing further theoretical, as well as applied, long-term and interdisciplinary research. Some suggested research topics the Excom could consider included:

- · Understanding how to respond to unavoidable losses, e.g. some research might consider how to identify and lessen the psychological impacts of NELs on those affected;
- · Understanding the long term consequences from the loss of non-market commodities and how to reduce the risks of such losses;
- Guidance on terminology regarding NELs, including understanding the role of language and the choice of terminology in promoting more effective implementation of approaches to address NELs;
- Understanding the impact of climate change on health, e.g. through a long-term study by a global working group on NELs in collaboration with the WHO and other expert organizations;

- · Understanding NELs in relation to resilience, e.g. through the use of mixed qualitative and quantitative research methods:
- Developing a new economic model to assess, capture and potentially monetize natural capital, biodiversity and environmental externalities.

Further, questions from the audience posed online to the panel revealed several other key question areas, which might merit further consideration by the research community. These questions are as follows, and the complete list of questions can be found in Annex 1:

Questions related to knowledge gaps and need for further research:

- · Will NELs become more apparent with increasing warming and how should this factor be incorporated towards addressing the issue?
- How can IPCC special report on 1.5 degrees reflect on the implications for non-economic loss and damage, especially in ways that will facilitate decision making?
- · What should be priority areas for research on NELs?
- · What can we learn from behavioural and social science about how to manage non-economic losses?
- · Which research methods should be used to investigate an issue which is so subjective and context dependent?
- · How to 'measure and address' the NELs experiencing by the informal sector when they are not treated in 'equal' manner within the system?
- How to develop the global-framework in addressing the NELs while the issue is highly contextual in some cases trying to 'monetize' will reduce its 'actual value'?
- · How does the non-economic L&D address loss of culture and traditional knowledge of indigenous peoples?
- · Is there a danger of NELs being subsumed into economic losses?
- · Can the extent of deprivation prevailing amongst the vulnerable communities be considered for measuring the risks of non-economic losses?
- Can non-economic losses have spill-over effects on economies, business, property...those kinds of assets we think of in economic terms?
- · How are issues like values and the role or function that a non-economic asset plays showing up in decision making? What do we know about how decision makers consider non-economic values when they have to decide what to do about a problem?

Commitment to leadership and communication: In terms of leadership under the UNFCCC, the Excom were seen as having a role to play in communicating the urgency of NELs to Parties, and thus helping to drive action through the uptake of effective response measures. Such response measures include those under both mitigation and adaptation goals and policies, e.g. these could be included by Parties as 'meaningful' content under their NDCs.

Further, the Excom was seen as having a role in synthesising and communicating knowledge, methodologies and case studies relating to NELs. In particular the issues of resilience of migrants, displaced or relocated people and communities, as well as indigenous knowledge were highlighted in this context.

PHOTO BOOTH CAMPAIGN

"WHAT DO NON-ECONOMIC LOSSES MEAN TO YOU?"

16-18 MAY 2016

A photo campaign took place in the lead up to the side event, in order to complement the side event in raising awareness of NELs. In order to bring these diverse issues to life and raise awareness with the audience, the campaign posed the question: "What do non-economic losses mean to you?"

A total of **65 people participated in the photo campaign** (a sample of these are compiled in the images below) representing a wide range of stakeholders from around the world. A complete list of the answers received can be found in Annex 2.



ANNEXES

ANNEX 1: QUESTIONS RECEIVED ONLINE

Questions related to knowledge gaps and need for further research

- Will NELs become more apparent with increasing warming and how should this factor be incorporated towards addressing the issue?
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Questions or statements related to policy and practice

National

- · Where are non-economic losses going to be most prominent and most in need of addressing?
- How can loss of life or loss of territory be incorporated and integrated into national policies? Is that realistic?
- Some speak of alternative livelihoods and relocation as viable and favourable options for loss of territory & ecosystem function. Please comment.
- · [...] NELs must be integrated into the NAPs. Wasn't it one of the group's priorities to address L&D as separate from adaptation?
- · When will non-economic losses become apparent in vulnerable communities? Is this a problem decision makers have to address now, or only in the distant future?

International

- Do you think that the UNFCCC has a role to play in addressing NELs? Where would be a good place to start?
- Do you think that SIDS and LDCs should receive priority focus in the context of NELs? Please comment on this in the context of sea level rise-loss of territory.
- · How does the Excom plan to take forward the work stream on NELs up to and beyond COP 22?
- · What do you think that the Excom should do to make a difference in terms of addressing loss and damage?
- Should vulnerable countries simply absorb NELs as an expected impact from climate change without anything being done at the UNFCCC level?

Audience views

- [...] focus should be on reducing risks, but wouldn't that be adaptation? L&D entails that resilience building strategies have already failed, right?
- · What can be done beyond mere definitions while losses continue to occur? This has to be more than an academic exercise.
- Is it that we cannot address NELs or is it that there is no will to address it because it requires funding?
- · Why are you trying to put an economic value on losses which are non-economic?
- NELs will need to be translated to economic value to assist in addressing. Where will and where should the money come from?
- · Stop using the term "non-economic losses" and replace with "most important losses"
- · Will the mechanism of funding of NELs have an impact on the valuation of NELs?
- · Non-economic losses = Most important Losses while Economic Losses = Less important losses

ANNEX 2: PHOTO-BOOTH AND ONLINE RESPONSES

Answers submitted at the photo booth and via Slido to the question: What do non-economic losses mean to you?

- 1. My mountains will have no more snow. #Bhutan, #PNW [Pacific North West]
- 2. My grandchildren will know the beautiful islands
- 3. Next generations should enjoy healthy and beauty landscapes and wildlife.
- 4. Loss of life, loss of institutions, heritage and unrecoverable properties, for example ecosystems.
- 5. Loss of CULTURE, LANGUAGE, HOMELAND. DISASTER to VULNERABLE PEOPLE and communities.
- 6. Sad for: The loss of cultural heritage; Our cities of origin will be under water; The world will just not be the same!
- 7. Sad for: the most vulnerable people, who are already suffering from losses caused by the adverse effects of climate change.
- 8. No money, but rather culture, history, heritage. We need processes that develop and protect our 'other' losses through preservation and education.
- 9. What do you want to keep? Values, functions.
- 10. ALL That we cannot evaluate financially and which is a capital for a community and society (social, Traditional,...)
- 11. Key assets we may lose
- 12. Decoupling valuation from action and urgency
- 13. Addressing rehabilitation to losses and damages Compensation.
- 14. Loss of social fabric
- 15. My grandchildren will never know when water was as free as the air.
- 16. Ça touche la santé, le bien être et les conditions de vie des générations futures
- 17. 1. Loss of forest resources; 2. Loss of biodiversity; 3. Ecological loss, 4. Loss of biomass, 5. Loss of freshwater availability; 6. It can result in drought; 7. It can promote climate change and migration.
- 18. The extinctions of species is real. I am still young but some of the animal and plants pieces I saw 20 years ago in the village of Ghana cannot be seen anymore.
- 19. My lovely places in my Country Can by stay lovely for my child
- 20. I am more concerned about the lives of millions rural farmers, their livelihoods are at risk and they have no opportunity to attend such conferences to voice their concerns. Mashauri. DRC
- 21. Non-economic losses mean most because they're the most difficult to recover and rebuild.
- 22. To save the biodiversity is our task
- 23. Non-economic losses should be Nigeria's first Priority. #Buhari #Nigeria #Koyan
- 24. PROTECTION OF HUMAN LIFE SHOULD BE OUR #1 PRIORITY #Mugabe #Zanu #Zimbabwe
- 25. LOSS OF INSURED AND UNINSURED LOSSES should be Kenya's Priority #Kenya
- 26. NON-ECONOMIC LOSSES have a huge effect on the entire globe especially the Least Developed Countries / states.
- 27. Rivers are dying and I am going to miss the boat rides!

- 28. The loss of cultural/archaeological resources do you to impacts from sea level rise and coastal erosion such as forts
- 29. COMMUNITY DISENFRANCHISED AND DISEMPOWERMENT
- 30. Loss of privilege of identity to the place and social-era
- 31. Death; Cultural/social identity losses
- 32. Because I still haven't seen a SLOTH
- 33. Because Polar Bears Need a safe Place To Live!
- 34. Loss of things that money can't buy, such as cultural heritage
- 35. PUTTING PEOPLE'S VALUES CULTURAL HERITAGE, HEALTH, IN THE CONTEXT OF CLIMATE CHANGE. ENSURING THAT NONE MARKET THINGS ARE NOT LOST!
- 36. Losing my identity as an islander
- 37. Land is a NEL cos it cannot be sold or bought in The Pacific Islands!
- 38. We take care of Biodiversity to get our Energy from it. = Hydrogen
- 39. LOSS OF OUR CULTURAL IDENTITY...
- 40. All that gives meaning to life of people.
- 41. Securing and Advancing the RIGHTS OF INDIGENOUS PEOPLES on Land and Natural resource management enshrine global solution #climatechange
- 42. Life
- 43. Cannot plant a coconut
- 44. Stealing the future generations' livelihood
- 45. MIGRATION CLIMATIQUE SAVOIRS-
- 46. Solidarity!
- 47. failure of global solidarity
- 48. NIUE LOST 95% OF ITS NATIONAL MUSEUM TO CYCLONE HETA
- 49. It will be the next silent spring without BEES
- 50. NELs are definitely a challenge to our societies, ways of life, our behaviour, our roots... Let's work together!
- 51. In many cases it is (NELD) Difficult to value in monetary terms. However, to me, it affects your 'pocket' as well as your 'Hearts'... and many aspects.
- 52. Loosing joy IN MY EVERYDAY LIFE
- 53. Values should be valued perhaps not in monetary terms
- 54. LOSING MY SENSE OF BEING A SMALL ISLANDER. Seychelles.
- 55. What do non-economic losses mean to you?
- 56. Losing my island
- 57. Life
- 58. Can community disempowerment be included among NELs? Could proactive bottom-up initiatives related to climate change address this issue?
- 59. Can monetary valuation of natural resources and ecosystem services be an effective instrument on preventing NELs?
- 60. Loss of life, loss of identity, loss of territory, loss of 'a place called home'
- 61. Any intrinsic value to a person
- 62. Invisible, essential values that we forget to count until we've lost them and realise our society doesn't work the same without them.
- 63. Intrinsic values held by communities
- 64. Losses occurring mainly in developing countries that are not destroying any insured assets. E.g. homes of people, etc.
- 65. It means a normative level of loss that should not be acceptable for any society that claims to be civilised. Such as loss of an island country. No amount of money can compensate for such an existential loss.
- 66. Losses incurred to society from natural events
- 67. Putting human first
- 68. Loss of livelihood
- 69. What affected populations perceive to be valuable independent from monetary value?

- 70. Without bees it will be the next silent spring.
- 71. Coral reefs will be in history books
- 72. The land and sea have cultural, spiritual, and historical value to my people. It is impossible to put a dollar value on these protected and treasured areas. When the reefs die, and the land is lost below the sea, we lose our heritage. We lose our past, and our future. We lose an important part of our identity. This is one example of a non-economic loss to me.

Annex 3: WORD CLOUD

Answers submitted at the photo booth and via Slido to the question in word cloud format (wordle): What do non-economic losses mean to you?



ANNEX 4: TWITTER RESULTS

Social media engagement on twitter (Snapshot from 19 May 2016) #climateNELs































