

Non-economic losses (NELs): Human mobility, territory, and indigenous knowledge

Prof. Petra Tschakert*

School of Earth and Environment

University of Western Australia

* With contributions from Jon Barnett, Alistair Woodward, David Pannell, Nancy Tuana, Carmen Lawrence, Mark New, Abu Mumuni, Sarah Prout Quicke, Susanna Sallu, Margaret Alston, Ram Pandit, Neville Ellis, Alka Sabharwal, Doug Besette, Reuben Tete Larbi, Irene Kunamwene, and Naomi Godden

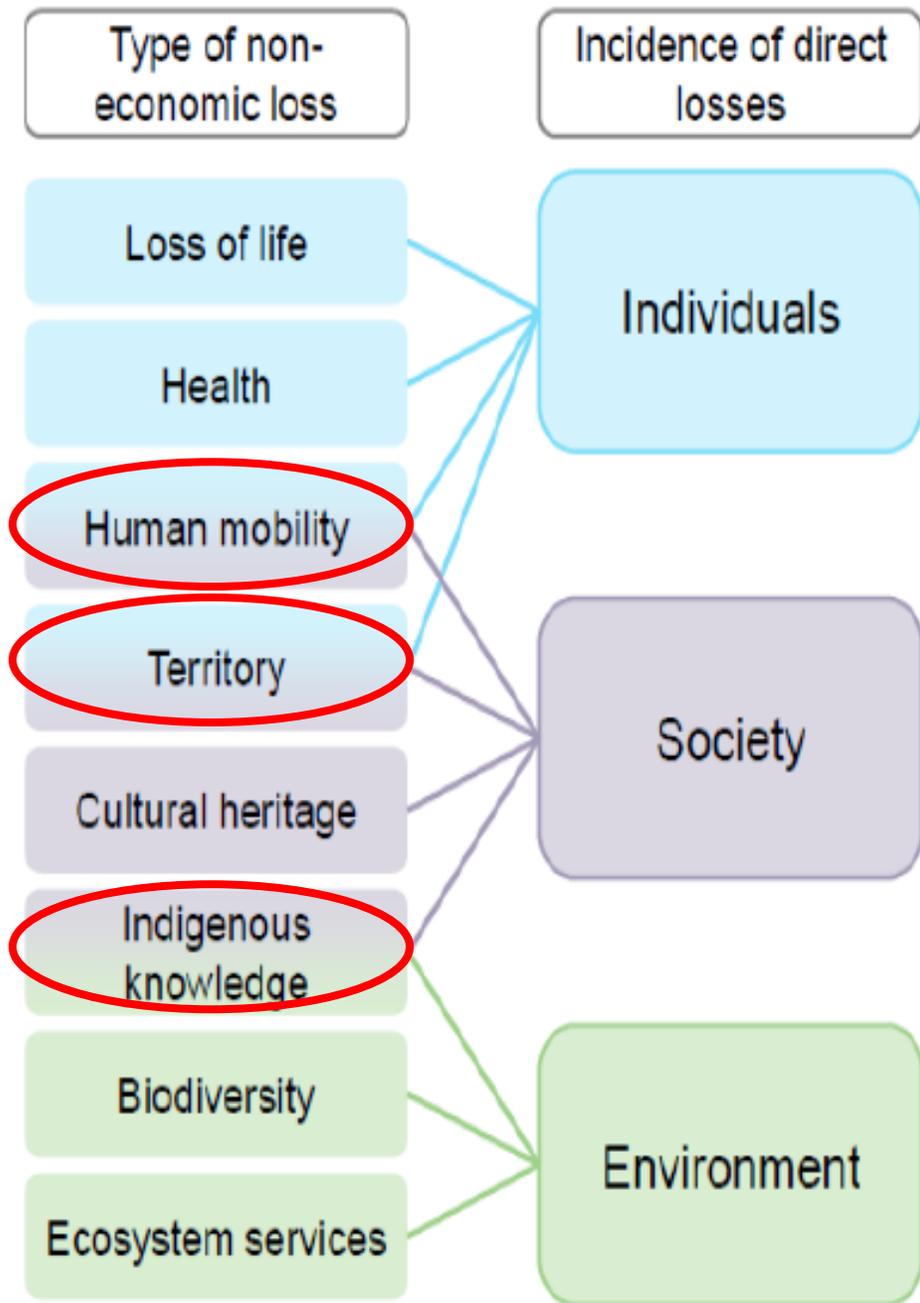
UNFCCC, WIM ExCom Loss & Damage, Bonn, 26 April 2016

Overview

- 1) NEL concepts and valuation approaches
- 2) Value-driven perspective (alternative school of thought)
- 3) Human mobility
- 4) Territory, place and identity
- 5) Indigenous knowledge and indigeneity
- 6) Policy relevance

NELs – Main Types

Technical paper (2013)



- NELs = loss or resources, good and services NOT commonly traded in markets
- Absence of market price → ‘**non-market**’
- Non-market economies (e.g. gifts, barter; no financial transactions)
- **Non-market losses?**

- Loss = non-recoverable via \$ investment?
- Damage = recoverable via \$ investment?
- Econ/non-econ (market/non-market) = useful dichotomy?

Losses, Limits to Adaptation, and Valuation

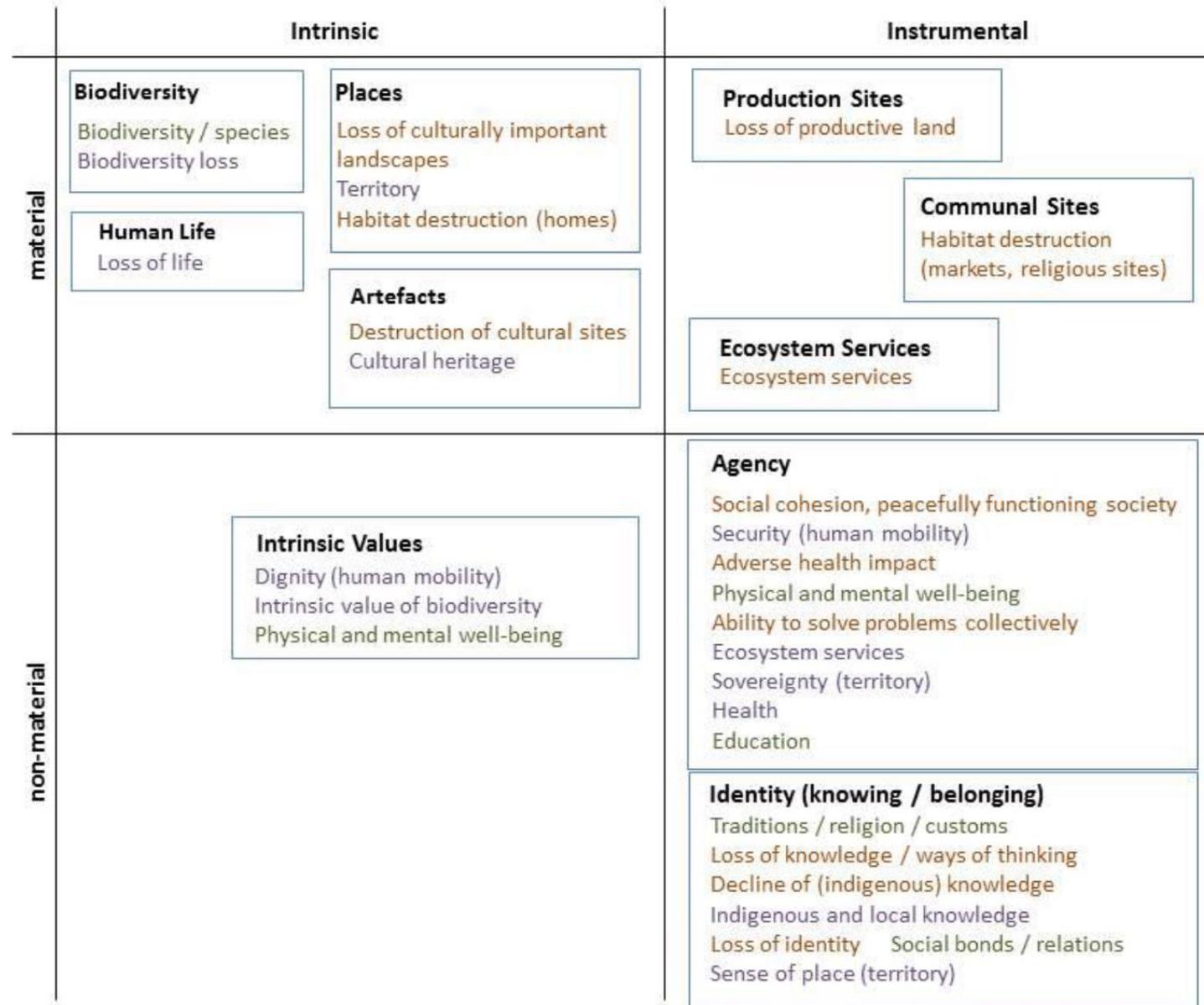
- **Losses** = irreversible, when restoration and reparation are impossible
- **Limits to adaptation:** The point at which an actor's objectives (or system needs) cannot be secured from *intolerable risks* through adaptive actions (IPCC AR5, 2014)
- **Intolerable loss** (or risk of loss) – compared to acceptable and tolerable ones
- Intrinsically linked to **what people value** and **how** ('socially constructed')

Valuation of NELs (Technical paper UNFCCC 2013):

- Economic – putting an economic value on a good or service (e.g. willingness to pay)
- Scoring and weighting of criteria (MCDA) (e.g. impacts, poverty reduction, costs)
- Risk and vulnerability indices - expert assessments (env/climatic hazards, disasters)
- (Semi) Qualitative scoring and trade-offs in decision making (e.g. climate risks)

NEL Categories

Figure 1: Conceptual framework categorising NELD



Sources: Andrei et al., 2015; Morrissey and Oliver-Smith, 2013; Fankhauser et al., 2014

Shift in Focus:

From Impacts, Risks and Costs to What People Value

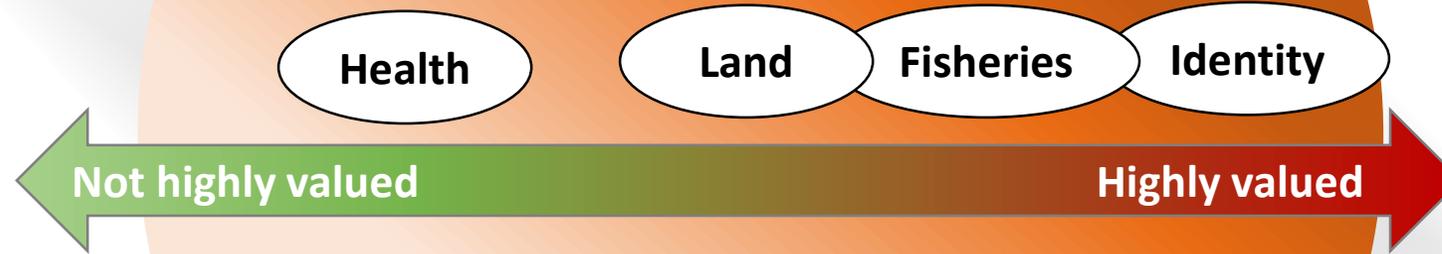
Instead of starting with current and future impacts from climate change and assessing economic and non-economic losses for all possible loss categories, we could start with **what people in specific places value and how these aspects are affected by climate change (Not every loss matters!)**

As a next step, we would examine how what people value *shifts over time* with new understandings of risk, adaptation options, and likely consequences.

Technical Paper (p16):

- What is valued? [*not to be confused with universal human values and ethical and religious values...*]
- How is it valued (use vs non-use)?
- Where does the value reside (instrumental-achieve valuable objective vs intrinsic – valuable in themselves)?
- How does what is valued change over time?

People's messy lives (a multitude of stressors)



What
people
value

How much one thing is valued compared to others

**CURRENTLY EXPERIENCED
CLIMATE CHANGE (1°C):
SLR, ☀, flooding
+
EXPERIENCED
LOSS**

Intolerable Loss
(fundamentally
threatens a private or
social norm despite
adaptive action)

Acceptable Loss

Not highly valued

Highly valued

Adaptation potential

Adaptation

**Adaptation = attempt to keep risk to valued
assets or objectives at a tolerable level
(Dow et al. 2013)**

Tolerable Loss

Significant impacts from CC

Limited impacts from CC

Health

Fisheries

Identity

Land

LOSSES to
what people
value

- Physical
- Emotional
- Spiritual
- Cultural
- Psychological
- Relational

**FUTURE CLIMATE CHANGE (1.5, 2, 4°C)
+
RISK OF LOSS**

Intolerable Risk of Loss
(fundamentally threatens a private or social norm despite adaptation potential)

Adaptation potential

Tolerable Risk of Loss

Acceptable Risk of Loss

Not highly valued

Highly valued

Significant impacts from CC

Limited impacts from CC

Fisheries

Health

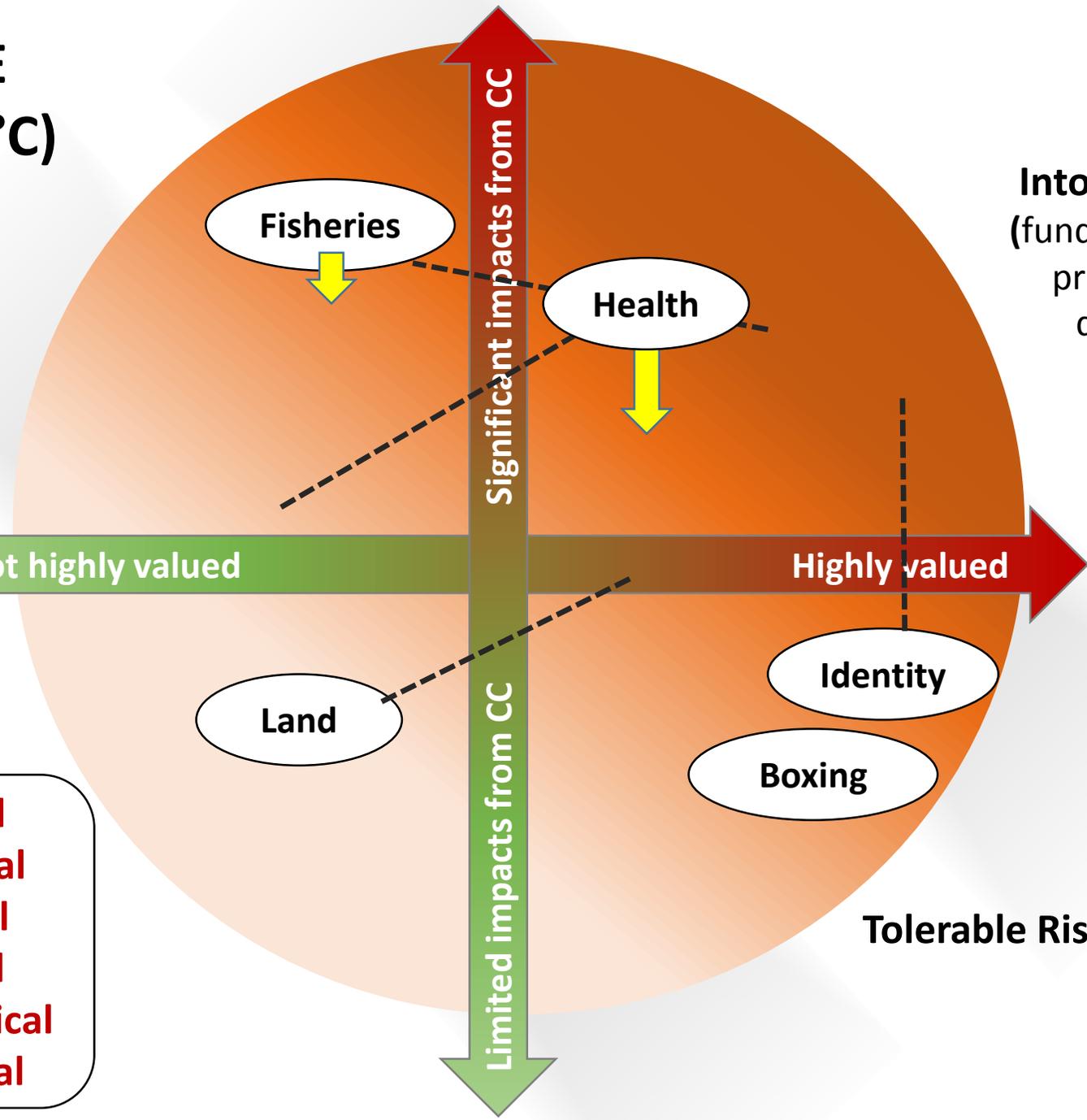
Land

Identity

Boxing

LOSSES to what people value

- Physical**
- Emotional**
- Spiritual**
- Cultural**
- Psychological**
- Relational**



The Role of Human Mobility and the Right to Stay

- Mobility = continuum (voluntary movements – forced migration/displacement)
- **Secondary losses** (mental and physical health, agency, security, identity, sense of place/place attachment, knowledge)
- **Best practices** and institutional arrangements to reduce loss under relocation
- Reducing vulnerabilities and risk of displacement through expanding **opportunities for mobility** (as adaptation strategy)
- Freedom/right to **move** *versus* freedom/right to **stay** (intrinsic values) – cultural ties to land, psycho-social needs, identity, agency, knowledge
- Premature or exuberant policies to reduce loss from displacement (e.g. relocation with dignity/facilitated migration) **may narrow or undermine adaptation** through loss of confidence in places ‘at risk’ - who decides? timing? (e.g. Small Island States)
- **Assessment:** investments in building resilience in place vs preparation to leave

Linkages between Loss of Sovereignty, Sense of Place, and Identity

- **Territory** = jurisdiction of state, boundaries, sovereignty, self-determination
 - atolls, small-island states, land unlivable due to drought/degradation
- **Place** (dependence, attachment, identity) = intangible, subjective, non-territorial
 - = biophysical entity, repository of memory, contexts for lives & meaning
- **Identity/identities**: dynamics and shifts, strengthening, narrowing
- **Secondary losses**: disruption of social cohesion/collective action – low adaptation
- **Critical thresholds**: ‘desirable’ shifts (foster collective action) vs non-desirable (break-down)?
- Examples:
 - Fishermen buy fish or take up boxing to sustain or change livelihood identity
 - Farmers feel no longer human when sharing water with animals (intolerable)
 - ‘Bad’ farmers and land degradation (loss of sense of self) – ‘resilient’ at the expense of health
- **Assessment**: psychometric (identity); affect/emotions (attachment); livelihoods (dependence)

Intrinsic and Instrumental Values of Indigenous Knowledge and Peoples

- Does 'indigenous knowledge' sufficiently encompass indigenous peoples?
- **Indigenous peoples** as the conduit of **indigeneity** (culture, place, identity, language, connection to nature (human health = eco-health), spiritual tradition and practices, types of knowledge, mobility, shared, source of resilience and strength, defense mechanism against marginalization)
- Indigeneity = **human equivalent of biodiversity**
 - instrumental – management of resources, social cohesion, adaptation
 - intrinsic – identity, belonging, custodians of place (country) (≠ territory)
- **Non-western categories/typologies** (ways of knowing-meaningful places)
- **Assessment:** indigenous knowledge science, social capital, community resilience

Policy Relevance

- What implementation approaches to reduce and/or avoid losses, for whom, where?
- What strategies to pursue for losses that are unavoidable and intolerable?
- Better incorporation of intangible & indirect losses into disaster loss databases (e.g. DesInventar – global; Emergency Management Australia – national)
- Need comprehensive assessment methodology + pertinent case studies

Challenges for avoiding losses:

- Cultural, non-material, and symbolic aspects ('subjective' dimensions of CC) under-represented - secondary to material losses, economic costs, and insurance debates
- Certain types of NELs (e.g. dignity, identity) and 'non-charismatic' places invisible

Opportunities for avoiding losses:

- Identify success stories (better knowledge of CC → shifts in what people value → enhanced adaptive action → reduction/avoidance of loss)