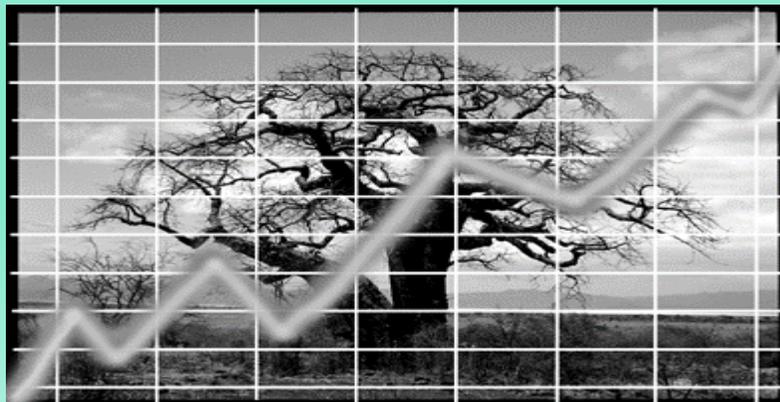


# UNECE workshop on Benefits of Trans boundary Water Co-operation

## Session 5: Environmental and social Benefits

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# Examples of social benefits:

## Guidance para 34 Type III benefits

- Impacts on people in the basin (eg floods (eg Mekong, England)

Less substantive evidence and assessment of other social benefits:

- Economic and environmental impacts affecting deprived groups (eg poor, malnourished) or vulnerable communities
- Extent of poverty and long term unemployed in sectors or regions where jobs lost or created
- Improved health and education

+ Improved engagement => better governance => greater implementation of measures and realisation of their benefits

# Examples of environmental benefits: Guidance para 34 Type IV benefits

- Benefits from use of water bodies for fishing, boating and informal recreation

Eg Murray Darling – see Wheeler

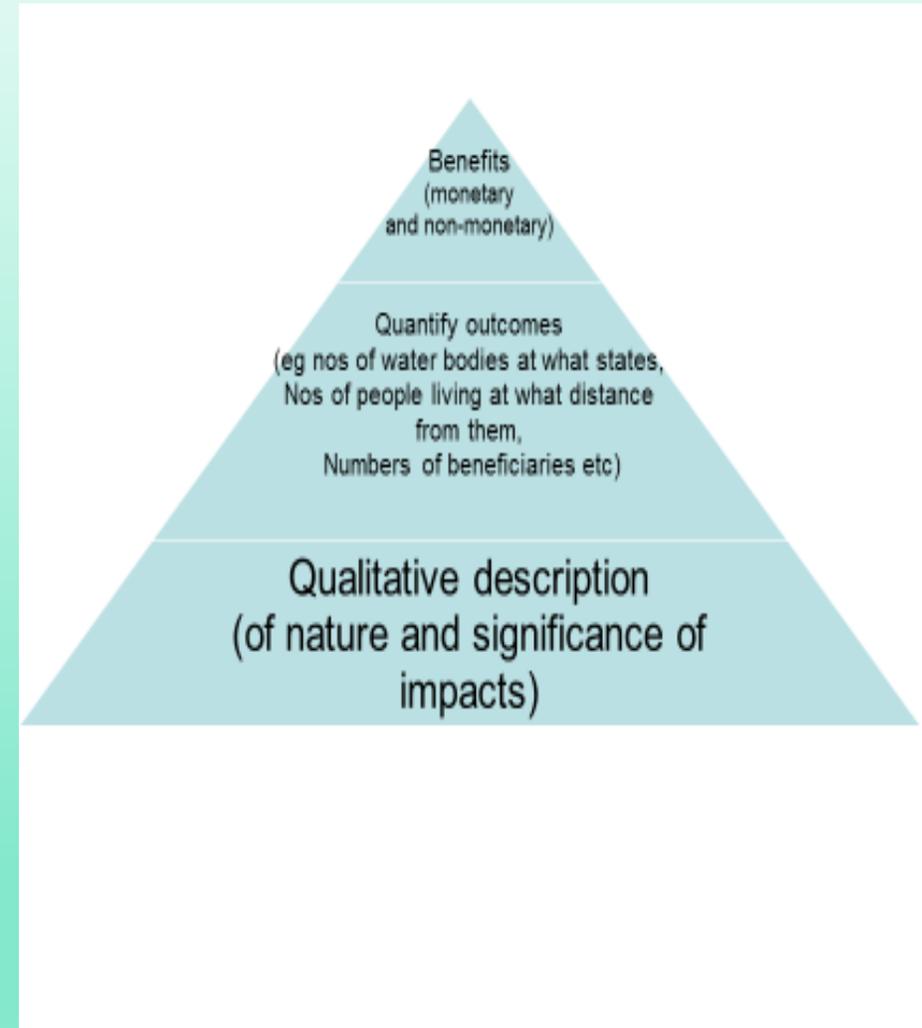
Less quantified benefits regarding

- More intangible improvements in ecology of the water bodies and their ecosystems and reduced or avoided degradation of habitats
- Extent environmental resources in the basin support economic activities (eg by providing water, controlling flooding, maintaining flows, controlling soil erosion etc)
  - Lack of authoritative data
- Benefits of integrated mgt of flood risks, water resources and water quality in basin vs separate controls – esp where high needs for improved waste water treatment: See Guidance para15

# How to Assess Environmental and social Benefits:

## Key Building blocks (Guidance Fig 2.3 paras 23 -25)

- Less substantive assessment of environmental and social benefits than economic benefits.
  - Need to consider and realise broader benefits (Guidance para 5)
    - ⇒ qualitative description important basis for any assessment
    - ⇒ Importance of indicators to quantify outcomes (Guidance para 43)
  - But key issues, challenges and gaps:
    - Difficult to aggregate and summarise the impacts in diverse units?
    - Need to present convincing qualitative evidence so that environmental and social benefits are considered duly on a par with the quantified economic benefits?
    - Need to inform trade offs (Guidance paras 40-41) and address ques:
      - 'So what?'
      - 'Are the benefits worth the costs of providing them?'
- ⇒ May require monetary & non-monetary assessment
- ⇒ If monetised BCR > 0.5 < 1.5 then need to pay particular attention to assessing non-monetised



# Currently little practical guidance geared to policy makers' needs (Guidance para 7)

Challenging requirements for valuation of environmental benefits

1. Need a sound scientific base
2. Need comprehensive coverage of all impacts
3. Need clear specification and description of the impacts
4. Need provision of adequate information about such impacts
5. Estimate carefully the number of beneficiaries
6. Beneficiaries and society have constraints on their income and resources which they could devote to alternative goods and services.
7. Base assessment on large representative sample of affected parties.
8. Present clearly findings, methodology, assumptions and limitations.

Perfect answer to one challenge may not address all others

So need **adequate** coverage of all above elements

Must retain focus on informing and aiding decision-making (Guidance para 40)

Need proportionate assessment commensurate with intended use (Guidance para 42)

# Difficulties for environmental benefits assessments

- Where strong conflicts, then monetary valuation of more intangible environmental benefits can be disputed, problematic and might not be useful (eg Murray Darling Basin) (Guidance para 41)
- Need collaborative long term study programme (Guidance paras 22 & 45)
  - not plethora of competing studies
- Need to involve the various parties and affected groups (Guidance para 37)
- Need to reduce conflicts and secure parties' agreement to the assessment process and method (eg Great Lakes) - (Guidance para 46)
- The qualitative scientific assessments of the environmental benefits may not be sufficiently convincing to secure co-operation

# Key Questions for the Session

- Which environmental and social benefits have been assessed, and which methodologies were used?
- Which difficulties were encountered, and how were they overcome?
- What has been their impact (in terms of influencing a transboundary water cooperation process)?
- What are the key lessons learned and recommendations for the assessment of similar benefits in other transboundary water cooperation settings?

# Session Presentations

- North American Great Lakes Basin: Jeff C. Ho, Stanford University
- Murray-Darling Basin: Sarah Ann Wheeler, University of South Australia
- Lower Jordan River Basin: Gidon Bromberg, Friends of the Earth Middle East