

“ Counting Our Gains”

Workshop on Benefits of Transboundary Water Cooperation

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Draft typology on the benefits of transboundary water cooperation

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The presentation

1. Typology: rationale, ideal characteristics, focus
2. Draft typology: Overview
3. Draft typology: The 5 types
4. Words of caution
5. Questions for the session

Why a typology?

- The identification of a full set of benefits is useful to promote cooperation and help realise the potential benefits
- But some benefits seem to be overlooked
- A typology could support the identification of relevant benefits in individual cases

The ideal typology should...

- help to identify all possible benefits
- help to avoid “double counting”
- be easy to use by practitioners
- be easy to understand by decision-makers

Focus of our draft typology

- ***Two “families”***
 - **Outcomes** (e.g. economic growth)
 - Process/governance (e.g. increased transparency)
- ***T W Cooperation v T W Management***
 - **Benefits of TWM** (e.g. avoided deaths from floods)
 - **Additional benefits** (e.g. increased trade)

Overview of draft typology

Type I. Economic benefits within the basin	<ul style="list-style-type: none">• Expanded economic activity• Reduced cost of carrying out economic activities• Reduced economic impacts of water-related hazards• Increases in property values
Type II. Economic benefits beyond the basin	<ul style="list-style-type: none">• Economic impacts in the rest of the country due to forward and backward linkages• Benefits of increased economic integration
Type III. Social benefits	<ul style="list-style-type: none">• Health impacts (mortality, morbidity)• Social dimension of economic impacts• Access to basic services• Access to cultural and recreation opportunities
Type IV. Environmental benefits	<ul style="list-style-type: none">• Avoided habitat degradation and biodiversity loss
Type V. Geopolitical benefits	<ul style="list-style-type: none">• Benefits generated from improved relationships between countries (not already included in Type II)

Economic benefits within the basin

Expanded economic activity and productivity	Aquaculture, irrigated agriculture, mining energy generation, industrial production, nature-based tourism, water-based transport,...
Reduced cost of carrying out economic activities	<ul style="list-style-type: none">• Lower cost of water inputs (e.g. avoided cost of supplying water from more expensive sources, lower cost of treating raw water)• Lower costs of energy and transport inputs
Reduced economic impacts of water-related hazards	<ul style="list-style-type: none">• Avoided economic losses from droughts and floods• Avoided food and energy shortages
Increases in property values	<ul style="list-style-type: none">• Due to improved environmental quality• Due to reduced flood risks

Economic benefits beyond the basin

Economic impacts in the rest of the country due to backward and forward linkages

Example 1: Increase in agricultural production of irrigated fruit trees may have a **backward linkage** through the demand of equipment that may be produced elsewhere in the country and a **forward linkage** through supplying fruit to the agro-processing industry.

Example 2: Increased hydropower generation lowers the price of electricity for all industrial production in the country.

Economic impacts of increased economic integration

- Increased trade of goods and services
- Increased cross-border investment
- Opening of borders for workers

Social benefits

Health impacts (mortality and morbidity)	<ul style="list-style-type: none">• Reduced human impacts of floods• Improved quality of water (bathing, fishing, drinking)• Increased food security
Social benefits of economic impacts	<ul style="list-style-type: none">• Reduced unemployment levels• Reduced income-poverty levels
Access to basic services	<ul style="list-style-type: none">• Water services• Electricity
Access to cultural and recreational opportunities	<ul style="list-style-type: none">• Water as a cultural, spiritual and religious asset• Water-based recreational activities

Environmental benefits

- Many consequences of increases in environmental quality already captured in previous types
- Environmental benefits remaining: habitat preservation
- “Beyond the basin” dimension: migratory fishes and birds

Geopolitical benefits

Regional economic integration (type II)	<ul style="list-style-type: none">• Regional market for goods and services• Cross-border investments• Regional job market
Peace	<ul style="list-style-type: none">• Avoided cost of military conflict• Peace dividend (avoided military cost)
Cooperation in other policy areas	<ul style="list-style-type: none">• Health• Education• Energy• Transport

Words of caution

- Not all the possible individual benefits will be present or significant in all transboundary basins – **don't try to “tick all the boxes”**
- In some cases, the same benefit could be classified under different categories – **don't agonise over classification**
- Some benefits could be inputs for the realisation of other benefits – **be careful to avoid double counting**

Questions for the session

- What are the challenges and opportunities for the identification of benefits?
- Is the suggested typology in general useful for advancing transboundary water cooperation?
- Is the proposed typology adequate for catching all possible benefits?