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# Methodology for assessing the water-food-energy-ecosystems nexus in transboundary basins and experiences from its application: synthesis



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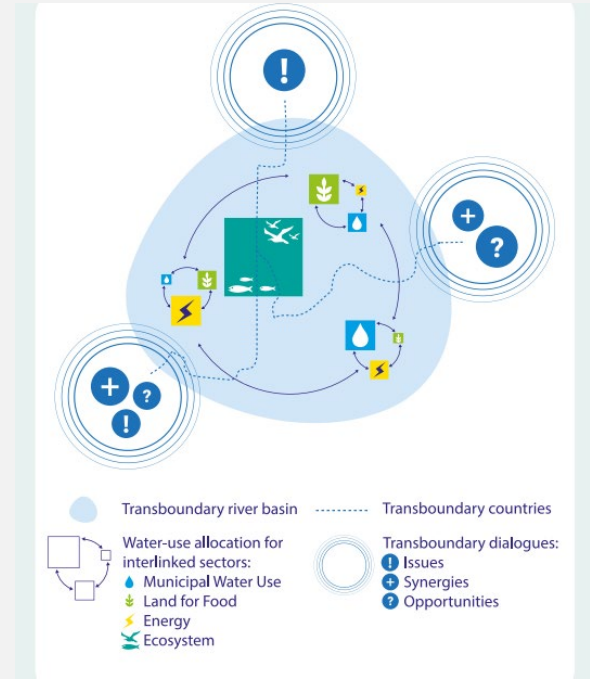
WATER CONVENTION

# Transboundary Nexus Assessment (TBNA) Methodology

A participatory approach to facilitate cross-sectoral cooperation in transboundary basins



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## Transboundary Nexus Assessment (TBNA) Methodology

The TBNA methodology responds to six principles:

- A. Participatory process
- B. Local knowledge mobilisation
- C. Sound scientific analysis
- D. Capacity building
- E. Benefit sharing
- F. Transparent exchange of information

And is comprised of six steps:



## STEP 4

### Identify and Analyse Intersectoral Issues

The first workshop kicks off the intersectoral and transboundary dialogue.

Split participants into groups to examine key sectors in greater detail based on the technical analysis and governance analysis from Step 3. Ask the groups to identify interlinkages with other sectors (impacts, dependencies, trade-offs) and discuss them from relevant sectors' perspectives. Develop lists of basin specific interlinkages and pressing issues, for example: reconciling water needs of hydropower and irrigation, energy-access constraints for agriculture, or severe threats to a key ecosystem service.

**Suggested Tools:**

Opinion-based questionnaire (agree / disagree with statements)

TOPIC	a. High Agree	b. Agree	c. Neutral	d. Disagree	e. High Disagree
1	10%	20%	30%	20%	10%
2	10%	30%	20%	20%	10%
3	10%	20%	30%	20%	10%
4	10%	20%	30%	20%	10%

Simplified diagrams for sectoral groups to facilitate brainstorming exercises

## STEP 6

### Identify and Analyse Solutions and Benefits

Investigate and quantify possible ways for addressing trade-offs and synergies in resource management using a range of technical solutions and policy interventions.

Proposed solutions can be explicitly tied to the benefits for key sectors. Translate solutions into feasible actions ideally linked to existing policies or projects on the agendas of national Governments or basin organizations.

These can be grouped into 5 types of 'nexus solutions': institutions, information, instruments, infrastructure (and investments), international coordination and cooperation .

Unpack solutions into actions to be implemented in coordination across sectors.

**Suggested Tools:**

- Brainstorming sessions to identify possible solutions
- Experience sharing from other projects
- Cost and benefit analysis

*N.B. The identification of solutions often starts in the first workshop as a natural evolution of the nexus dialogue.*

