

# Assessing the water-food- energy- ecosystem nexus in transboundary basins: status, progress, lessons and the future

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Convention of the Protection and Use of Transboundary Watercourses and International Lakes



# Background

- Population growth, economic development and increased energy and food needs all exert **increasing pressure on natural resources**. How to **meet common development needs and sustainability**, avoiding potential conflicts from tensions between sectoral and national objectives?
- 2<sup>nd</sup> Assessment: Frictions between sectors about water use in many basins; weak policy integration and coherence
- **Sectoral** planning and decision-making commonly in **isolation**
- Many developments **beyond water management** impact on waters
- The “nexus approach” to managing resources aims to **enhance water, energy, food and environmental security** by increasing efficiency, reducing trade-offs, building synergies and improving governance across sectors.

## About the Assessment of the Water-Food-Energy-Ecosystems Nexus under the UNECE Water Convention

- Work overseen and guided by the Task Force on the Water-Food-Energy-Ecosystems Nexus
- Some 6-8 basins to be assessed, responding to requests – pan-Europe, Africa, Asia; different nexus settings, climate, resource scarcity etc.
- Key partners: Finland (lead)/Finnish Environment Institute SYKE, Royal Institute of Technology (Stockholm), Switzerland/SDC, FAO
- Aims: 1) to **identify intersectoral synergies** that could be further explored and utilized in the different basins; 2) to **determine policy measures and actions** that could alleviate negative consequences of the nexus and help to optimize the use of available resources (under future environmental and climate constraints).



# Progress achieved

- **Methodology** for assessing intersectoral linkages/impacts/trade-offs in transboundary basins developed & a consultation done
- **Concepts** developed for model maps and graphics
- **Pilot basin's** (the Alazani/Ganikh) **assessment** at an advanced stage (draft assessment being reviewed); Assessment of the Sava on-going & workshop held in March 2014 -> improved understanding, intersectoral transboundary dialogues promoted, awareness raised...
- Fruitful opportunities & exchanges: JRC (quantification/ modelling); GWP (experience & network beyond UNECE region); FAO (methodology & indicators) etc. -> **synergy and/or co-funding**
- Experience shared on various international fora — the nexus work has attracted a lot of interest (MRC's nexus conference in April 2014, GWSP's conference in May 2014 etc.)

# Challenges and lessons learned

- **Balanced approach** involving environmental protection insights and economic sectors' development needs and potential
- **Combining local and international knowledge** in an effective way; stakeholder participation
- Necessary to bring in **new expertise**; new (unchartered) ground — no “off-the-shelf” solutions -> complicated & takes easily time
- **Overview/scoping nature vs. specificity** -> overall framework that is applicable to very different basins and adapts to the particularities of the settings
- **Data** available commonly limited, especially at basin level
- **Broad scope** easily leads to diverse expectations
- A lot is possible but limited **resources require** focus & constrain

# Future until 2015 and beyond

- Methodology provides an overall frame that adapts to the setting and specific nexus issues – could be replicated in other basins
- Expected forthcoming assessments: Syr-Darya, NW Sahara Aquifer, Niger, Narva, Isonzo, a Mekong tributary ... Spin-off activities beyond 2015
- Basin assessments January 2014 - April 2015; A general stock-taking report & recommendations for the 7<sup>th</sup> MoP in November 2015
- Nexus Task Force meets next 8-9 September 2014 to review the work & plans; 3<sup>rd</sup> meeting in April 2015 to endorse the contents
- Processes for discussing the findings in each basin to be defined; cooperation in disseminating individual assessments? (subject to opportunities and resources)
- Experience from nexus assessment can enrich further assessment work