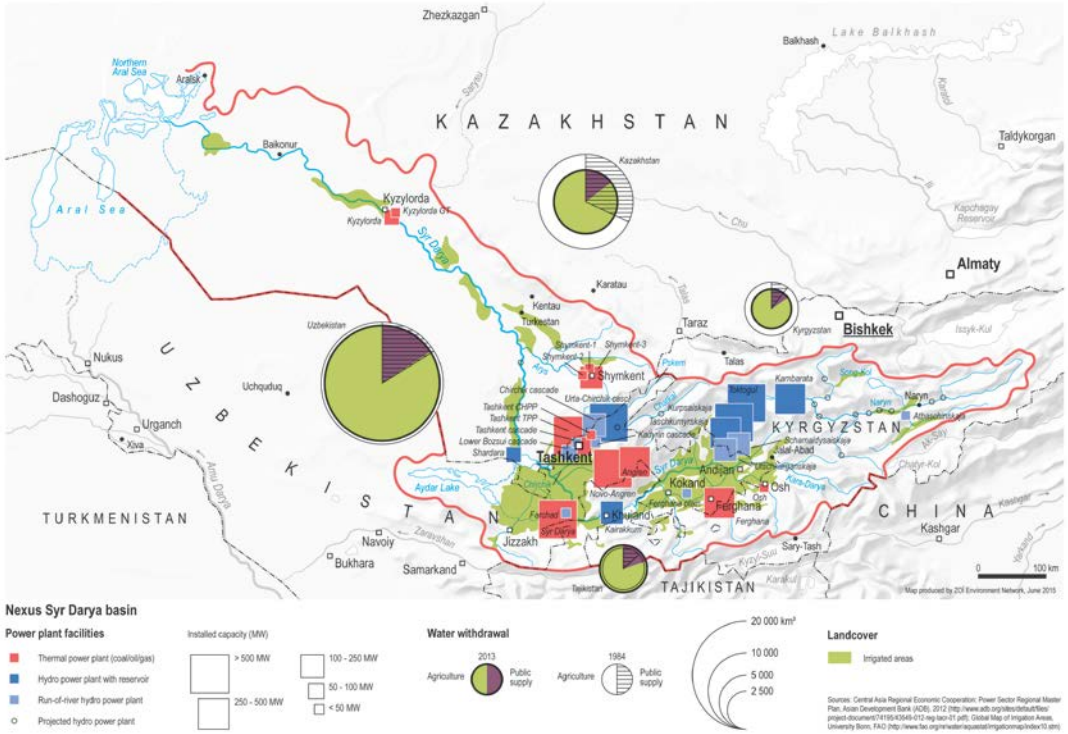
Assessment of the Water-Food-Energy-Ecosystems Nexus in the Syr Darya Basin: Introduction

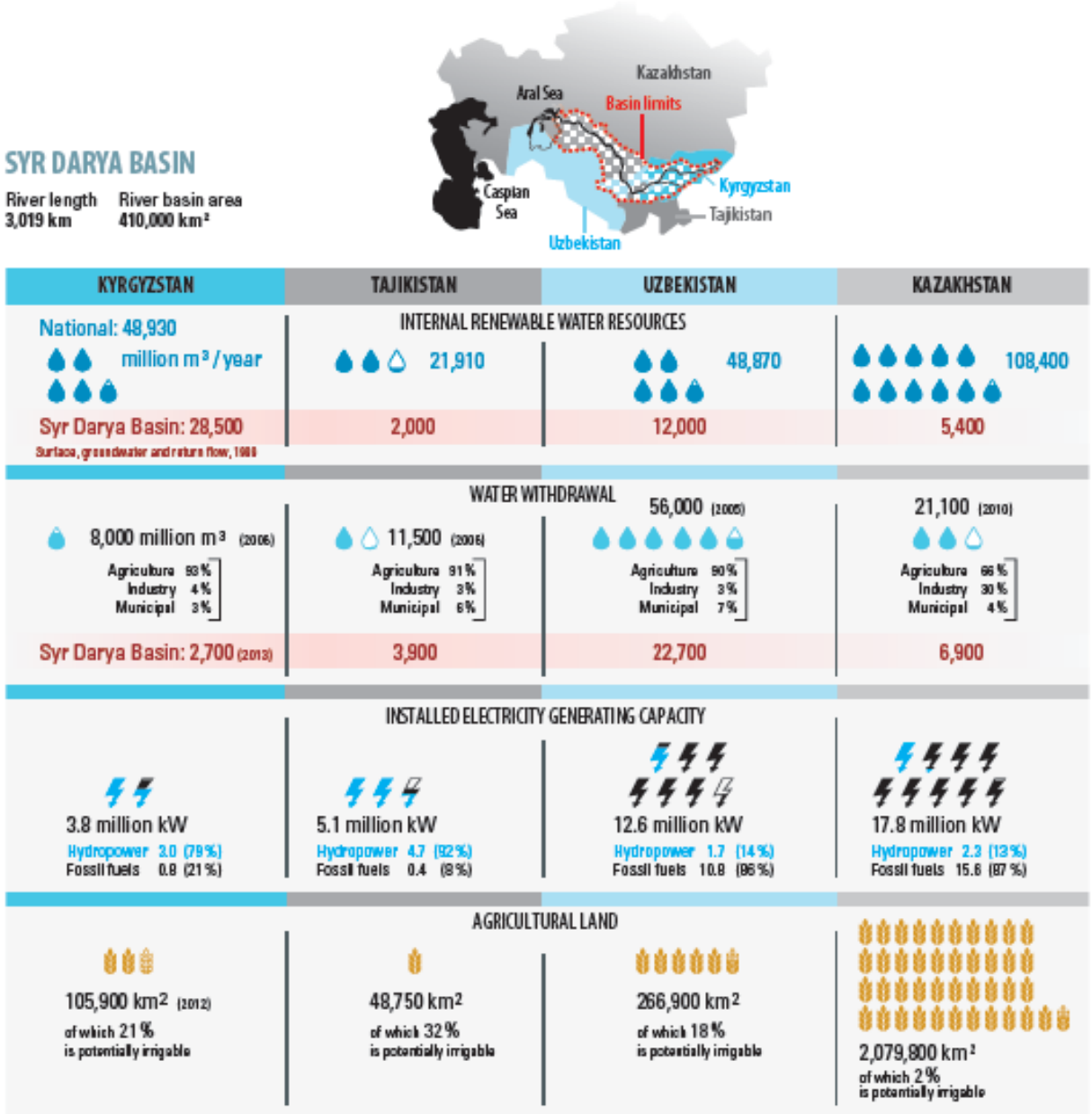
Dr. Annukka Lipponen
Environmental Affairs Officer
Water Convention secretariat
UNECE

Nexus assessment process in the Syr Darya Basin



- Desk study
- Multisectoral workshop (Almaty, 2-4 December 2014) for the countries organized with GWP in cooperation with FAO
- Main intersectoral issues, some future scenarios, possible solutions jointly identified
- Scoping level analysis
- Participatory process: Consultations (e.g. NPDs)
- Funded by Finnish Ministry of Foreign Affairs

Syr Darya Basin: indicators



Possible solutions/synergic actions identified (a selection):

1. **National development with co-benefits**
   - Improving energy efficiency, reducing dependency on water for energy (diversification of sources
   - Rationalizing water use (esp. in agriculture)
2. **Broader sustainable development and national policy coherence**
   - Developing mechanisms to identify and incorporate the wider nexus impacts in sector-based policy development leading to more integrated planning processes
   - Improving basin-wide monitoring, data verification and exchange, and knowledge-sharing, including joint monitoring (e.g. water flows and quality), joint forecasting
3. **Accelerate national development by furthering cooperation**
   - Improving intersectoral coordination at the basin level by increasing representation of and consultation with the relevant ministries
   - Developing a regional energy market and exploring opportunities for energy-water exchanges

Possible UNECE contributions to the Nexus Dialogues in Central Asia

a. Outputs (material for both further national & regional nexus dialogues)

a. Experience from application of the nexus assessment methodology (ENG, soon RUS)

b. Syr Darya assessment (a summary in RUS; an extended assessment in ENG and RUS)

c. A policy brief

d. Example to an official document of the Group of Experts on Renewable Energy

b. Awareness raising and capacity building on different platforms

a. (in cooperation with OECD) National Policy Dialogues (KZ, KG, TJ) – intersectoral, relevant ministries represented at a senior level

b. Outreach to the energy sector in cooperation with UNECE Sust. Energy Division: e.g. Sustainable Energy Forum (Oct 2016, Baku)

Some concluding remarks

- Recognition of the value of a nexus approach for sustainable development expanding to economic sectors, illustrated by the cooperation with the UNECE Group of Experts of Renewable Energy.
- A “menu” of possible synergic actions identified for the countries’ consideration.
- A 4-country energy system modeled, that interfaces with other resource models: Subject to interest of the countries, with additional data, specific questions and opportunities could be explored (e.g. effect of investments)
- Opportunities to build further on this work: SPECA TWG, EUWI National Policy Dialogues, new project on Nexus Dialogue in Central Asia led by CAREC and to be financed by the European Commission.

- **http://www.unece.org/env/water/nexus.html**
- **Annukka.Lipponen@unece.org**