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**ASSESSING THE WATER-FOOD- ENERGY-ECOSYSTEM NEXUS
IN TRANSBOUNDARY BASINS UNDER THE WATER CONVENTION:
ALAZANI/GANIKH PILOT PROJECT**

Kachreti, 25-27 November 2013

Agenda

Organizers: United Nations Economic Commission for Europe (UNECE), UNDP/GEF project “Reducing Transboundary Degradation in the Kura Aras River Basin”, Ministry of Environment and Natural Resources Protection of Georgia

Languages: English and Russian with simultaneous interpretation

Meeting the growing water demand without compromising sustainability is a rising challenge in the context of growing population and under the pressure of climate change impacts. It is therefore crucial to better understand the interactions between water, food, energy and water-related ecosystems in river basins, in order to strengthen synergies and policy coherence between water, agriculture, energy and land management sectors.

The assessment of these interdependencies is even more relevant in transboundary basins, where identifying intersectoral synergies and mutually beneficial solutions can help reducing trade-offs and potential conflicts, not only across sectors, but also across borders, and support the decision-making process to enhance sustainability.

Recognising this, the Parties to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) have included in the Work Programme 2013-2015 an assessment of the water-food-energy-ecosystems nexus in selected transboundary basins and established the Task Force on the Water-Food-Energy-Ecosystem Nexus to overview and guide its preparation. This workshop is organised as part of piloting the approach to assessing the nexus, discussed and agreed upon in general terms at the first meeting of the Task Force held in Geneva from 8 to 9 April 2013.

The expected benefits of the assessment include expert-supported identification of inter-sectoral synergies that could be further explored and utilized, and identification of policy measures and actions that could reduce tensions between sectoral objectives, avoid unintended consequences of resource management and resolve trade-offs between sectors. This assessment also supports strengthening capacity in the participating countries.

The methodology development for the nexus assessment and its piloting are supported financially by the Finnish Ministry of Foreign Affairs and the Swiss Agency for Development and Cooperation.

25 NOVEMBER

14.00–14.30

Opening

Ms. Nino Sharashidze (TBC), Ministry of Environment and Natural Resources Protection, Georgia

Introductions

Introduction to the workshop: objectives and expectations, background, assessment of the water-food-energy-ecosystems nexus under the UNECE Water Convention, inputs to the workshop

Mr. Bo Libert, UNECE & Ms. Mary Matthews, Chief Technical Advisor and Project Coordinator, UNDP/GEF Kura Project



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14.30-17.00 (coffee break 15.45-16.00)

SESSION 1: Training — Introduction of the Nexus methodology

This session is aimed at providing all participants with knowledge about the key concepts related to the water-food-energy-ecosystems nexus. Notably, the energy security, water security, food security, and environmental security will be explained, as well as their critical importance to sustainable development.

Problems of a sectoral management approach to resources will also be highlighted, and what are the benefits of an inter-sectoral (nexus) approach. It will be illustrated why and how a nexus approach works, and how it has been used. This training will also clarify what sorts of questions it helps to answer and what can be done with it in the Alazani/Ganikh Basin and in this workshop.

Presenter: *Prof. Mark Howells, KTH*

Moderator: *Mr. Seppo Rekolainen, Director of the Freshwater Centre, Finnish Environment Institute (SYKE)*

Discussion:

- What are the needs and expectations of the authorities and stakeholders regarding the nexus assessment under the Convention?
- What might be relevant policy questions that the assessment could help to answer?

17.00–18.00

SESSION 2: Describing the Alazani/Ganikh Basin and the relevant developments (plenary)

In this session, the objective is to learn and share information about the current conditions in the basin and what are the on-going trends and developments in the basin and in the surrounding area. All the participants are encouraged to share their knowledge and experience.

The following questions will also be addressed:

- What sectors are active in the region?
- How do the national policies and development strategies reflect at the basin level?
- Who are the stakeholders?

Moderator: *Ms. Mary Matthews, UNDP/GEF Kura Project*

Round table: Main directions of the relevant state policies (brief informative statements of 5 min each)

- *Ministry of Energy, Georgia*
- *Ministry of Energy, Azerbaijan*
- *Ministry of Agriculture/ Ministry of Melioration, Azerbaijan*
- *Ministry of Agriculture, Georgia*
- *Ministry of Ecology and Natural Resources*
- *Ministry of Environmental Protection of Georgia*

Discussion:

What are the positives about the basin?

What is a common goal for the basin? How can sustainability be achieved in development?

Evening home work assignment: Completion of factual surveys

KTH experts and the UNDP/GEF Kura Team advices and supports



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Day 2, 26 November

9.30-10.30

SESSION 3: Predicted impacts of the climate change on the Alazani/Ganikh Basin (plenary)

Climate variability and change influence the conditions for the different sectors and the ecosystems, and hence how the nexus plays out in the future.

Moderator: *Mr. Seppo Rekolainen, SYKE*

Climate change predictions the Alazani/Ganikh Basin

Ms. Medea Inashvili, Service of Climate Change, Ministry of Environment and Natural Resources Protection of Georgia and Mr. Rafiq Verdiyev, National IWRM Expert for UNDP-GEF Kura Aras Project, Azerbaijan

Discussion:

- What are the predicted impacts of climate change on the basin?
- Are there strategies for adaptation to climate change, and what targets or measures are envisaged for adaptation in different sectors?

10.30–13.00 (coffee break 10.45-11.00)

SESSION 4: Group work by sector – energy, environment, water (supply), agriculture

The session starts by an explanation of the work to be carried out groups divided by sector. Each group will be assigned a facilitator and one group member to report for the group.

Questions to be discussed in groups:

- What does the Alazani look like in the year 2020 and 2030 based on your sector's plans?
- What are the assumptions about the conditions and availability of resources to achieve this future successfully? Do these set particular requirements to other sectors?
- What are the anticipated demands (for water, energy, food – only the resource that your sector deals with should be considered)? How do these demands relate to added pressures on the basin's ecosystems and natural resources?
- What are the benefits that this sectoral development provides (locally, nationally, regionally, internationally)?
- How will this help other sectors? How will other sectors help this?
- Where there are possible tensions between sectors what are some possible solutions?

13.00-14.00 Lunch break

14.00-16.30 (coffee break 15.15-15.30)

SESSION 5: Presentation of the group work and plenary discussion about the plans

The nominated rapporteur for each of the groups will report back to the plenary about the findings (15 min/group). The groups representing the other sectors are invited to think and make notes about

Following each presentation, the plans outlined for each sector, the vision and the demands are discussed (30 min/sector).

Moderators: Prof Mark Howells KTH and Prof Holger Rogner KTH

Questions for the plenary discussion:

- Are these 10 and 20 year visions and plans compatible? When they are not:
- Where are there potential trade-offs or conflicts in water use priorities?
- Are some plans complementary? How can that be improved and those linkages strengthened?
- How will we know these conflicts emerge – what happens?
- How do you think each sector/nexus component impacts other sectors?
- How do these trade-offs or conflicts compare in urgency or scale of impacts (priority for action)?



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16.30-17.30

SESSION 6: Group work — intersectoral linkages and influences, reconciling different uses

The participants are divided into mixed groups with the different sectors represented in each group.

The discussion will be facilitated by the prior distribution of the prepared material (graphs, maps, list of policies, specific examples/issues)

Discussion in groups:

- How will the plans presented in the previous session impact on other sectors/resources?
- Which incompatibilities or trade-offs have the greatest impact? (Try to agree in the group about an order of importance)
- What are some possible resolutions to these conflicts?

The groups are encouraged to start thinking what information is still needed (time permitting).

Discussion groups report back to the plenary

19.30 **Dinner reception**

Day 3, 27 November

9.30–10.00

SESSION 7: Transboundary aspects

This session focuses on the transboundary aspects of the challenges as it pertains to local, national, regional and international influences (both negative and positive).

Summary to be presented by: *Ms. Mary Matthews, UNDP/GEF Kura project*

The scope of transboundary cooperation and the arrangements for it, future outlook

Ms. Mariam Makarova, Ministry of the Environment Protection and Natural Resources of Georgia (TBC) and

Mr. Mutallim Abdulhasanov, Ministry of Ecology and Natural Resources, Azerbaijan

10.00-11.00

SESSION 8: Reconciling different uses — potential solutions (plenary)

In this session, potential solutions to alleviate the negative impacts in the nexus are discussed, taking as a starting point the ideas put forward in the group discussions on Day 2 (sessions 4 and 5). Solutions could be of various kinds — changes to policies, new policies, management and measures practices, institutional arrangements, infrastructure operation and so on.

Moderator: *Mr. Bo Libert, UNECE*

Questions:

- What opportunities there are to reduce negative intersectoral impacts and enhance positive impacts (synergy)?
- Who (which sector etc.) is in a position to do something about the identified potential solutions?
- Can some priorities for the above be identified for possible follow-up?

11.00-11.15 Coffee break



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11.15-13.00

SESSION 9: Information and sources, indicators and presentation of findings

In this session, information needed to describe the identified inter-sectoral linkages and impacts as well as the possible indicators (session 6) for that purpose will be discussed. Different options for illustrating how the inter-sectoral relationships are expected to develop in the future will also be discussed. To stimulate the discussion the international experts will show some initial elements/findings for the nexus assessment of the Alazani/Ganikh based on the data and documentation available, including as much as possible the questionnaire replies and the highlights of previous sessions. It will also be discussed what analyses or quantification could be made, and whether some scenarios could be developed based on the sectoral plans outlines (session 4) and/or climate change.

Moderators: *Prof Holger Rogner and Prof. Mark Howells, KTH*

Group work: Reviewing the proposed nexus issues and key indicators for the Alazani basin, identification of possible gaps and proposals for additional indicators.

Discussion:

- What are the possible indicators for the trade-offs or conflicts identified? (international experts can provide a list for review and inspiration)
- Is the proposed list of nexus issues descriptive of the Alazani/Ganikh Basin?
- Do the indicators adequately address the interlinkages discussed (review the list prepared)?
- Should other qualitative or quantitative indicators be added to the list?
- What information is still needed? What are sources for this information?

13.00-14.00 Lunch and checkout

14.00-16.00 (coffee break 15.45-16.00)

SESSION 10: Completing the nexus assessment in the Alazani/Ganikh Basin

The schedule of the nexus assessment is recalled in this session. The next steps in the assessment process are agreed upon, including the deadlines and responsibilities.

Collection and sharing of information and data

Analyses and quantification

"Nexus profile", preparation of the draft assessment

Review of the draft assessment by the national administrations and commenting

Endorsement process in the Task Force on the Water-Food-Energy-Ecosystems Nexus

Moderator: *Mr. Seppo Rekolainen, SYKE*

Summary of the decisions: *Ms. Annukka Lipponen, UNECE*

Opinion survey distributed and collected

16.00 Closure of the meeting