

3rd Regional Nexus Roundtable in South East Europe

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Tirana, Albania
Hilton Garden Inn Tirana***

Concept Note

Organized by:
Global Water Partnership – Mediterranean
German Ministry for the Environment, Nature Conservation and Nuclear Safety

In support of the implementation of the
South East Europe 2020 Strategy, Dimension Environment

Contributing to the objectives of the
UfM Water Agenda 2030 and its Financial Strategy

Supported by:
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Background I – A brief on the Nexus Approach

Interlinkages between water-energy-food-environment

One of the major challenges that our societies face is how to deliver water, energy and food for all in a sustainable and equitable way, while preserving the health of natural systems that form the basis of any economic activity. Interlinkages between water, energy and food systems are manifold. Some generic illustrations of such interlinkages are presented below.

Water <-> Energy: Water plays a key role in energy production e.g. in hydroelectric plants, for cooling fossil-fuel and nuclear plants, in growing plants for biofuels. At the same time, energy is required to process and distribute water, to treat wastewater, to pump groundwater, to desalinate seawater.

Water <-> Food: Water is the keystone for the entire agro-food supply chain, while agricultural intensification impacts water quality.

Food <-> Energy: Energy is an essential input throughout the entire agro-food supply chain, from pumping to processing to transportation to refrigeration. Conflicts around land use could arise in the case of biofuels or extended solar installations.

Healthy ecosystems are an essential requirement for the sustainability of all the above and are negatively affected if water, energy or food are used in an unsustainable way.

Synergies and trade-offs

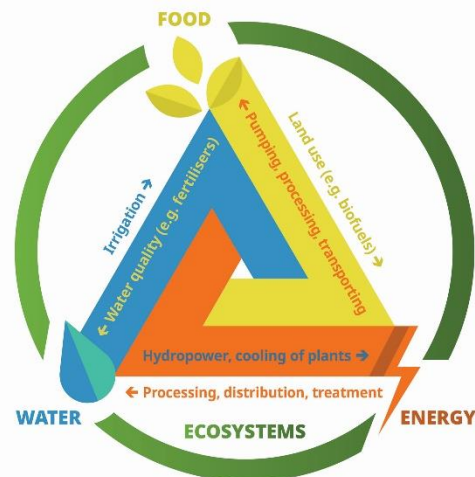
Such interlinkages between the water-food-energy-environment sectors mean that synergies and trade-offs are available. For example, a large hydropower plant provides benefits across sectors by producing electricity, providing water storage for irrigation and urban uses, mitigating flood effects. However, this can have negative effects for downstream ecosystems and the coastal zone, or require resettlements of communities. Similarly, using irrigation to grow bioenergy can help improve energy security but it may also result in competition with agriculture for land and water resources, therefore negatively impacting food security.

Significant opportunities for synergies can arise from such interlinkages. Typical examples include the potential of wastewater treatment plants to produce energy and make available treated water for agricultural or environmental uses; the potential for using renewable energy in desalination plants etc.

The Nexus approach

The Nexus approach starts from the realization that in a traditional fragmented approach, attempting to achieve the security independently in the water, energy, and food sectors without addressing trade-offs with the other two sectors will endanger their sustainability and security. The Nexus approach is essentially about moving beyond such a traditional sectoral thinking and adopting an integrated approach for the sectors, with a view to reconciling their potentially conflicting interests as they compete for the same scarce resources, while respecting environmental constraints as well as human rights, and exploring emerging opportunities.

Under such an approach, interlinkages, synergies and trade-offs among the relevant sectors are assessed aiming to identify solutions to address these, fostering water-food-energy security and efficiency, while reducing impacts and risks on water-dependent ecosystems. A Nexus approach is also an excellent tool



towards the achievement of the SDGs and meeting the goals of building low carbon and climate resilient economies and societies.

The Nexus approach in a Transboundary context

The adoption of a Nexus approach in the case of Transboundary water bodies ensures benefits to various sectors in the whole river basin area and ensures that synergies are explored at both inter-sectoral and cross-country levels, improving coordination, cooperation and thus reducing conflicts and trade-offs. Mutual commitments to increasing resource efficiency and eliminating unnecessary waste of water resources benefit all riparians. A transboundary Nexus approach can also foster regional political cooperation and provide further economic benefits through the development of regional markets and increased & optimised trade.

The social dimension of a Nexus approach

An effective adoption of a Nexus approach is also a promising instrument for promoting considerations on social cross-cutting issues (such as gender empowerment, stakeholder engagement, human rights, combatting poverty etc.) by safeguarding the rights of the socially and economically vulnerable groups that are affected the most by resources insecurity, as they depend the most -and spend the largest share of their income- on basic needs in the form of water, food and energy.

Background II – Nexus in SEE and the Regional Nexus Policy Dialogue

Natural resources management in SEE area – the Nexus approach

Despite significant advancements especially in the past decade, integrated natural resources management remains a substantial challenge in South East Europe (SEE). Unsustainable management of natural resources has been affecting directly and indirectly economic growth, human prosperity as well as the environment and ecosystems.

With almost 90% of the area of SEE falling within shared river basins, increased cooperation for the management of shared natural resources in SEE, such as water, is of paramount importance for sustainable economic growth and human welfare. Currently, effective cooperation for the management of shared waters is being increasingly implemented but a lot remains to be achieved.

The following main Nexus-related conflicts and trade-offs have been broadly identified as common¹ in SEE:

- water allocation between different users, in particular during drought events;
- increasing river flow regulation for electricity generation by hydropower;
- nature conservation areas being affected by hydropower developments;
- hydro-peaking and subsequent ecosystem deterioration by the operation of dams;
- downstream impacts of dam operations during floods;
- increasing energy needs for food production and water services and treatment;
- pollution of surface and groundwater by pesticides and nutrients, and their treatment;
- land-use intensification and loss of certain habitats/ecosystems;
- conflicts around water and land resources needed for biofuel production;
- deforestation and biodiversity loss due to unregulated cutting of fuelwood.

The application of a Nexus approach in SEE can lead to multiple and cross-sectoral benefits broadly impacting the societies, economies and politics in the Region²:

¹ Nexus Mapping Study in South East Europe (see below)

² As per the outcomes of the 1st and 2nd Regional Nexus Roundtables in SEE (see below)

- Economic benefits, such as increased mid- and long-term viability of economic activities, resilience in the face of climate change, reduced risks and associated costs from floods and droughts, greater value added in agriculture sector as well as tourism, increased efficiencies in the consumption of resources and use of infrastructure, optimized trade, innovation, etc.
- Social and environmental benefits, such as the promotion of the Sustainable Development Agenda 2030, improved public health, employment creation, improved water and sanitation services, improved conservation and recovery of ecosystems and habitats, etc.
- Regional cooperation and geopolitical benefits, such as enhanced cooperation in the management of shared resources also through the adoption of new cross-border agreements, common regulations and protocols, facilitation of compliance with requirements and targets relevant to EU accession, development of regional markets for goods, services and labour, increased cross-border investments, etc.

The Nexus approach in SEE

In the SEE region, existing good practices of Nexus include:

- The establishment of inter-ministerial coordination bodies;
- Consultative bodies e.g. for rural development;
- The integration of water and biodiversity targets in agriculture and/or rural development plans;
- Nexus assessments and studies to identify priority synergies and trade-offs.

However, many policy and management areas to better address the Nexus still show significant gaps and potential for improvement. In general, the administrative system established foresees several authorities to share the competencies for the specific Nexus sectors, with one 'line' authority leading initiatives.

Currently, policy development via regulation, strategies or plans is often characterized by:

- Formal institutional cooperation, not necessarily translating into policy integration;
- Isolated efforts;
- Lack of common targets;
- Overlapping responsibilities and competing objectives among local and central governments.

The Regional Nexus Policy Dialogue and action in SEE

At the Regional level, the use of a Nexus approach is being promoted by the Regional Cooperation Council (RCC) through the South East Europe 2020 Strategy (SEE2020) adopted in 2013. Global Water Partnership – Mediterranean provides technical assistance, being the organization responsible for coordinating action for Nexus and Water issues under the Dimension Environment of SEE2020's Sustainable Growth Pillar.

The latter is one of the SEE2020's 5 growth pillars, each of which contains a number of policy dimensions. Environment is one of the four Dimensions of the Sustainable Growth Pillar of SEE2020 and the Region's economies participate in the coordination of its implementation through the Regional Working Group on Environment (RWG-Env) which operates under the auspices of the RCC. One of the Key Strategy Actions in Dimension Environment is to *"Identify steps and measures necessary for advancing the water, energy and food nexus approach at national and transboundary levels and investigate opportunities for launching a political process under the RCC for the enhancement of cooperation in the SEE in the field of TWRM"*

The key aim of the Regional Nexus Policy Dialogue in SEE is to support the above Strategy Action.

The Regional Dialogue is financially supported by:

- The German Ministry for the Environment, Nature Conservation and Nuclear Safety Advisory Assistance Programme (AAP) for environmental protection in the countries of Central and Eastern Europe, the Caucasus and Central Asia and other countries neighbouring the European Union, in the framework of the project *"Water-Food-Energy-Environment Nexus Policy Dialogue Process in South East Europe"*, supervised by the **German Federal Environment Agency (UBA)**

- The **Global Environment Facility (GEF)** through its Programme “International Waters: Learning Exchange and Resources Network (**IW:LEARN**)”, Activity 2.3: *Supporting Regional Cooperation on Shared Water Resources through Dialogue*
- The **Austrian Development Agency (ADA)** in the framework of the project “*Promoting the Sustainable Management of Natural Resources in Southeastern Europe, through the use of the Nexus approach*” (SEE Nexus Project), implemented by **GWP-Med** in cooperation with the United Nations Economic Commission for Europe (**UNECE**).

A set of activities has been developed as part of a Regional Dialogue, including:

- Three Regional Roundtables and three back-to-back Nexus Groups Meetings (meetings of Nexus-related Ministries representatives).
 - The 1st Regional Roundtable was held on 20-22 June 2017 in Belgrade, Serbia and
 - the 2nd one on 23-24 October 2018, in Skopje, North Macedonia.
 The key recommendations of these Roundtables are available in the Annex of this Concept Note
- A Regional Nexus Mapping Study to provide
 - a mapping of the level of institutional and policy integration in the Region’s economies of the management of Nexus-related natural resources, and
 - an initial Identification of Nexus-related interlinkages and potential benefits, trade-offs and conflicts in the Region.

The Study was presented and discussed in the Skopje Roundtable (23-24 October 2018) and subsequently endorsed through a written process without any further comments by members of the RWG-Env. The Study is available [here](#).

Further, in the context of the ADA-funded SEE Nexus Project:

- Nexus Dialogue Processes will be implemented in the transboundary basins of the Drin and Drina rivers, and in Albania. Each of these 3 Dialogue Processes is structured around Transboundary and/or National Consultation Meetings and the development of analytical technical Nexus Assessments as per the methodology developed by UNECE. These Assessments will identify inter-sectoral linkages/benefits/trade-offs, investigate in depth priority ones, model future scenarios around the management of resources and suggest possible directions of synergic action.
- A Nexus-related capacity development workshop will be held in each of these two transboundary basins.
- For 4 of the priority issues to be identified in the context of the Policy Dialogues, respective Concept Notes and Project Documents will be developed, also exploring financing options by development partners and/or financing institutions.

The Regional Dialogue is operating in synergy with:

- The ‘Petersberg Phase II / Athens Declaration Process’
- The UNECE Water Convention
- The Union for the Mediterranean (UfM) Water Agenda and its Financial Strategy

The 3rd Regional Nexus Roundtable – Objectives and the road ahead

The sessions of this Roundtable are structured in order to:

- Enhance capacities and increase awareness of participants, including through their engagement as players/stakeholders in the “Nexus Game”, a training tool / policy exercise in the form of a “serious game”;
- Share experiences from recent and ongoing Nexus-related Assessments and Policy Dialogue Processes in the SEE area and beyond;
- Discuss types and characteristics of solutions to address Nexus-related challenges appropriate for the SEE area, as well as challenges around their promotion;

- Discuss priorities and options for the financing and implementation of Nexus-related investments, from the perspective of both financing institutions and the region's economies;
- Explore preferred options, approaches, activities and settings for the advancement of Nexus perspectives and related cooperation at the regional and transboundary levels;
- Discuss challenges and opportunities for increased women empowerment and social cohesion under an integrated sustainable approach in the management of natural resources

Looking forward, a key objective of this Roundtable is **to reach a common understanding on how the Regional Dialogue Process can enable the adoption of the Nexus approach in the Region, and facilitate the achievement of the economic, social and transboundary benefits described above, in the SEE.**

This discussion will be the focus of Session 5 of the Roundtable and of the closed Nexus Group Meeting right after the end of the Roundtable.

Based on the recommendations of the endorsed Regional Nexus Mapping Study and the discussions during the 2nd Regional Nexus Roundtable and the Nexus Group Meeting in Skopje in 2018, the following pathways have been identified as possible suitable entry points for advancing the Nexus Approach in SEE; their further elaboration by the Roundtable and the representatives of the Economies could render them building blocks of the Nexus Roadmap, should there is a decision to develop one:

1. **Implement past recommendations**

Some Nexus-related initiatives, assessments and reports are already available relevant to the SEE. However, there is a major gap in implementing their recommendations (an overview of such recommendations is available in Table 17 of the Mapping Study). The Region's economies should

- facilitate the implementation of these recommendations
- identify and assess any barriers and difficulties that hinder their implementation
- identify relevant funding sources and instruments, or establish new ones
- facilitate regional exchange and monitoring on good practices and lessons learned

2. **Optimise planning**

Planning processes need to maximise cross-sectoral benefits while being resilient to climate change. However, currently, most planning processes in the Region remain without integrating objectives or identifying synergies. The Region's economies should

- foster early vertical (across political levels) and horizontal (across sectors) cooperation and planning
- coordinate and integrate the different timeframes and geographic scales while planning

3. **Underpin decision-making with improved data and capacities**

Access to Nexus-relevant sectoral information remains limited thereby undermining the capturing of synergies and implementation of solutions. Suggested actions:

- promote specific national and/or transboundary Nexus studies and assessments, also taking into account the expected effects of climate change on resource availability and demand;
- improve available monitoring, datasets, information;
- promote procedures and platforms for accessibility and understanding;
- support the harmonization of datasets across sectors and borders;
- develop related capacities of staff in institutions

4. **Develop pilots and learn from them**

Given the large list of possible "Nexus solutions", the early development of pilot projects is recommended under a step-wise learning-by-doing approach, steered at the Regional level:

- Implement pilot actions, prioritizing climate-resilient no-regret measures e.g. on alternative solutions or technologies or governance/management set-ups;
- Draw lessons learned and share and comparing experiences at regional level;
- Upscale implementation after the first learning cycle;

The potential role and contribution of the Regional Dialogue Process

The Regional Dialogue can support the implementation of these pathways, and the promotion of the Nexus approach overall by serving as a platform/forum to:

- assess how the economies progress in the implementation of past recommendations
- identify funding sources,
- exchange and monitor on good practices and lessons learned
- identify topics/issues and focus (technologies, governance) that would be of major interest for regional activities
- share knowledge, tools and experience
- promote the establishment of a Regional Nexus Research Centre as a hub for knowledge management and for providing assistance and capacity building, also engaging the scientific community.

The dimension of gender and/or marginalized communities in advancing a Nexus approach

This Roundtable also includes a dedicated session on the dimension of gender and marginalized communities, aiming to discuss the main challenges around ensuring equitable access to services in the Nexus sectors, as well as opportunities for increased women empowerment and social cohesion under an integrated sustainable approach in the management of natural resources.

Equal access and use rights to natural resources, especially for marginalised and vulnerable population groups, including women, are indispensable for an inclusive and sustainable development.

Although all economies in the Region have committed to international legal instruments on gender equality, a real gender approach is still missing in most sectors' policies and strategies related to the Nexus, with exceptions typically in the field of rural development strategies.

The participation of representatives of gender organisations and women groups in this Roundtable will give them the opportunity to directly follow up on Nexus-related regional developments, processes and initiatives and actively contribute to the debates.

Moreover, they will have the opportunity to share and exchange experiences with a range of different stakeholders and raise awareness on challenges in ensuring equitable access to services in the Nexus sectors, as well as opportunities for increased women empowerment and social cohesion under an integrated sustainable approach in the management of natural resources.

Annex – Recommendations and conclusions from the previous Roundtables

1st Regional Nexus Roundtable in SEE (Belgrade, 20-22 June 2017) - Recommendations & conclusions

- 1) *There are on-going efforts at the governmental level for the coordination of actions across Water, Food, Energy and Environment sectors and the achievement of integration at the level of planning and implementation of actions. The Nexus approach is a suitable tool to support these efforts at the level of governments. Further, it is a suitable tool to support integration of sectors across borders hence, promoting transboundary basin cooperation.*
- 2) *There is a need for these efforts to be supported by information exchange among sectors at the level of ministries as well as at the level of academia, research organizations, institutions and local authorities. Existing commissions for the management of the shared basins or existing efforts to enhance cooperation for the management of shared basins should put effort to enable the exchange of information among riparian parties. Information Management Systems, where data can be stored and processed to support decision making, can be of immense benefit in this regard. Effort should be put to have such systems in place and be accessed as well as fed with information by different ministries.*
- 3) *Management norms and schemes that are used by any of the Nexus sectors should adapt to the emerging realities that are shaped by the EU legislative framework that governs other Nexus Sectors as well as by the natural phenomena. The EU Framework Directives affect -at different level- all Nexus Sectors. The same is true for Climate Change.*
- 4) *Bodies to enable integration are of great value. At the level of governments, inter-ministerial water committees and councils of sustainable development exist in many of the SEE2020 economies. Mechanisms to monitor the implementation of the decisions taken, linked with the Parliaments of the countries could improve integration and coordination. At the level of transboundary basins, basin Commissions can play this role.*
- 5) *Strategies to enable integration among sectors are of great importance. Such strategies are in place in some of the SEE2020 economies. The National Sectorial Programme of Albania and the National Strategy for Sustainable Development of Montenegro are such examples. Spatial plans could also play this role. These Strategies should be accompanied by adequate financial means and action plans to enable their implementation.*
- 6) *The Nexus approach can be of great assistance in prioritizing the issues to be addressed as well as prioritizing related actions.*
- 7) *Existing legislative frameworks such as the Water Framework Directive can function as coordination instruments and as “triggers” of integration in planning. Nevertheless, in this specific example the energy and agricultural sectors are only indirectly dealt with, being water users.*
- 8) *Better alignment of policy timelines and related planning cycles among different sectors would assist in the interests and priorities of each other to be taken into consideration by all sectors.*
- 9) *Nexus related efforts at transboundary level can have synergistic effects that go beyond the Nexus sectors, such as floods management.*
- 10) *The representatives of the institutions from the SEE2020 economies, including the representatives of the SEE2020 economies in the RWG Env that participate in the event, appreciate the actions for the achievement of the Nexus related objectives under the SEE2020 Strategy. Montenegro, Kosovo* and the former Yugoslav Republic of Macedonia have indicated interest to be the focus of the Nexus Policy dialogues and accompanying activities under the SEE2020.*
- 11) *Energy producers and dam operators have expressed interest in using the Nexus Approach related tools as means to streamline energy planning with environment and water resources management planning, with the aim of co-optimization of results for all four Nexus sectors.*

- 12) *The Nexus Approach related information as well as analytical tools that can be used to address the integration related needs, should come at the disposal of the SEE2020 economies.*
- 13) *With these in mind, the Nexus Policy Dialogue at the SEE2020 level under the RCC and with the assistance of the GWP-Med and REC and the support of ADA, the BMU and GEF IW:LEArN is beneficial and the institutions from the SEE2020 economies participating in the event, welcome its initiation. Actions in this regard should continue.*
- 14) *The meeting concludes that the definition of concrete steps and actions in the form of a regional Nexus Strategy that would allow the SEE2020 economies to identify and pursue the benefits from the use of the Nexus approach is most welcome.*

2nd Regional Nexus Roundtable in SEE (Skopje, 20-22 June 2017) - Recommendations & conclusions

- 1) *Representatives of institutions from the SEE2020 economies participating in the event reaffirmed the beneficial role of the Nexus Policy Dialogue at the SEE2020 in promoting coordination among economies and integration among sectors. They consider that activities in this regard should continue.*
- 2) *Participants in the Roundtable affirmed that the value and benefits of a Nexus approach are manifold and spread beyond the relevant sectors, including:*
 - *For the economy:*
 - *Reduced risks and associated costs from floods and droughts*
 - *Greater value added in agriculture sector as well as tourism*
 - *Increased efficiencies in the consumption of resources and use of infrastructure resulting to reduced overall costs*
 - *For the environment:*
 - *Improved conservation and recovery of ecosystems and habitats*
 - *For the Society:*
 - *Generation of a common vision, and a sense of perspective and direction*
 - *Improved public health*
 - *Improved water-sanitation services*
 - *Employment opportunities*
 - *For Regional cooperation and politics*
 - *Enhanced cooperation in the management of shared resources also through the adoption of new cross-border agreements, common regulations and protocols*
 - *Development of regional markets*
 - *Increased and optimized trade*
 - *Facilitation of compliance with requirements and targets relevant to EU accession*
- 3) *Suggested Nexus-related solutions include:*
 - a) *Multipurpose use of the existing and planned infrastructure*
 - b) *Optimisation of flow regulation e.g. improved cooperation in operation of hydro plants, etc.*
 - c) *Promotion of efficiency in the production and use of energy and resources; increased integration of renewables sources beyond hydropower*
 - d) *Further integration of the energy and agriculture sectors in the River Basin Management planning and implementation process*
 - e) *Ensuring the sharing of and access to up-to-date data, in a user-friendly and manageable manner*
 - f) *Improvement of the interface between science and policy-making*

- g) *Introduction of economic valuation of ecosystems and their services including in relation to erosion, floods, water quality*
 - h) *Exploration of further potential economic synergies e.g. ecotourism, sustainable agriculture, rural development*
 - i) *Capturing synergies from wastewater treatment – energy production – agriculture*
 - j) *Improvement of capacities, raising awareness*
- 4) *Management norms and schemes that are used by any of the Nexus sectors should adapt to a Nexus approach in order for benefits and synergies to be fully captured.*
- 5) *In the case of hydro plants operated by different entities in one river, especially in a transboundary context, official agreement on a well-regulated coordination system is needed to optimise shared benefits on energy production, flood control, minimum ecological flows. Individual operators that may face costs under an overall optimisation approach could be offered bonus and/or compensation schemes.*
- 6) *A successful implementation of institutional and policy integration under the Nexus could stimulate the adoption of similar integrated approaches into other sectors or challenges e.g. in climate policy, waste management, disaster risk reduction, forests etc.*
- 7) *Suggested way ahead to capture the benefits of an efficient Nexus approach, include:*
- a) *Optimisation of planning:*
 - *Foster early vertical and inter-sectoral coordination and cooperation within governmental authorities; Coordinate/integrate the different timeframes and geographic scales for planning in different sectors; integrate the Nexus approach into strategic documents and local plans.*
 - b) *Prioritise resilience:*
 - *Develop planning based on projections of resource availability and demand*
 - *Promote climate-resilient and no-regret measures including resource efficiency and nature-based solutions*
 - c) *Better data and tools for better decision making:*
 - *Improve available monitoring, datasets, information*
 - *Promote procedures and platforms for accessibility and understanding of data*
 - *Develop fit for purpose Nexus analytical tools*
 - *Establish regional early warning systems*
- 8) *It is important to foster actions for the adoption of the Nexus Approach. Potential options can include the following:*
- a) *Establish a Forum for sharing knowledge, experience & information and debate priority issues.*
 - b) *Establish a Nexus Research Centre in the SEE2020 Region to act as a hub for knowledge management and for providing assistance and capacity building to the Region's economies, also engaging the scientific community.*
 - c) *Promote the harmonization of data and indicators across sectors and economies.*
 - d) *Develop of pilot projects.*
 - e) *Identify existing financing sources and establishment of innovative ones, also engaging the private sector.*
 - f) *Implement Nexus Dialogues and develop Nexus assessments to cover as many basins and economies as possible.*