



Concept Note for Side Event GEF/GCF Pavilion

Risks and opportunities for meeting Water, Energy, and Land SDGs across scales

COP 25, 12 December 2019, Madrid, Spain

Narrative

This event is organized by the Integrated Solutions for Water, Energy, and Land (ISWEL) project, a partnership between the Global Environment Facility (GEF), the International Institute for Applied Systems Analysis (IIASA) and the United Nations Industrial Development Organization (UNIDO). The main goal of ISWEL is to develop tools and capacities that can support the management of the water, energy and land nexus at global and regional levels.

The purpose of this event is to showcase the tools that have been developed as part of the project, illustrate how these can be used for national and basin-wide planning, and discuss their scaling potential.

The global assessment has developed an integrated view of the risks that different regions of the world might face in the future to meet key water, energy and land-related development and environmental targets, and the exposure and vulnerability of world populations to them. In addition, the project also explored to identify strategies and solutions for achieving sustainable pathways for water, energy, and land (WEL) taking into account a range of possible climate and socio-economic futures. These global outcomes will be accessible through the development of web-visualization tool called hotspot explorer. This tool is expected to support international organizations and donors in identifying investment risks and opportunities to reach the sustainability agenda.

At the regional level, the project has focused in two transboundary basins facing multiple environmental and development challenges: Indus and Zambezi. Efforts here haven been concentrated in developing a system analysis framework comprising integrated assessment models and participatory process that can be utilized by basin decision makers to provide evidence-based information on what cost-effective solutions exist to for riparian countries to jointly meet water, energy and land related SDGs. Building capacities around nexus research and management is also a key feature of this project. This dual track approach helped building an enabling environment to facilitate better management of the water, food, and energy sectors related SDG targets.

Key questions

GLOBAL

1. What areas of the world are exposed to the largest risks?
2. How will these risks evolve under different climate scenarios? Who will be most exposed?
3. How can countries adapt and minimize the risks?

BASIN

4. Why adopting a water-energy-food nexus approach matters for basin-wide planning?
5. What pathways exist to meet the SDG agenda?
6. What are the costs and benefits of integrated approaches?