This communication is intended to share the experiences gathered from the multi-scale and participatory scenario process developed for the Integrated Solutions for Water, Energy, and Land (ISWEL) project. The main purpose of ISWEL is to develop tools and capacities for WEL nexus management at the global level, but also zooming into two transboundary basins facing important development and environmental challenges: The Indus and the Zambezi. Within the basins, significant efforts have been devoted in engaging with stakeholders with the purpose of: 1) identifying priority needs and development challenges regarding water, energy, and land in ways, and 2) co-develop a number of model-based scenarios that can serve as a basis for discussing cost-effective solutions to jointly meet sectoral development goals.

The scenario process is based on scientific approach but it also aims to produce policy relevant results, and it includes 5- steps: 1) Identification of current challenges: 2) Exploration of future pathways under a business as usual; 3) Exploration of future pathways to alternative desirable futures; 4) robustness assessment of basin pathways against global scenarios like the Shared Socio-Economic Pathways (SSPs), and 5) translate and validate stakeholders visions and pathways into quantitative model-based scenarios. This 5-step process was designed to ensure that resulting scenarios integrate basin priorities and preferred policy options regarding water, energy and land, and at the same time are robust and feasible strategies in the light of global changing conditions. The presentation will reflect on the outcomes of this process, lessons learned and the way forward.