

## II Stakeholder meeting in the Indus Basin “Developing pathways to a sustainable future”

With the aim of supporting knowledge generation and sharing for the sustainable management and future of the Indus, IIASA in partnership with International Centre for Integrated Mountain Development (ICIMOD), the International Water Management Institute (IWMI) and the World Bank convened two interlinked events from May 29<sup>th</sup> through June 2<sup>nd</sup> 2018 in Vienna and Laxenburg: a Scenario Workshop on “Developing Visions and Future Pathways for the Indus Basin” and the Third Indus Basin Knowledge Forum, whose theme for this year was “Managing Systems Under Stress: Science for Solutions in the Indus Basin.”

The nature for linking these two events dates back to the Second Indus Basin Knowledge Forum that took place in Colombo in July 2017. Back then IIASA, took the commitment to lead one of the [ten action points](#) agreed at the Colombo meeting and also an integral component of ISWEL project: the co-development of future scenarios for the Indus Basin taking into account different global developments and climate scenarios.

The 2-day ISWEL Scenario Workshop was facilitated by eight IIASA staff, and supported by three members of the project steering committee. The overall aim was to go one step beyond the first consultations held earlier in the year and bring together experts and stakeholders from the four riparian countries, to jointly discuss this time desirable futures and pathways in the Indus basin and its riparian countries for the management of water, energy, and land. The workshop was based on a scientific approach but it also aimed to produce policy relevant results. The specific objectives of this meeting included the co-development in partnership with sectorial experts from all four riparian countries of:

- ✓ 3 different visions and pathways to desirable futures for the Indus basin taking into account different global developments and climate scenarios.
- ✓ Enhanced and shared understanding on the implications of different investments in the basin and their consequences cascading through the WEL sectors.



Participants in the Indus Scenario Workshop

Table 1 Summarizes the list of organizations participating in the Scenario Workshop.

Country	Organization
Afghanistan	Environmental Conservation Specialist Organization of Afghanistan (ECSOA)
	Ministry of Energy and Water
China	National Climate Centre and Chinese Academy of Sciences
	Xingjiang Institute of Ecology and Geography
	National Climate Centre
India	Indian Institute of Technology (IIT) - Kharagpur
	The Celestial Earth
	Government of Punjab
	TERI School of Advanced Studies
	National Institute of Hydrology
	The Energy Resources Institute (TERI)
	University of Kashmir
	National Institute of Hydrology
	National Institution for transforming India (NITI) - Aayog Researcher
Nepal	The International Centre for Integrated Mountain Development (ICIMOD)
Pakistan	Lahore University of Management Sciences (LUMS)
	Lead Pakistan
	Planning Department-Government of Punjab
	U.S. Pakistan Center for Advanced Studies in Water
	Upper Indus Basin Network
	Ministry of Science & Technology
United Kingdom	Oxford University
USA	The Massachusetts Institute of Technology Institute (MIT)
	The Global Environment Facility (GEF)

The outcomes of the Indus Scenario Workshop consisted of:

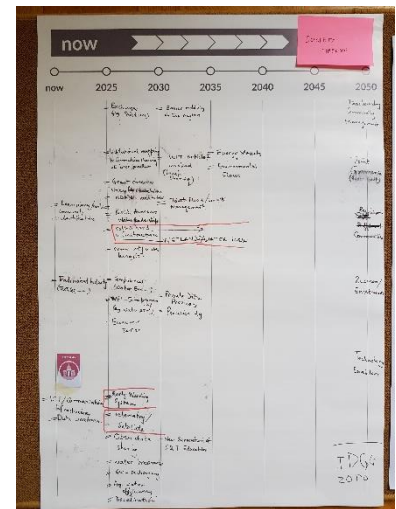
1. Three visions for the Indus basin, differentiated by the value preferences of the stakeholders, composed of spatial representation of development as well as sectoral challenges, and a range of potential solutions (technological but also behavioral, and policy related).
2. A timeline describing the different steps at which solutions and challenges will have to be implemented/addressed.

The narratives describing the visions and pathways are included in Section 1.1 and the report containing the processed information can be found online [here](#). Pictures of the visions and pathways drawn by stakeholders are shown next. Two short videos of the process and how it feeds into a wider basin consultation process (IBKF) can be viewed [here](#).

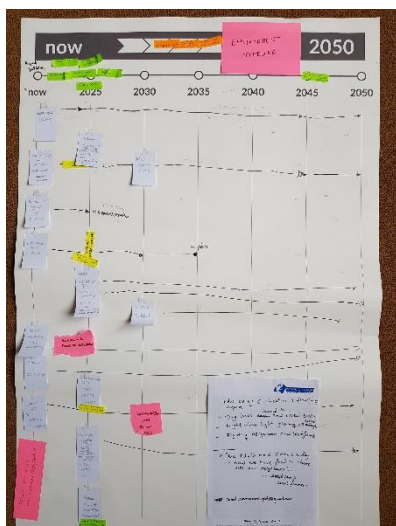
## Economy Vision INDUS



## Society Vision INDUS



## Environment Vision INDUS





The workshop was very well received by all participants and very much valued the highly interactive nature of the exercise. A short VIDEO summarizing the process can be found [here](#).

*“The two-day scenario building workshop was very engaging, and I found it particularly stimulating to have the opportunity to discuss, reflect, and envision a future that is possible.” (Afreen Siddiqi, Pakistan)*

*“What was most impressive was the sincere desire among Basin countries to work together and understand better the challenges it faces and work towards finding solutions. The knowledge, skills, and commitment shown by IIASA as facilitators of the workshop brought out the best in all the participants.” (Khalid Mohtadullah, Chair of the Upper Indus Basin Network)*



A substantial part of the Indus Knowledge Basin Forum was devoted to present the results of the Scenario Workshop that took place in the prior two days and seek for additional feedback from a wider group of stakeholders how the visions and pathways could be improved and completed.



*Participants of the Workshop presenting the outcomes to the IBKF audience.*

The outcomes of the Workshop and further discussions held during the IBKF will constitute the basis for refining the Nexus tool IIASA is developing and at the same time will provide the input for the quantitative basin scenarios. The results of the scenario assessment will be shared with stakeholders during the 3rd workshop (2019) providing an opportunity for further revising and improving visions and pathways.

## **Training on “Open-source modeling tools and resources for the water-energy-land nexus”**

ISWEL modelers team also organized a training with the purpose of introducing a number of the models and resources used at IIASA that support decision making, policy analysis and capacity building across the water, energy and land sectors at a range of scales.

Key developers of the models gave presentations and presented examples on the use of the tools and they can be used can be used in the wider community to support local decision making and capacity building. Specific examples about their use in the Indus Basin were discussed.