

## Workshop Output TT 2.3.D

**Title of workshop:** Distal impacts of hydrospheric and cryospheric changes in mountain regions

**Prepared by**

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<b>Participants*</b>	Daniel Viviroli, Fabian Drenkhan

\* Workshop participants that have submitted contributions to the workshop

General questions to please be answered in the workshop reporting

- 1) What was the focus of the workshop? Methodological issues and advancements or thematic issues (systems knowledge, transformation knowledge, target knowledge). Please check and fill in the matrix in the output section.

Methodological issues and advancements	Thematic issues		
	System knowledge	Transformation knowledge	Target Knowledge

- 1) Which key points were discussed in the workshop as a whole? (This should be more a synthesis and not simply a summary of the key points in each presentation)

On a global scale, hydrological models have made great advances – quantitative assessments of the dependencies on mountain water resources are becoming available. Scenario as well as model uncertainties are difficult to estimate. The physical background of the model developers leads to the negligence of socially relevant aspects (e.g. virtual water, attribution of demand to non-local consumers).

- 2) What is your opinion on the current state of knowledge concerning your topic(s) (focusing on mountain regions)? *Please check and fill in the matrix on the following page.*

**Overall assessment of the state of:**

What is your personal opinion on the current state of knowledge concerning the topic(s) addressed in your workshop. Please tick the appropriate field. Brief explanations are appreciated.

State of knowledge	Very good	Good	Poor	Very poor	Not appropriate	Comments
Global			x			<i>Quickly improving</i>
Regional			x			<i>Which region? All regions; improving</i>
Scattered case study-based knowledge		x				<i>High-mountain Asia; European Alps; very isolated studies in the Andes</i>
Knowledge about past states/trends				x		
Knowledge about current situation						<i>Locally extremely heterogeneous</i>
Knowledge about future states/trends/thresholds				x		<i>Limited by extremely uncertain boundary conditions (precipitation)</i>
Knowledge about the system		x				<i>Knowledge exists in the separate research communities (supply/physical versus demand/social) but exchange and mutual understanding is missing</i>
Knowledge about shaping pathways to more sustainable development (transformation knowledge)				x		<i>See above</i>
Knowledge about envisaged goals (target knowledge)						<i>Yes, SDG6 Water and Sanitation but only on a high level</i>

