



Science for Solutions decade: HELPING
Hydrology Engaging Local People IN one Global world
IAHS Scientific Decade 2023-2032
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**Details of the Working Group – Stepwise ecological restoration of
watersheds**

Describe the work and how your suggested working group will contribute to the goal(s): About 48% of rivers worldwide are degraded due to varying degrees of reduced connectivity. One main challenge in restoring degraded river ecosystems is a lack of comprehensive scientific knowledge concerning the changes of hydrological and ecological processes within the larger watershed context. Synthesizing case studies from diverse countries is essential to demonstrate how a deeper comprehension of hydrological and ecological processes contributes to stepwise ecological restoration of watersheds.

Describe the methods you will use to achieve the goal(s): Watershed models; data-driven modelling, remote sensing; case study analyses; synthesis of case studies; stakeholder involvement.

Describe the (a) short-term, (b) the long-term and (c) the ultimate results you hope to achieve:
(a) Short term goal: develop a water and ecosystem simulator to understand hydrological and ecological processes of degraded or restored watersheds. (b) Long-term goal: develop an advanced decision support system for the watershed restoration. (c) Ultimate results: establish and apply a robust tool for ensuring water security and fostering watershed restoration.

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