



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 – Enhancing the resilience of the Water -
Energy - Food (WEF) Nexus**

Describe the work and how your suggested working group will contribute to the goal(s): We will analyse the usage of water in energy and food production, identify inefficiencies and develop solutions to increase the resilience. We will conduct stakeholder analysis, causal loop diagrams and simulations of the holistic water energy food system. A strong emphasis will be given to NBS, since they have proven to increase the WEF Nexus while providing significant positive side effects.

Describe the methods you will use to achieve the goal(s): Hydrological modelling, Causal Diagrams, system modelling, hydro-power modelling, LCA to assess water footprint and ecological footprint.

Describe the (a) short-term, (b) the long-term and (c) the ultimate results you hope to achieve:

- (a) Short term: increasing the resilience of the WEF nexus in remote communities,
- (b) Medium term: the potential of hidden hydropower (H-HOPE project),
- (c) Long-term: developing solutions to sustain water, energy and food supply in a changing climate.

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