

Addressing SDG synergies and trade-offs from an interlinkage perspective: *The SDG Interlinkages Tool and its application*

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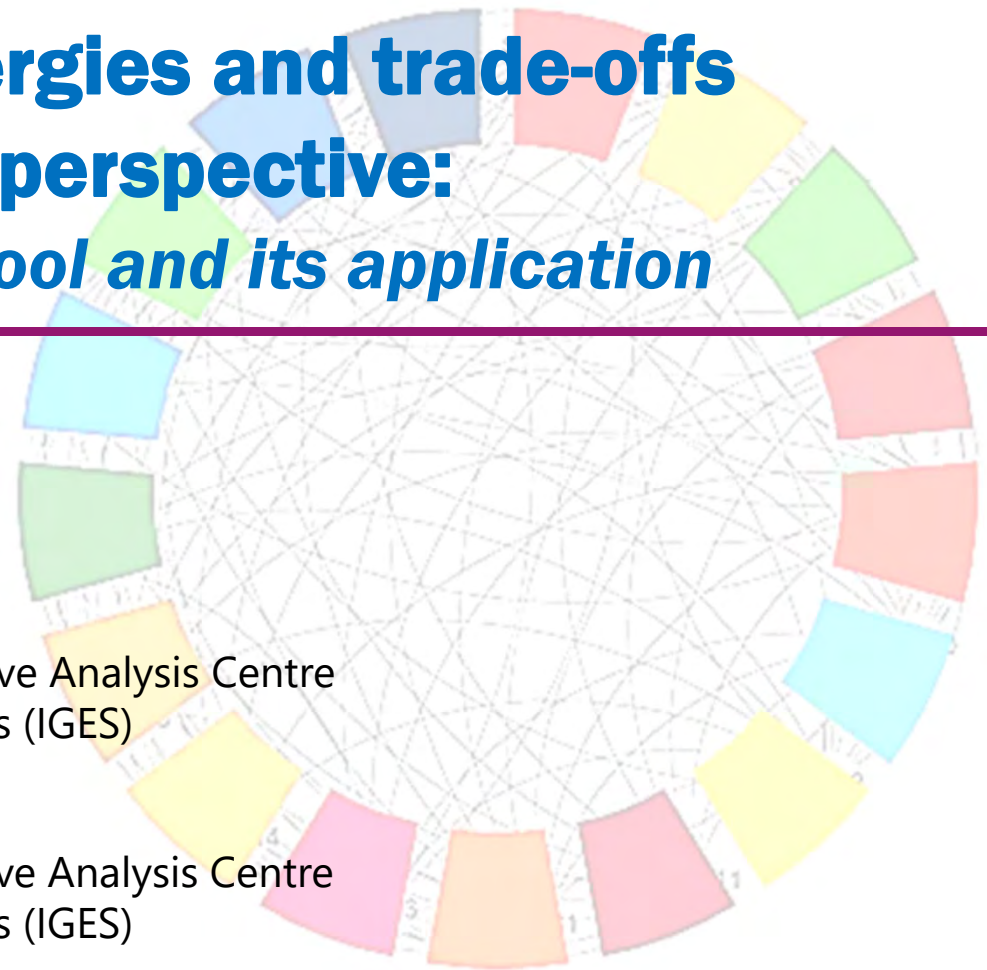
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***TT-4 Understanding SDG Synergies and Trade-offs for
Sustainable, Resilient and Inclusive Development, ISAP 2020***

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Importance of taking an integrated approach for SDGs planning and implementation from an interlinkage perspective

- Shifting from a siloed approach to an integrated approach is imperative for achieving the SDGs.
- Understanding the interlinkages between SDG targets is important for taking an integrated approach which helps address the following issues:



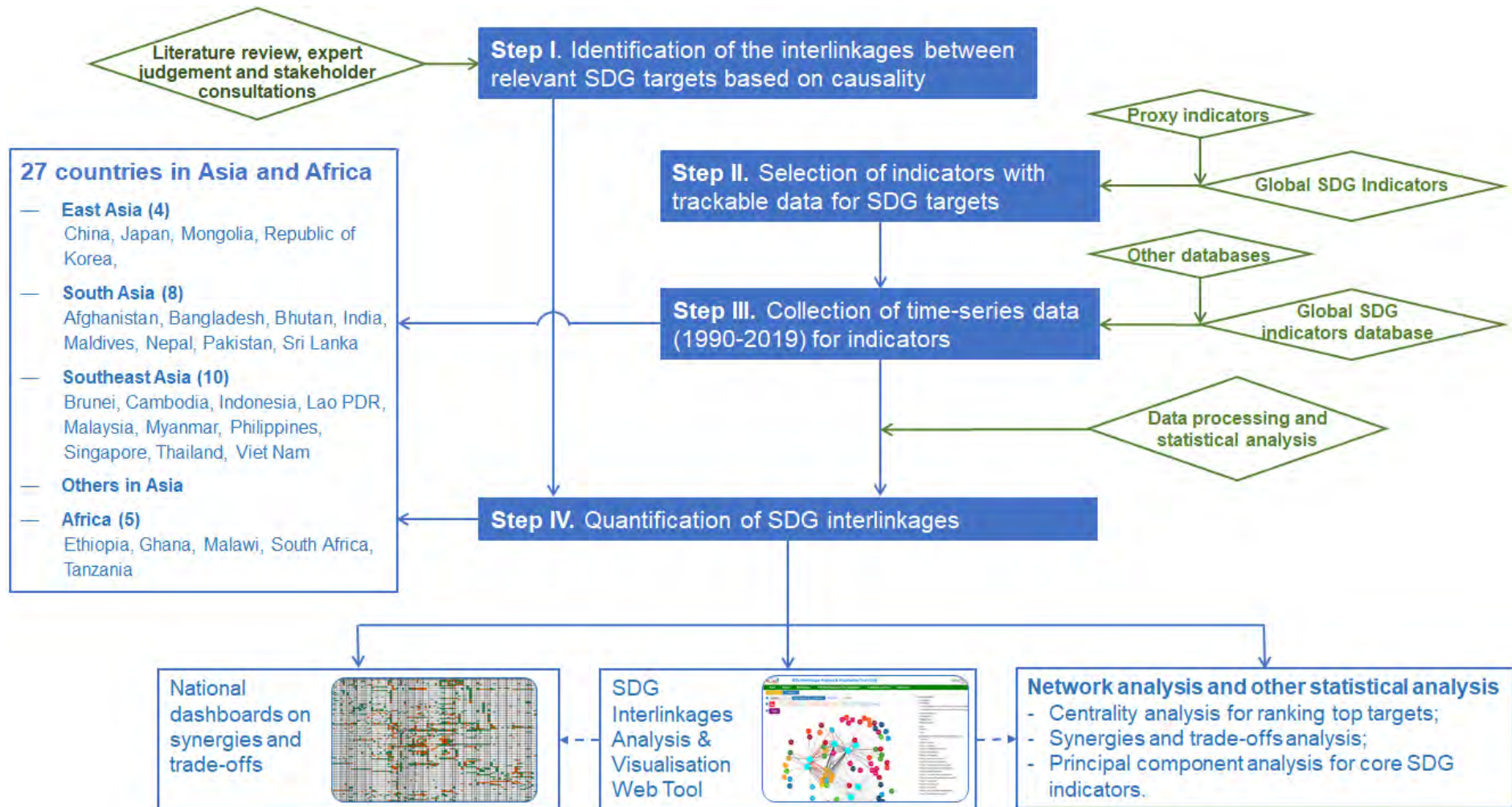
A siloed approach overlooking the interlinkages



An integrated approach addressing the interlinkages

- *How will achieving one target impact on achieving others and how strong are the impacts?*
- *Where are the synergies or trade-offs between the SDG targets?*
- *How countries are different in terms of SDG interlinkages?*
- *What are the policy implications for priority setting and for institutional and financial arrangement, etc.*

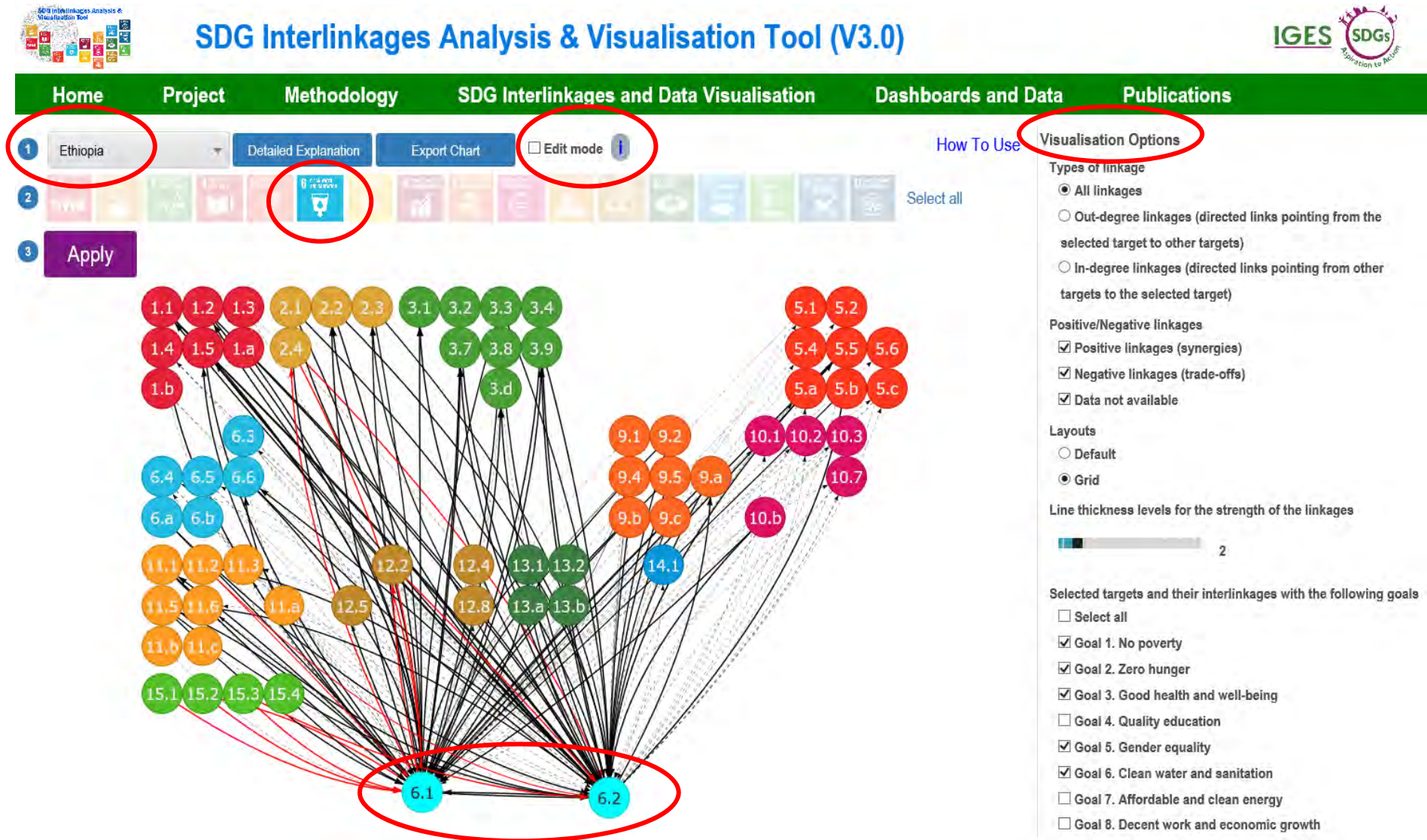
IGES SDG Interlinkages Tool: A four-step methodology



Source: SDG Interlinkages Tool (V3.0) <https://sdginterlinkages.iges.jp/methodology.html> (Zhou, et al., 2019)

IGES SDG Interlinkages Analysis & Visualisation Tool (V3.0)

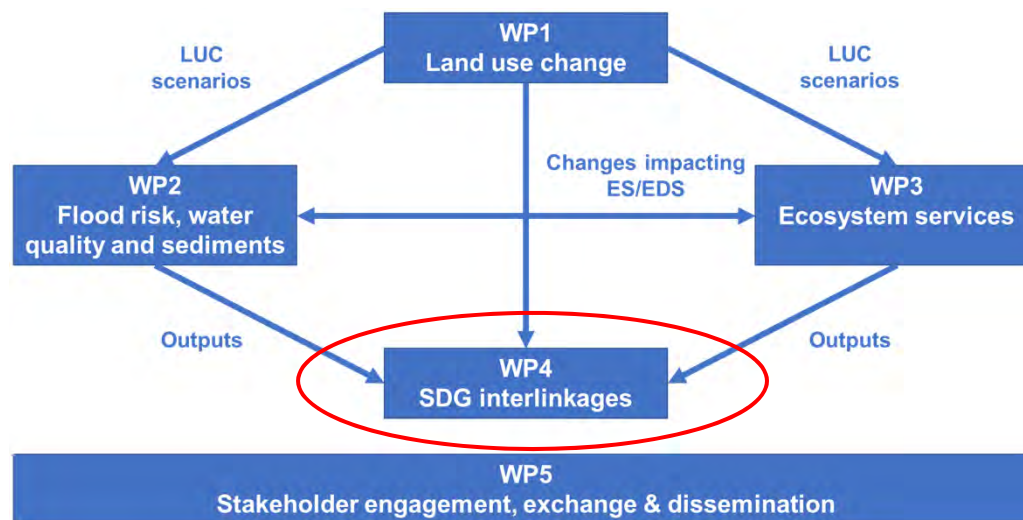
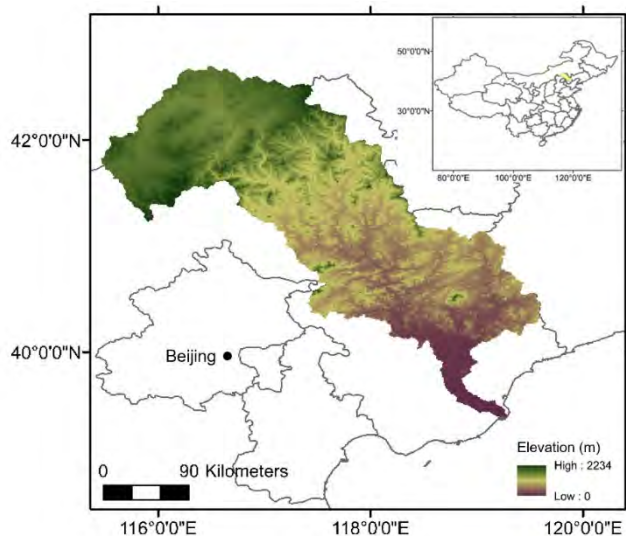
(<https://sdginterlinkages.iges.jp/visualisationtool.html>)



Source: A screenshot taken from the SDG Interlinkages Analysis and Visualisation Web Tool (Zhou, et al., 2019)

Application of the SDG Interlinkages Tool for sub-national assessment at the river basin level in China

- Aim: Provide scientifically-grounded and policy-relevant information on the SDG synergies and trade-offs at the river basin level to help assess the spatial impacts from national policies.
- China's Luanhe River Basin: The most important water source in northern China, covering 27 counties across three provinces (Hebei, Inner Mongolia and Liaoning) and supplying water to Tianjin Municipality and other areas.



Source: Luanhe Living Lab (<https://luanhelivinglab.home.blog/>)

Identification of the SDG interlinkages for the Luanhe River Basin

- 🌍 Literature review (UN flagship reports, etc.);
- 🌍 Expert judgement (11 experts);
- 🌍 Field trips along the river basin (1,800 km) and meetings with local officials and experts;
- 🌍 Stakeholder consultation workshop and the following-up questionnaire survey through email.



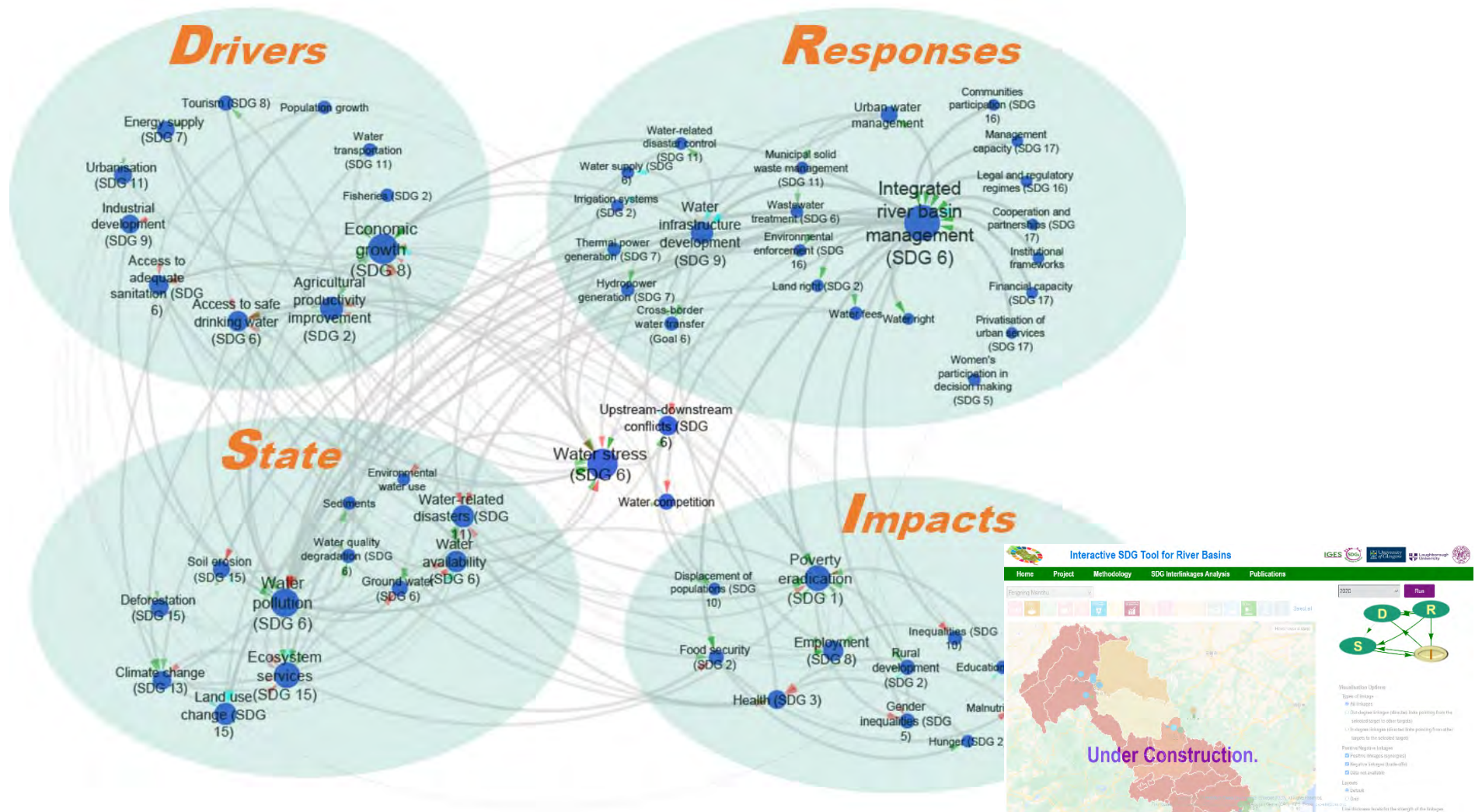
Luanhe field trip with local officials, 9-17 October 2019.



Stakeholder workshop jointly developing future land use and policy scenarios (18 October 2019).

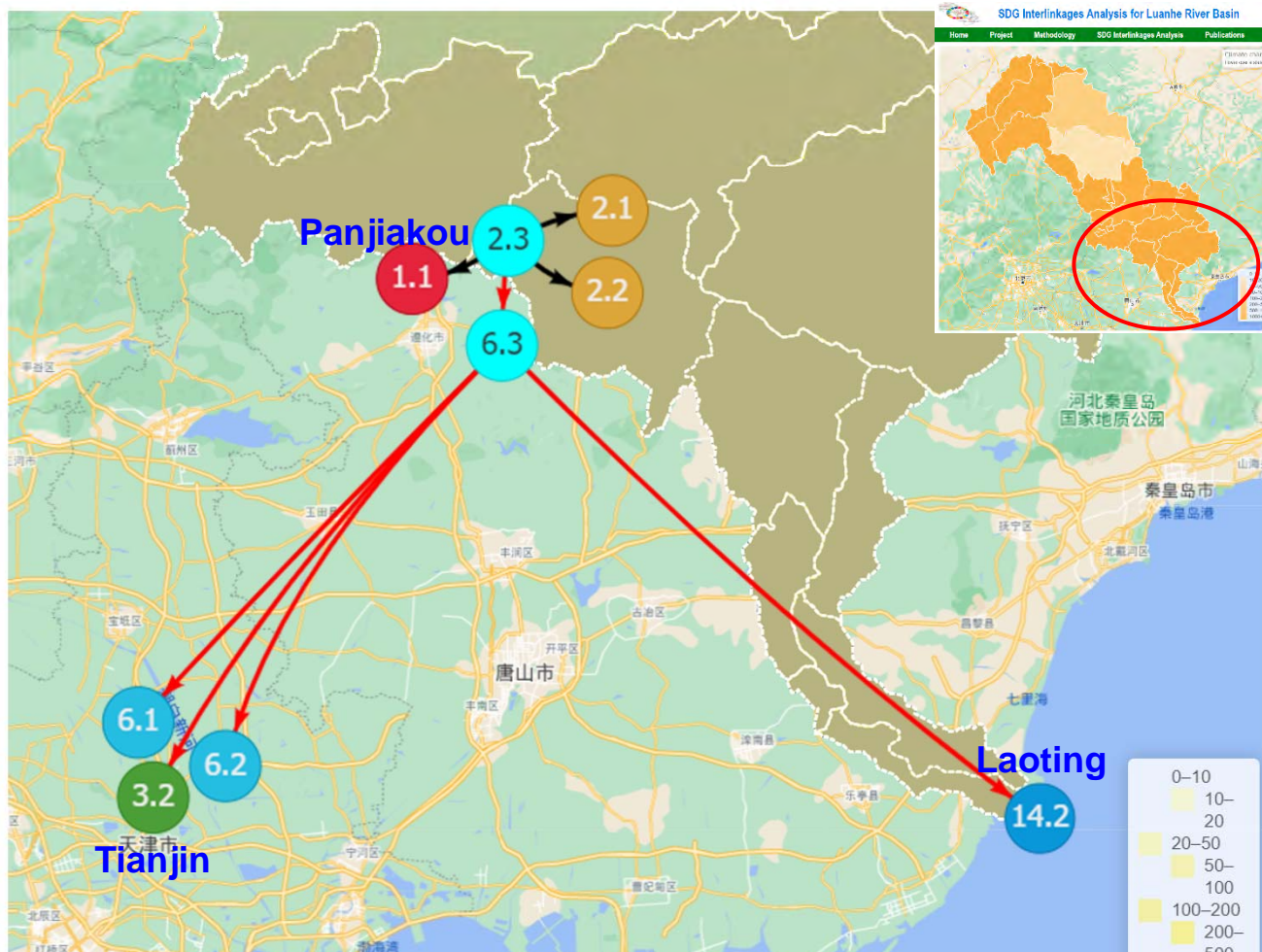
Source: Luanhe Living Lab (<https://luanhelivinglab.home.blog/>)

SDG interlinkages for China's Luanhe River Basin based on a simplified **DPSIR** framework



Downstream impacts of cage aquaculture in midstream reservoirs

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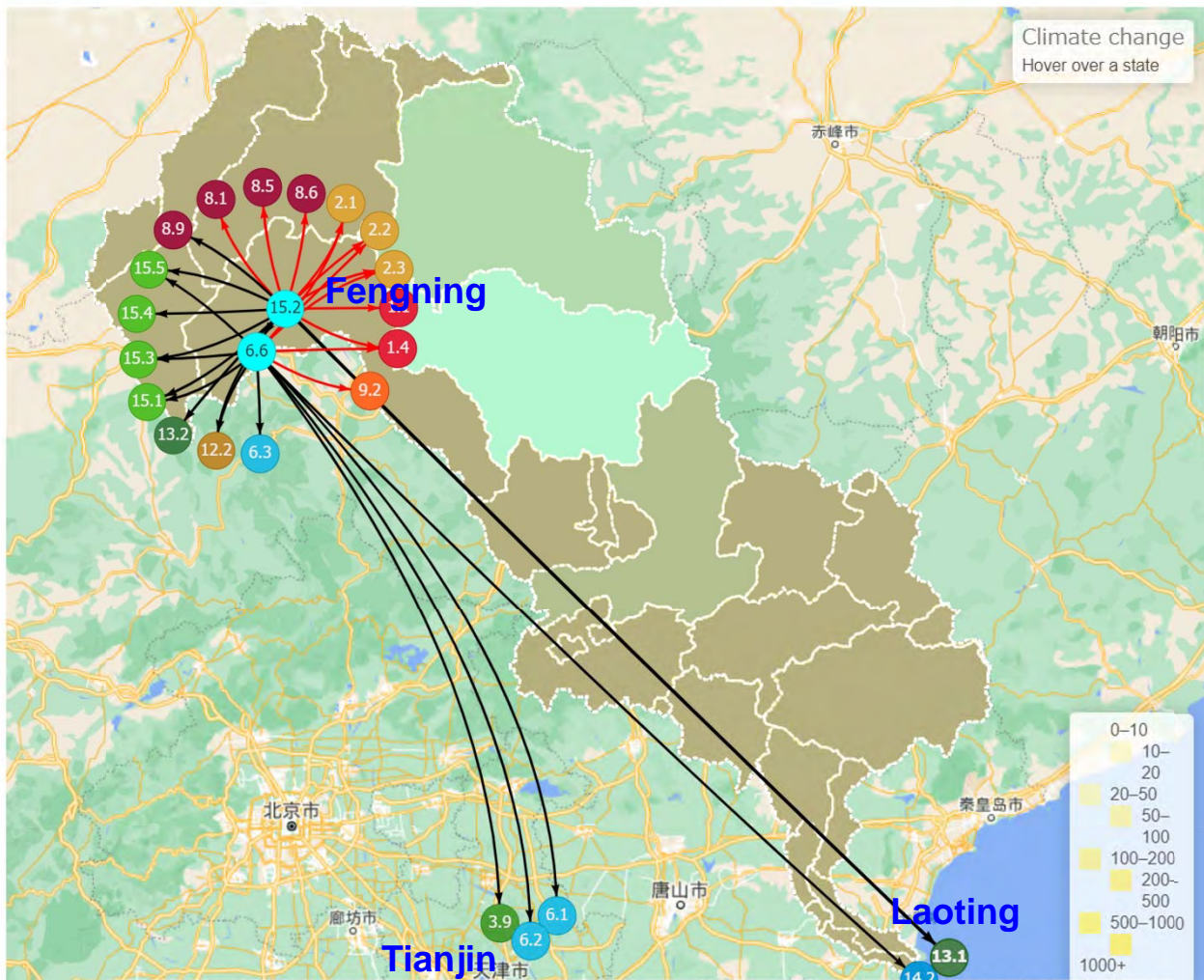


- Midstream activity: Cage aquaculture in Panjiakou Reservoir (2.3)
- Midstream benefits: agriculture production (2.3), livelihood of small holders (1.1), food supply (2.1), nutrition (2.2), etc.
- Downstream impacts: water pollution (6.3), access to safe drinking water (6.1, 6.2), health impacts (3.2), marine pollution (14.2), etc.

Source: "Luanhe Living Lab" river basin SDG tool. <https://sdginterlinkages.iges.jp/luanhe/SDGInterlinkagesAnalysis.html>

National policy on upstream forest conservation and trade-offs and synergies in the upstream and the downstream





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- National policy on the designation of protected areas for water source conservation in the upstream (Fengning) (6.6, 15.2)
- Upstream impacts: agriculture production (2.3), livelihood of small holders (1.1, 1.4), food supply (2.1), jobs (8.5), industrial development (9.2), etc.
- Downstream benefits: water quality and quantity (6.3, 6.1, 6.2), health impacts (3.9), climate resilience (13.1), etc.
- National or global impacts: ecosystem services (15.1, 15.3, 15.5), carbon sequestration (13.2), etc.

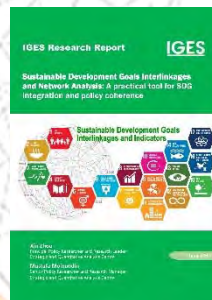
Source: "Luanhe Living Lab" river basin SDG tool. <https://sdginterlinkages.iges.jp/luanhe/SDGInterlinkagesAnalysis.html>

Key messages

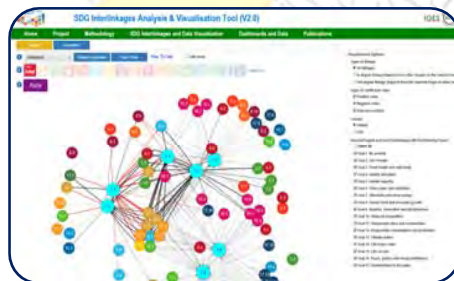
-  Upstream-downstream conflicts from quality-induced water scarcity in the future due to agricultural intensification, potential expansion of industrial capacity and urbanisation calls for strengthening environmental management for achieving holistic SDGs in the entire basin.
-  For national policy making, a comprehensive package is needed to take account of the trade-offs particularly in the lagged-behind regions and with the vulnerable groups to ensure equitable development across regions and leave no one behind.
-  Wider participation of relevant stakeholders in the policy formation and implementation stages is important to ensure policy integrity and coherence by reflecting the concerns from various aspects.
-  Limitations of the analytical tools due to the gaps in data availability and the knowledge about the spatial impacts constrain their practical application and need to be improved.

Thank you!

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Zhou, X., Moinuddin, M., 2017. Sustainable Development Goals Interlinkages and Network Analysis: A practical tool for SDG integration and policy coherence. IGES Research Report. Hayama: IGES. Available at: https://sdginterlinkages.iges.jp/files/IGES_Research%20Report_SDG%20Interlinkages_Publication.pdf.



Zhou, X., Moinuddin, M., Li, Y., 2017. SDG Interlinkages and Data Visualisation Web Tool. Hayama: IGES. Available at: <https://sdginterlinkages.iges.jp/visualisationtool.html>.