Sustainable Development Goals (SDG) Interlinkages Analysis and Visualisation

A practical tool supporting SDG integration and policy coherence

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Importance of SDG interlinkages analysis and existing knowledge gaps

- The 17 SDGs and their targets cover separate and diverse elements that interact and complement each other in an indivisible way, and in doing so make up a complex network of interlinkages.

- The framework of the SDGs suggests an integrated approach to seek and scale up the synergies, and mitigate and eliminate the trade-offs through integration across sectors and collaborations across various administrative levels and actors.

- However, existing knowledge on SDG interlinkages remains limited.
  - Lack of comprehensive interlinkages study covering all targets;
  - Quantification of the SDG interlinkages is limited;
  - SDG interlinkages study at the national level is lagging behind;
  - Analysis of SDG interlinkages, beyond the identification of the interlinkages, is limited.

- IGES developed a practical and science-based SDG Interlinkages Visualisation Web Tool that can help in shifting from a silo approach to an integrated approach.

IGES' integrated approach on SDG interlinkages analysis and visualisation

The SDG Interlinkages Web Tool (i) allows users to visualise the interlinkages between SDG targets, (ii) helps identify potential synergies and trade-offs between SDG targets, (iii) provides indicator-level time-series data for selected countries in Asia, and (iv) enables comparison of country progress and performance over time.

Identification of interlinkages

➤ Identification of binary links (1 for presence of interlinkage, 0 otherwise) between 169 SDG targets based on:

 – knowledge obtained from international consultation processes on SDG indicators (such as IAEG-SDGs and SDSN);

 – literature review.

Quantification of interlinkages

➤ Statistical data treatment;
➤ Quantification of the interlinkages of SDG targets based on regression analysis of indicator-level time-series data.

Indicators and data collection

➤ Identification of 51 indicators (SDSN and others) with trackable data for 108 SDG targets;

➤ Collection of time series data (2001-2014) for 51 indicators for nine Asian countries (BGD, KHM, CHN, IND, IDN, JPN, ROK, PHL, VNM).

Interlinkages analysis and visualisation

➤ Development of IGES SDG Interlinkages and Data Visualisation Web Tool to visualise interlinkages and indicator-level data;
➤ Apply Social Network Analysis techniques to analyse the structure of the interlinkages network and identify strategic targets.

Country-specific dashboards indicating potential reinforcing (green) and conflicting (red) interlinkages

Bangladesh

IGES' SDG Interlinkages and Data Visualisation Web Tool (Ver. 1)
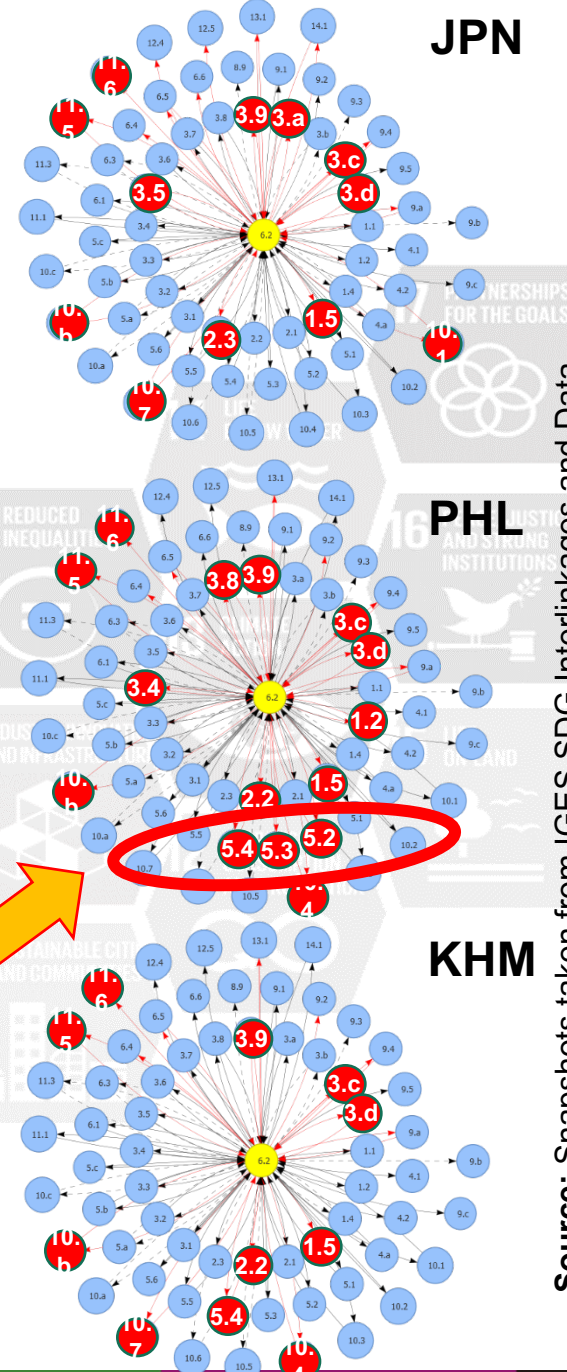
Free to access online at:
https://sdginterlinkages.iges.jp/visualisationtool.html

Example of the application of the SDG Interlinkages Web Tool

- The tool can help demonstrate some more influential targets which can help priority setting and resource allocation
  - For Example, **Target 6.2** (Universal access to sanitation and hygiene) was found to be one of the top 20 strategic targets for almost all the countries covered in the study.

- The tool can suggest why interactions between targets vary across countries and why some countries need to treat certain interactions differently.

- For example, **Target 6.2** has a total of 71 enviro-social links, of which there are 21 trade-offs in **JPN**, 27 trade-offs in the **PHL** and 19 trade-offs in **KHM**, indicating **more enviro-social synergies in KHM than PHL.**

- In particular, **Target 6.2** in **PHL** has potential trade-offs with **Goal 5** on gender equality, suggesting gender equality requires attention when addressing sanitation and hygiene.

JPN

PHL

KHM

Source: Snapshots taken from IGES SDG Interlinkages and Data Visualisation Web Tool (https://sdginterlinkages.iges.jp/).

Thank you!

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