

Sustainable Development Goals (SDG) Interlinkages Analysis and Visualisation

*A practical tool supporting SDG integration and
policy coherence*

Dr. Xin Zhou

Principal Policy Researcher and Research Leader
Strategic and Quantitative Analysis Centre (QAC), IGES

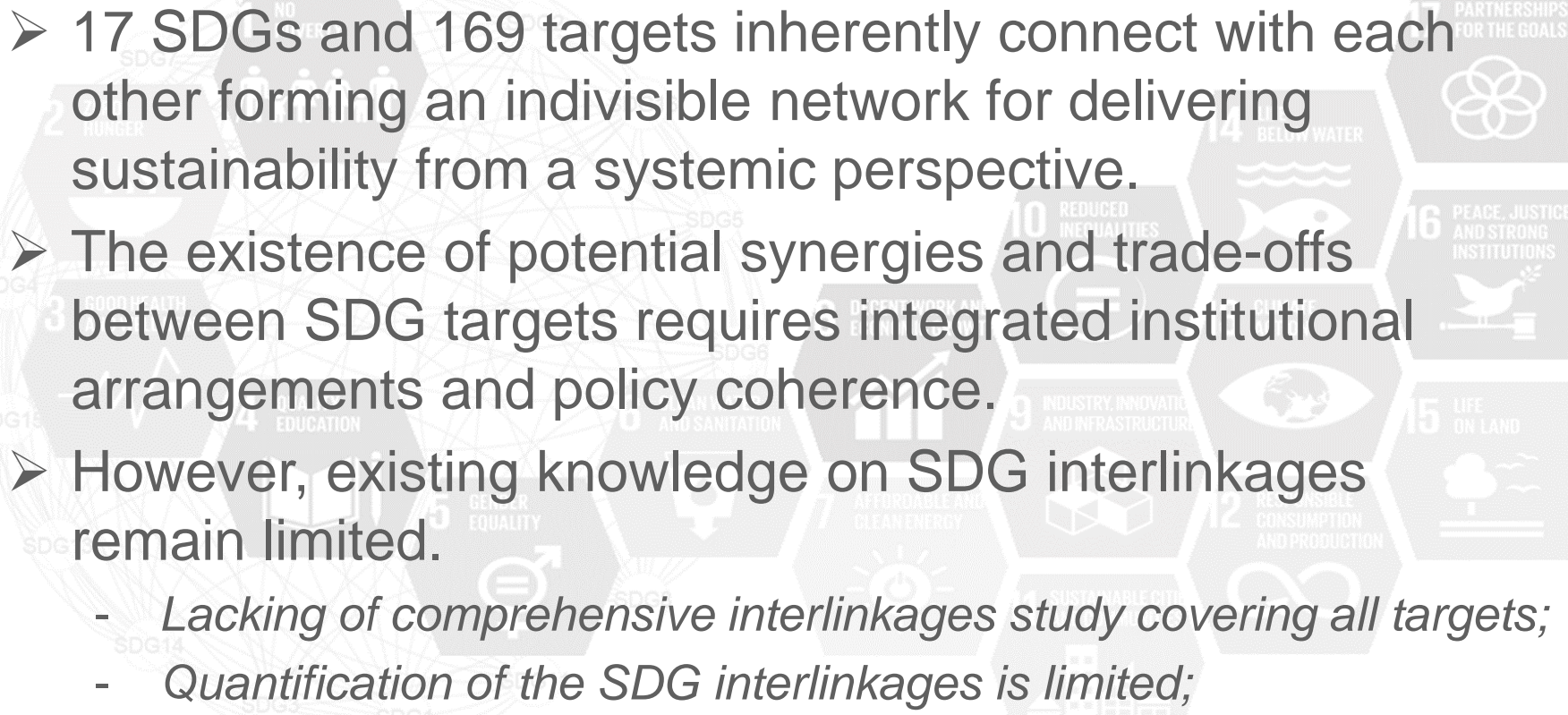
Dr. Mustafa Moinuddin

Senior Policy Researcher and Research Manager
Strategic and Quantitative Analysis Centre (QAC), IGES

***Integrating SDGs in Asia: An Action Menu for Policymakers
Session TT-5, ISAP 2017. 26 July 2017, Pacifico Yokohama, Japan***

IGES
Institute for Global
Environmental Strategies

Importance of SDG interlinkages analysis and existing knowledge gaps

- 
- 17 SDGs and 169 targets inherently connect with each other forming an indivisible network for delivering sustainability from a systemic perspective.
 - The existence of potential synergies and trade-offs between SDG targets requires integrated institutional arrangements and policy coherence.
 - However, existing knowledge on SDG interlinkages remain limited.
 - *Lacking of comprehensive interlinkages study covering all targets;*
 - *Quantification of the SDG interlinkages is limited;*
 - *SDG interlinkages study at the national level is lacking behind;*
 - *Analysis of SDG interlinkages, beyond the identification of the interlinkages, is limited.*

IGES' integrated approach on SDG interlinkages analysis and visualisation

Identification of the interlinkages

- Identification of the interlinkages between SDG targets based on:
 - knowledge obtained from international consultation processes on SDG indicators; and
 - literature review.

Indicators and data collection

- Identification of the indicators for SDG targets with trackable data;
- Collection of time series data (2001-2014) for the indicators for nine Asian countries.

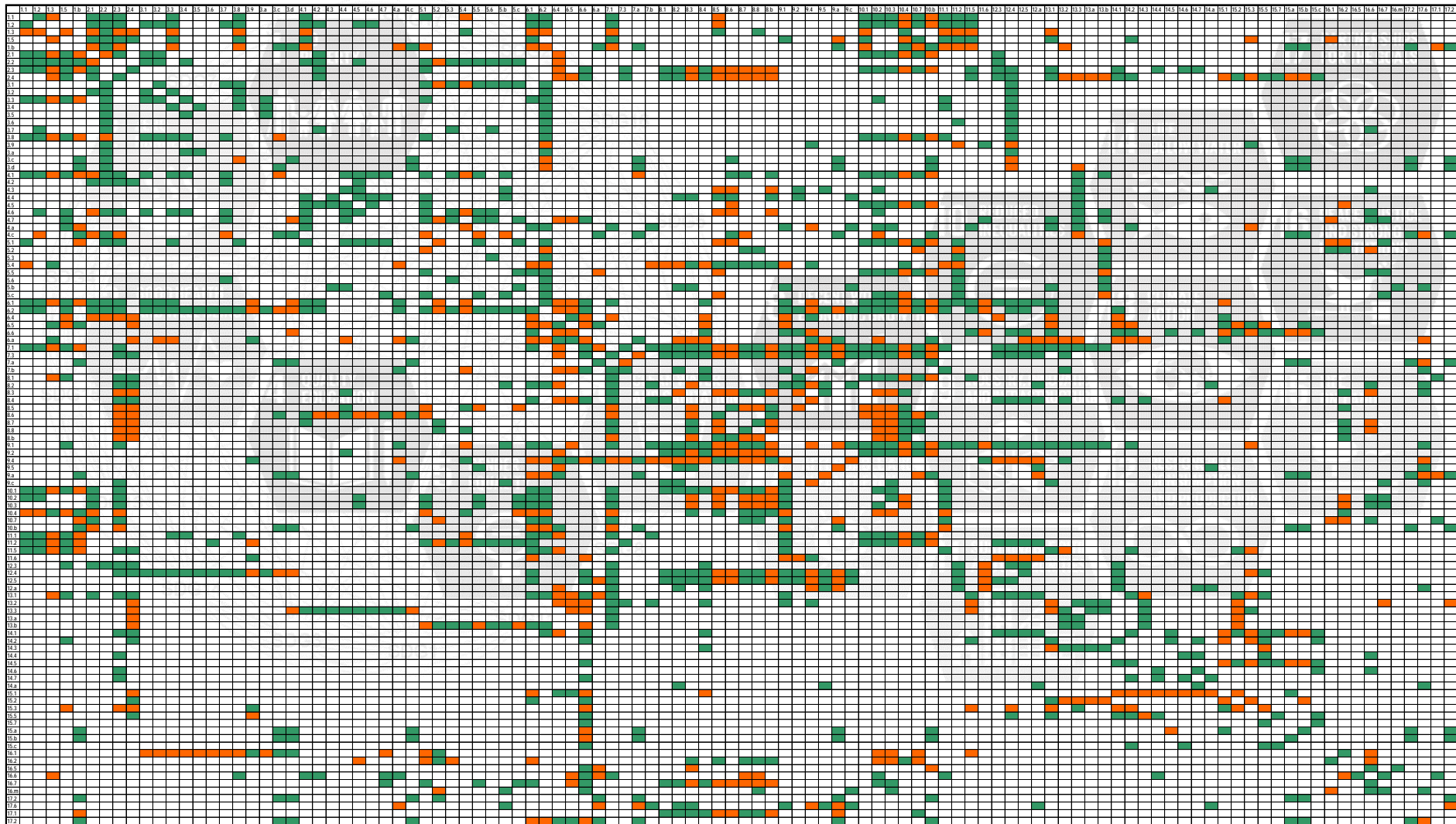
Quantification of the interlinkages

- Statistical treatment of data;
- Quantification of the interlinkages between SDG targets based on the correlation analysis of the corresponding indicators using time-series data.

Analysis and visualisation of the interlinkages


- Creation of a quantified network of the interlinkages between SDG targets for each country;
- Use of the Social Network Analysis to analyse the structure of the interlinkages and identify strategic targets based on the measurements of centrality;
- Development of a web tool to view the indicator-level data and visualise the interlinkages between SDG targets.

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



Bangladesh

IGES' SDG Interlinkages and Data Visualisation Web Tool (Version 1)

IGES  **SDGs**
Integration to Action

Home Project Methodology **SDG Interlinkages and Data Visualisation** Simulation Urban Targets Ecological Footprint Food-Water-Energy Nexus Publications

SDG Interlinkages and Data Visualisation

Display Comparison

1 Select One Country

- ☒ Bangladesh
- ☐ Cambodia
- ☐ China
- ☐ India
- ☐ Indonesia
- ☐ Japan
- ☐ Republic of Korea
- ☐ Philippines
- ☐ Viet Nam

2 Select Sustainable

1 2 3 4 5

3 Select SDG Target

☒ Goal 1. No poverty

☒ 1.1 End extreme poverty

Population below \$1.90

☒ 1.2 Halve national poverty

Population below national poverty line

☒ 1.3 Implement social protection systems to the poor

Government expenditure on health

☒ 1.4 Full access to basic services and economic resources

Data not available.

☒ 1.5 Build resilience of the poor to climate and other disasters

4 Select or Deselect SDG Targets & Indicators

☒ 1.1 End extreme poverty

Population below \$1.90 (2011 PPP) per day

☒ 1.2 Halve national poverty

Population below national poverty line

☒ 1.3 Implement social protection systems to the poor...

☒ 1.4 Full access to basic services and economic res...

How to use

1. Select only one country.
2. Select one or more Goals.
3. Select/Deselect SDG Target(s) and related Indicator(s) for the selected Goal(s).
4. Your selected Target(s) and related Indicator(s)

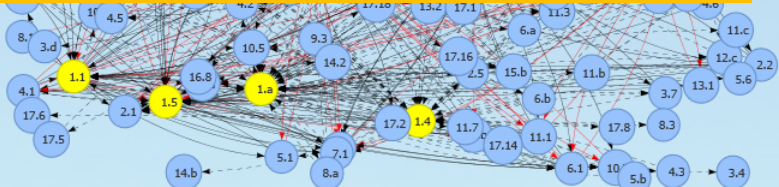
Export Table

	2003	2004

Export Chart

The *SDG Interlinkages and Data Visualisation* Web Tool (Version 1) is free to access online at:

<https://sdginterlinkages.iges.jp>



Note: i) Each node represents one SDG Target, e.g. Target 1.1, with yellow ones indicating the selected targets.
ii) Each line with an arrow linking two nodes represents a directional/causal link between two Targets, e.g. from Target 1.1 to Target 1.2. The value over the line (by putting the cursor on the line) indicates the strength of the linear relation between the pair of targets.
iii) A line in black represents a positive link and a line in red represents a negative link.



Thank you!

Contact: zhou@iges.or.jp