AI for SDG 16 on Peace, Justice, and Strong Institutions: Tracking Progress & Assessing Impact
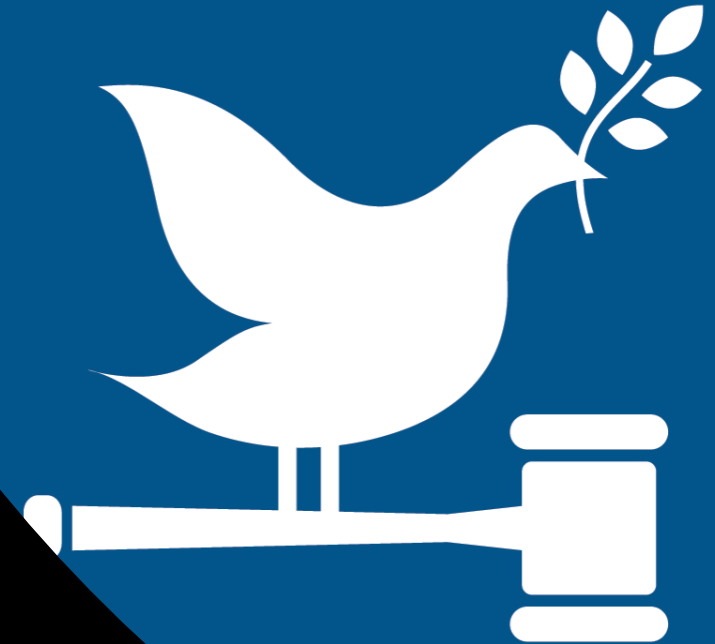
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Niheer Dasandi
University of Birmingham

Slava Jankin Mikhaylov
Hertie School, Berlin

SDG 16

• Shift from MDGs to SDGs linked to better understanding of role of politics and governance.

• SDG 16 recognised central role of effective, accountable, and inclusive political institutions in promoting sustainable development.

• Targets/indicators deal with range of governance issues – reducing violence, trafficking, corruption, and strengthening institutions, promoting rule of law, representative decision-making, and human rights.

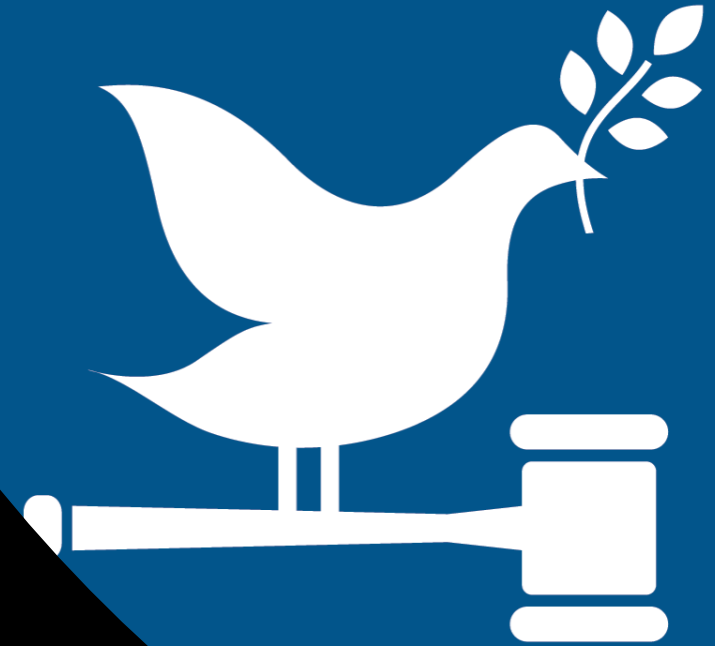• Seen as important in its own right, but also for achieving other SDGs.

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AI and SDG 16

- Two ways that machine learning techniques can help in two areas:

  - Tracking overall progress on SDG 16

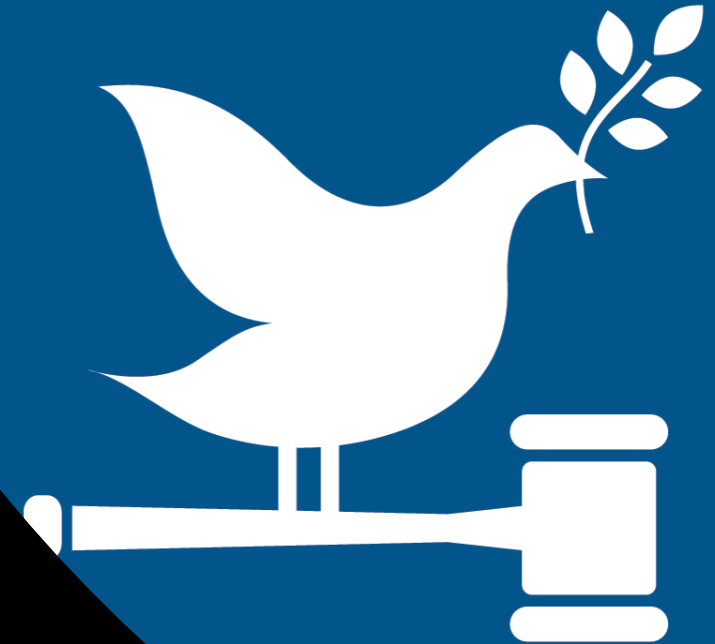 - Measuring the impact of different aspects of SDG 16 on other SDGs.

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Tracking progress on SDG 16

- Major challenge for effectiveness of SDG 16 is measurement (Edwards & Romero 2014).

- Several problems with measuring progress on SDG 16:

  - Validity of measures/indicators

  - Data availability
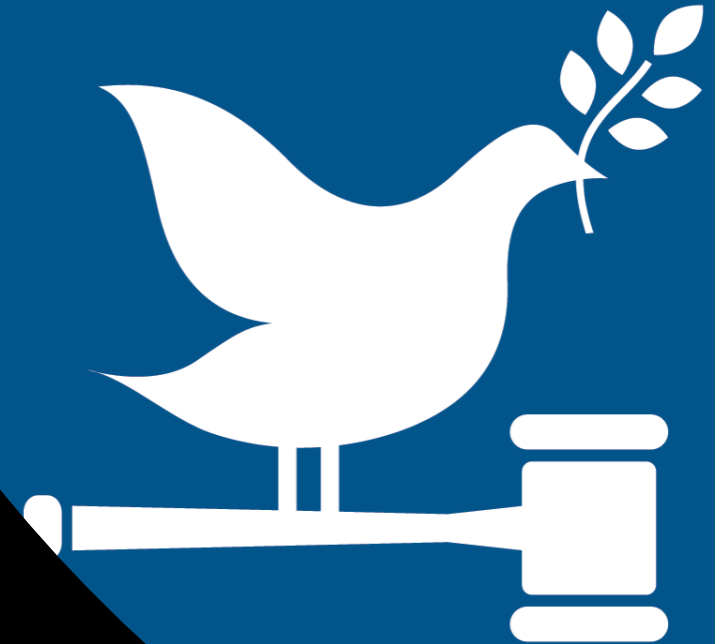
  - Aggregating trends across 23 indicators.

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Validity of indicators

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- Indicators often selected on the basis of data availability rather than whether they track progress on targets.

- Example
  - Target 16.A: Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime.
  - Indicator 16.A.1: Existence of national human rights institutions in compliance with Paris Principles.
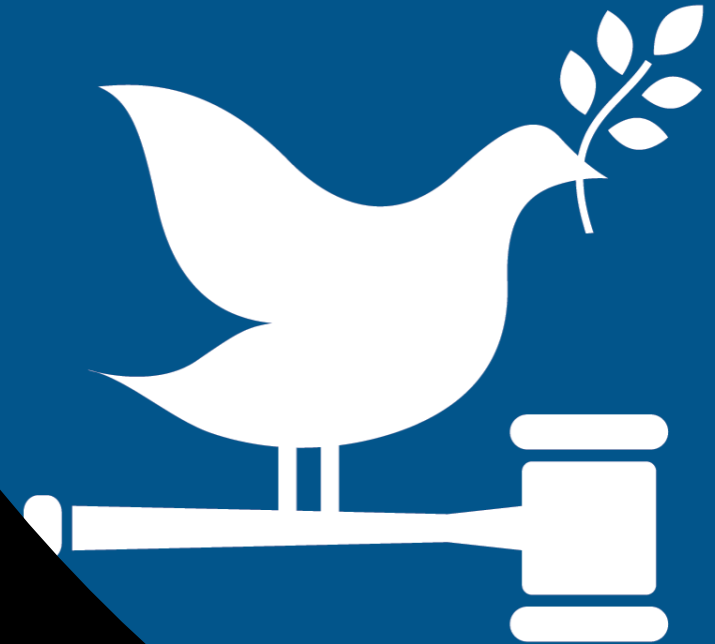
Data availability

- Even when we consider existing indicators, data availability a key issue.

- In developing and fragile country contexts, data collection capacity severely limited.

- Political nature of SDG 16 → some govts suppress information.

- Data needs to be at appropriate policy relevant level.

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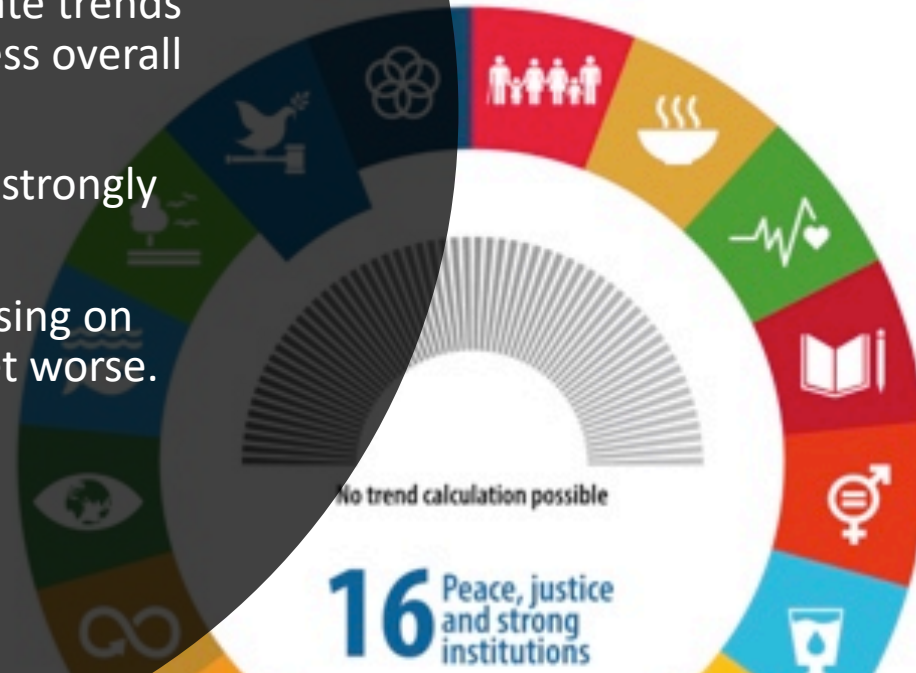# SDG 16 - Peace, justice and strong institutions

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Data extracted in May 2019.
Planned article update: June 2020.

Highlights

Aggregating Indicators

- Another issue is how to aggregate trends across the 23 indicators, to assess overall progress on SDG 16.

- Different indicators may not be strongly correlated.

- Govts deliberately (or not) focusing on some indicators while others get worse.

- Even an issue in the EU…

No trend calculation possible

16 Peace, justice and strong institutions

Impact of SDG 16 on other SDGs

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- SDG 16 seen as crucial to progress on other SDGs.

- We know little about how changes in different SDG 16 indicators affects the other SDGs and indicators.

- How does proportion of people who believe decision-making is inclusive and responsive (indicator 16.7.2) relate to countries having sustainable consumption action plans (indicator 12.1.1)?

- Important for resource allocation.

Alternative forms of data

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- Alternative forms of data can be used to supplement existing indicators.

- Textual data from news wires and social media already being used in HR measures – visual data and geospatial data currently underutilised in SDGs.

- Extending to multimodal data input in the learning system to improve measurement.

ML for causal links

Greater use of ML can help better understand the links between different SDG 16 indicators and other SDGs.

Improved measurement combined with predictive models – could be used to understand which SDG 16 indicator best predicts change in other SDGs.

Multi-layered network models used to understand causal interactions between SDG 16 indicators and other SDG indicators.