A NOVEL FRAMEWORK TO CONCEPTUALISE DATA CHALLENGES POSED BY THE SDGs

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Summary

▪ The United Nations' 2013 call for a 'data revolution' to advance the SDGs created high expectations for the role of data in advancing sustainable development (1).

▪ Halfway through the Agenda 2030, the central role of data for the SDGs is receiving renewed attention (2). However, much of the focus remains on the challenges posed by the SDG reporting framework.

▪ The purpose of this brief is to introduce a novel five-point framework which articulates and systematises the demands on data posed by the SDGs. The framework highlights the relationship between data and the transformative nature of the sustainable development agenda, and it identifies potential solutions for addressing SDG data challenges.

▪ The SDG framework requires new ways of thinking and experimentation in the data landscape, which also marks an opportunity to advance capacity in the global and national statistical systems.

▪ Collaborative research anchored in academia and practice can bring valuable insights into key opportunities to accelerate progress on the goals in the second half of 2030.

▪ In 2023, UCL Institute for Innovation and Public Purpose, host of the Sustainable Development Solutions Network (SDSN) UK, and Newcastle University partnered with the UK Office of National Statistics (ONS) to explore the specific requirements posed by five transformative commitments of the SDGs.

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The Background

The SDGs propose a new approach to global governance through goal setting, bringing together both novel reporting components as well elements from already existing reporting frameworks. Halfway through the 2030 Agenda, the centrality of data and reporting to the SDGs is receiving renewed attention. However, much of the focus remains on the challenges posed by the SDG reporting framework.

Our initial research has indicated that **the relationship between the 'transformative commitments' of the SDGs and data has been under-theorised in the literature.** In the spirit of SDG 17: Partnerships for the goals, this key finding sparked a collaboration between SDSN UK and the ONS to develop a preliminary conceptual framework which articulates and synthesises the unique features of data and reporting for the SDGs. The framework is intended to enable a more systematic exploration of the relationship between data and the transformative nature of the sustainable development agenda, and identify potential solutions for addressing SDG data challenges.

Data and the transformative commitments of the SDGs: A preliminary conceptualization

While we are not the first to explore the relationship between data and the SDGs - the Independent Expert Advisory Group (IEAG) established by the UN in 2014 as a global governance mechanism has supported the systematization and orientation of global efforts to overcome SDG data challenges - there has been a lack of a systematic appraisal of the features that make the SDG framework novel.

As the experience of the ONS suggests, the SDG framework requires moving beyond traditional data sources whilst ensuring data quality and

measurement standards are internationally agreed and adhered to. Our joint work with the ONS has explored the specific requirements posed by **five transformative commitments of the SDGs**, within data reporting at the level of the state.

Our focus on these five commitments represents a shift in the understanding of 'data quality'. As the Global Partnership for Sustainable Development Data recently suggested, societal needs are increasingly taken into account in data reporting, recognising that data should contribute to public purpose (3).

Each transformative commitment outlined below has been hailed individually (4), (5), (6) as a central component to achieving progress on the SDGs. However, these haven't previously been brought together to generate a framework of what the SDGs demand of data. Embracing the transformative commitments of the SDGs yields a deeper understanding of how data should be oriented to the SDGs. The following section integrates them into a framework and presents practical considerations from the ONS case.

1. Leaving No One Behind (LNOB): As a central promise of the 2030 Agenda, LNOB has been linked to data under the assumption that a lack of information poses a critical obstacle to tackling disadvantages, deprivations, and discrimination faced by marginalised populations (7). LNOB raises the need for data that yields insight on the experience of marginalisation and vulnerability. Failure to account for this commitment (e.g. absence of disaggregated data and intersectionality, absence of qualitative data and participatory research) would render 'disadvantage' and 'marginality' invisible in data and undercut the commitment to 'LNOB'.

2. National ownership and universality: Governments are expected to take ownership of the 17 SDGs, and as part of this, they are invited to report on indicators that are relevant to that country's context, reflecting the national adaptation of this global agenda. In some cases, too, country data cannot be sourced to match the SDG framework, which can create gaps in reporting. Such gaps, if not addressed by appropriate local proxies, may suggest lack of national ownership, which affects prospects of implementation.

3. Interlinkages: Referring to the complex network of interconnections existing across the SDGs, their targets, and indicators (8), understanding interlinkages is essential to ensuring policy coherence for sustainable development (PCSD) - as set out by indicator 17.4.1, for instance. However, those relationships are dynamic and evolving over time, which means they are challenging to capture in real-time. An absence of interlinkages in reporting means they are not tracked and connections cannot be made, particularly those that require contextual understanding. In these cases, policy coherence becomes more challenging to achieve and also more challenging to evaluate.

4. Non-statistical (policy-based) indicators: Approximately 10-20% of SDG indicators can be characterised as non-statistical, meaning they do not contain statistical variables and require a qualitative response (9). Progress against these indicators is often under-reported due to the complex data required. Failure to account for these variables would mean that the enabling environment and policy/legal "means of implementation" for achieving the SDGs is under-examined, with the effect that debate and learning over the best practice and key challenges in implementing the SDGs is stunted.

5. Evaluation: Evaluation extends beyond measuring progress towards targets and stresses the need for a country-led, rigorous, and evidence-based approach to improve SDG performance. Yet, there are limited details regarding what this entails within the SDG framework. The failure to integrate efficient and effective evaluation processes frustrates the overall SDG progress and undermines the key role of public and multi-stakeholder participation which is essential for a "whole-of-society" implementation and review in order to enable accountability at all levels.

Table 1: A five-point framework to conceptualise the unique features of the SDG framework

Transformative commitment	Relationship between data and transformative commitment	Associated challenges	Practical observatons from the ONS in the UK
1. Leave No One Behind (LNOB)	Data allows for disaggregation and analysis of intersectionality.	Prioritisation given scarce resources; Harnessing role of qualitative data in capturing disadvantage; Choosing which elements to highlight and how to report.	Limited disaggregation within datasets from both internal (ONS) and external (other government departments) sources have previously been identified by a dedicated Inclusive Data Taskforce as posing a challenge to the ONS. These include non-household populations; transgender, non-binary, and gender-diverse people; and "harder to reach" groups such as asylum-seekers, Gypsy, Roma, and Traveller groups) (10)
2. Universality - national ownership	Data reflects contextualisation and adaptation of a universal agenda locally. It shows local "buy-in" and reflects national dialogue.	Deciding the relevance and applicability of global indicators to local context is a political question as much as a data one.	Countries may choose to report on 'proxy' indicators for indicators where they do not hold relevant data, which may differ from the original intent of the SDG indicators (e.g. 17.11.1 in the UK), and they can also choose to adopt additional metrics that reflect the SDGs in context.
3. Interlinkages	Consideration of interlinkages across data can take multiple forms reflecting the different ways in which SDG targets and indicators are linked and aiming to inform efforts to increase policy coherence.	Reporting methodology; Interlinkages methodologies are under-researched and contain uncertainties; Need for understanding of potential interlinkages is outside the usual remit of NSOs.	The ONS measures policy coherence mechanisms in Governmental plans, yet those plans do not currently go beyond 2022 (11), and they do not systematically link objectives across goals. An improved approach would be needed to account for complex characteristics, such as possible lagged relationships between datasets, as well as a combined qualitative and quantitative analysis.

Transformative commitment	Relationship between data and transformative commitment	Associated challenges	Practical observatons from the ONS in the UK
4. Non-statistical (policy-based) indicators	SDG targets tackle policy processes and preconditions (e.g. presence of legal framework). Data on "means of implementation" is important to see which policies and approaches are effective, while tracking the governance enabling environment and facilitating policy learning.	Reporting methodology; Conversion to statistics; Evaluation; Interpretation of indicators.	SDG Indicator descriptions may request the number of countries adopting certain strategies. In the UK, reporting on this type of indicator in depth requires time-consuming policy research across broad topic areas, in which the ONS SDG team may not be the most qualified experts. (e.g. 13.1.2)
5. Evaluation	Data allows for accountability, comparison, stakeholder coordination and engagement, and it enables learning; it includes all key components of how 'governance through goal-setting' might work.	May fall outside the NSO mandate; Choosing the correct standard for progress to be evaluated.	The ONS points to the fact the implementation and evaluation associated with the SDG is outside of their remit. Policy leadership and overall oversight is provided by the Foreign, Commonwealth & Development Office (FCDO).

Source: Author's elaboration

Considerations for adopting and implementing the proposed framework

The framework presented above is intended to enable a deeper exploration of the relationship between data and the transformative nature of the sustainable development agenda and identify potential solutions for addressing SDG data challenges.

Some considerations for adopting and implementing the framework should be noted:

National and global reporting challenges may differ

Addressing each transformative commitment of the SDGs from a different structural level, i.e. national, regional or local level, can yield different practical challenges in terms of data gathering and reporting against the SDG framework, and thus would require their own adaptations of the framework.

Implementation capacity and resources are needed

Our research was informed by the experience of the SDG team in the ONS. It seems clear that a fuller engagement with the unique, transformative elements of SDG data requires more dedicated capacity and new expertise from NSOs, which may be beyond the current resources of statistical offices.

Local adaptation over retaining global comparability

Given the global SDG framework calls for contextual localisation, the proposed framework is not a 'one-size-fits-all' approach. Indeed, it is acknowledged that governments will design and adopt different strategies to address data challenges in relation to the SDGs. Trade-offs between adaptation of the SDG framework to national and local circumstances and cross-national comparability should be considered when engaging with the proposed framework.

Conclusion

In summary, the collaborative work between SDSN UK, led by UCL IIPP, Newcastle University, and the SDG team at the ONS has developed a five-point framework which articulates the unique role of data and reporting for the SDGs in recognition of the transformative elements of the 2030 Agenda. This proposed framework is the first to integrate the relationships between each transformative commitment and the associated SDG data reporting, which would enable NSOs and policy-makers to consider these relationships holistically.

We propose that this framework can help:

1. Enhance understanding of data challenges posed by the SDGs: It is widely held that reporting on the SDGs requires going beyond traditional data collection, analysis and statistics. This framework articulates why and how these elements come together to support key commitments of the SDGs.

2. Frame further research through case-studies of good practice: There is a need for greater understanding of how other countries or national governments have responded to a particular transformative commitment of the SDGs. While the framework presented is exploratory, it provides a general foundation in which researchers can anchor more specific work on strategies and case studies from different national contexts, accelerating peer learning.

3. Guide the work of NSOs and policy-makers: The framework can be used to guide evaluation, tracking efforts and highlighting gaps across these different domains and challenges, thus encouraging more effective policy and data reporting mechanisms within NSOs and beyond.

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About the Institute for Innovation and Public Purpose

The Institute for Innovation and Public Purpose (IIPP) at University College London (UCL) aims to develop a new framework for creating, nurturing and evaluating public value in order to achieve economic growth that is more innovation-led, inclusive and sustainable. This requires rethinking the underlying economics that has informed the education of global civil servants and the design of government policies. Our work feeds into innovation and industrial policy, financial reform, institutional change and sustainable development. A key pillar of IIPP's research is its understanding of markets as outcomes of the interactions between different actors. In this context, public policy should not be seen as simply fixing market failures, but also as actively shaping and co-creating markets. Re-focusing and designing public organisations around mission-led, public purpose aims will help tackle the grand challenges facing the 21st century. IIPP is a department within UCL - and part of The Bartlett, which consistently ranks in the top two faculties for architecture and the built environment in the world.

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