

*This 2019 conference paper now published as Allin P.V. (2020) "The Role of Statistics in Meeting the Sustainable Development Goals" in Statistics, Science and Public Policy XXIII. Humanity, Humility and Humour, ed. A.M. Herzberg. Kingston, Queen's University, pp. 13-17*

## **The Role of Statistics in Meeting the UN's Sustainable Development Goals**

P.V. Allin, Imperial College of Science, Technology and Medicine

All United Nations members have signed up to meeting the Sustainable Development Goals (SDGs) as part of the UN's 2030 Agenda. This is an ambitious, universal commitment. At heart is the eradication of "poverty in all its forms and dimensions" but the 17 goals, supported by 169 targets, embrace much more, through a "plan of action for people, planet and prosperity" (United Nations, 2015).

Indicators are being developed to assist this work. How the indicators are to be used is not explained, only that they are to measure the progress of governments in taking forward the agenda and in meeting the SDGs.

The task of defining the indicators and constructing them in each country largely falls to existing national systems of official statistics, working with the UN. Such indicators of sustainable development fit well within the scope of official statistics. My aim in this paper is to propose that official statistics have potential exceeding their current role. In short, it is one thing to measure something; it is another to use those data to help change the way we do things, especially as we strive to achieve the SDGs.

### **OFFICIAL STATISTICS IN THE SERVICE OF HUMANITY**

Alan Waterman (1963) wrote: "Science, in its pure form, is not concerned with where discoveries may lead; its disciples are interested only in discovering the truth. ... It is society that makes the ultimate decisions as to the uses to which new discoveries shall be put".

Official statistics, also, are in the service of humanity. We live in modern, liberal democracies and believe in facts and in evidence-based policy-making. We think politicians should speak in truths and that the people should have access to the same facts. We also prefer our economies, our public services and our businesses to be evidence-based.

Official statistics are 'official' because they are produced by governmental organisations or agencies. This gives no flavour of their value as public goods, which is captured in the UN's fundamental principles for official statistics: to "provide an indispensable element in the information system of a democratic society, serving the Government, the economy and the public with data about the economic, demographic, social and environmental situation" (United Nations, 2014). Official statistics are also meant to be the high-quality statistical information needed for "analysis and informed policy decision-making in support of sustainable development, peace and security" (*ibid.*).

The U.K. Government Statistical Service currently publishes approximately 3,570 statistical releases a year. Government survey and census data, and increasingly administrative data, are anonymised and made available for secondary analysis by academic researchers.

However, making official statistics and data available does not necessarily mean they are used. There have been many positive developments in user engagement across U.K. official statistics. Public confidence in U.K. official statistics, measured independently, is reported as high (NatCen, 2019). However, there is also evidence that user engagement needs to be significantly strengthened. A

parliamentary committee inquiry has looked at the governance of U.K. official statistics. One of its areas of concern is how all levels of the system engage in dialogue with users. Often it is key stakeholders such as government departments and the central bank that get most attention (Statistics User Forum, 2019).

## MAXIMISING THE VALUE OF OFFICIAL STATISTICS

The continuing challenge is to ensure that official statistics have practical utility and that their public value is maximised. One problem is that official statisticians tend not to know who all their users or potential users are. It is somewhat ironic that official statistics are meant to increase knowledge about society yet we know so little about their usage. Lists are largely either anecdotal, based on small scale exercises, or simply aspirational, summarising the kinds of users who official statisticians think should use their outputs.

Resources for official statistics are overwhelmingly spent on producing and publishing statistics, not on user engagement or marketing. Little if any account of the social value of official statistics is made in assessing cost against benefit.

There is a larger problem: "Simply having information organised in any way, shape or form is not in itself enough to lead to any improvement in health" (Lachmann, 2015, p18). This applies more generally. How can we use official statistics to help make decisions and achieve goals we set for ourselves and for society as a whole?

We tend to turn first to policy-making. It is for politicians and governments to decide something must be done and to make laws, set up regulatory bodies, or simply nudge us to change behaviour. But we are also influenced by market incentives and by ethical and cultural values and attitudes, all of which can change over time (Michie, 2017). Ultimately, it is the everyday actions of people, businesses and civil society that translate words into action.

In both policy- and decision-making, we call on facts, including official statistics. However, as Manski (2013) has shown, conclusions about policy options are inevitably based on a combination of data and assumptions. This applies also to our own decision-making. Having stronger data does not necessarily make for stronger conclusions. We sometimes have to make decisions beyond the decision to collect more data.

There is also the question of how people get their facts. It appears that relatively few users go straight to the primary sources of official statistics, the news release or article published by the official statistics agency. Rather, we get our statistics through the media. In traditional media, it is journalists and editors who decide what official statistics warrant coverage and how to report them. Official statistics are now increasingly pinging around social media, where there are other selection processes in play.

## OFFICIAL STATISTICS AND THE SDGs

We have no clear understanding of how official statistics are to be used, or what role they should play, in bringing about behavioural change needed to meet the SDGs. There are various theories of change, for example suggesting that "personal small and painless changes fall short on their own" but can be instrumental in leading to necessary policy change by governments (Sloane, 2016). In none of these theories is there recognition of the role of official statistics, though there is clearly space for them to raise awareness, help underpin strategy and set policy as well as monitoring progress.

The SDGs were set through a process of intergovernmental negotiation (Dodds, Donoghue and Roesch, 2017, p. 93). They were not formulated with any reference to an ability to measure whether or not a goal is achieved. The process of defining indicators started as the 2015 agenda was being agreed. The agenda envisages drawing on new and as-yet untried data sources. Over 240 indicators have been designed. The task of publishing data on a regular basis for every country is seen as "a tremendous challenge to all countries" (United Nations, 2016). Even with a sophisticated system

of official statistics, the U.K. can only so far report on some 70 per cent of the indicators and is still exploring data sources for the outstanding 68 indicators.

The U.K. Government will be reporting against its domestic progress on the SDGs annually, as part of its responsibility to the UN's global monitoring. However, a parliamentary committee has called for greater transparency: "This report, and a full breakdown and analysis of the data (disaggregated where relevant) must be made publicly available", to enable further parliamentary scrutiny, to "track progress and hold relevant Government departments to account on any areas where it is falling short" (House of Commons, 2016, p. 62).

We appear to be missing an opportunity. Why not use the indicators to help meet the goals, rather than simply track progress towards them? That would suggest a much greater level of engagement with business, the media, civil society and the general public on how the indicators are to be used, and on what needs to be done to achieve the SDGs. Such outreach in the U.K. appears limited, though there may well be good practice to learn from other countries.

Can we do more, so that official statistics work in the service of humanity, especially to help meet the SDGs?

## REFERENCES

- Dodds, F., Donoghue, D. and Roesch, J.L. (2017), *Negotiating the Sustainable Development Goals*. Abingdon: Routledge.
- House of Commons (2016), International Development Committee Report on UK implementation of the Sustainable Development Goals, HC 103. <https://publications.parliament.uk/pa/cm201617/cmselect/cmintdev/103/103.pdf>
- Lachmann, M.H. (2015), "Data Points Do Not a Person Make", in *Statistics, Science and Public Policy XIX. Communication, Knowledge and Understanding*, ed. A.M. Herzberg. Kingston: Queen's University, pp. 17-20.
- Manski, C.F. (2013), *Public Policy in an Uncertain World: Analysis and Decisions*. Cambridge: Harvard University Press.
- Michie, J. (2017), Letter to *The Economist*, September 16.
- NatCen (2019), <http://natcen.ac.uk/our-research/research/public-confidence-in-official-statistics/>
- Sloane, H. (2016), <https://medium.com/disruptive-design/recycling-and-a-meat-free-diet-won-t-stop-climate-change-what-can-you-do-e0f0980d3c46>
- Statistics User Forum (2019), Written evidence from the Statistics User Forum. <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/public-administration-and-constitutional-affairs-committee/governance-of-statistics/written/97918.html>
- United Nations (2014), Fundamental Principles for Official Statistics. <http://unstats.un.org/unsd/dnss/gp/fundprinciples.aspx>
- United Nations (2015), Transforming our world: the 2030 Agenda for Sustainable Development. <https://sustainabledevelopment.un.org/post2015/transformingourworld>
- United Nations (2016), The Sustainable Development Goals Report 2016, <http://unstats.un.org/sdgs/report/2016/The%20Sustainable%20Development%20Goals%20Report%202016.pdf>
- Waterman, A.T. (1963), "Science in the Service of Man." *Bulletin of the Atomic Scientists* 19.5: 3-6. <https://doi.org/10.1080/00963402.1963.11454494>