

Development numbers: the political economy of data production from “above” and “below”

“Poor Numbers: How we are misled by African development statistics and what to do about it”, by Morten Jerven, 2013, Ithaca and London: Cornell University Press pp185

“Who Counts? The power of participatory statistics”, edited by Jeremy Holland (2013) Rugby: Practical Action Publishing. pp212

These two books address the role of different sources of statistics: *Poor Numbers* raises extremely important issues about official data sets that are usually taken for granted as representing the real facts about development. “Who Counts?” continues to make the case for the validity, usefulness and intrinsically empowering impact of data collected with and for the communities whom development is supposed to affect while charting progress on the challenges of scaling up these approaches. While addressing these apparently polar ends of the spectrum of development statistics, seen together they frame some core issues of knowledge and power which lie at the heart of development. These involve the questions of who needs numbers and how they are produced.

In taking on the production of official development statistics in Africa, **Poor Numbers** is a small tome that addresses an issue central to the development sector but rarely broached. When last reading about African development trends –whether population growth; economic or agricultural development – to what extent did you enquire into the sources of the data on which discussions of improvement or deterioration were based? This book probes into the origins of the data and reveals a very unsettling and disconcerting picture.

Jerven starts by exploring the economic data on national income that is used for comparative analyses of GDP per capita and growth. The main sources used for scholarly work which debate patterns of growth in Africa are held in three databases (one of which is the World Bank Development Indicators but the Penn World tables are the main source for most economists). In the process of constructing these databases adjustments are made to achieve comparability and use different base years and methods of conversion to US\$. Jerven shows that even a simple ranking of GDP per capita from these databases produces quite different conclusions about their relative performance, nor do these rankings present any consistent differences. Indeed he explains how the World Bank has undertaken “gap filling procedures” due to the lack of timeliness of data received through official channels (such as the UN Statistical Office which collects the data from national accounts) and essentially made up its own data instead, the basis of which is entirely unclear. Given this it is difficult to suggest that these data can be relied on for any analysis and in particular not for the detailed analysis of variations in growth rates that is the core of the “growth regression industry”.

For those who have engaged with under-resourced Government ministries and statistics offices it is not difficult to appreciate the problems they face in efficient and accurate data production which Jerven is bringing to the fore. He also criticises donors for making demands on these scarce resources for data to meet their own needs, and introducing increasing sophistication of methods of data cleaning, management and triangulation techniques, when the basics of the system are hardly functioning.

However he goes further to analyse how data production is subject to the influences of political economy. He shows how numbers matter for politics, the allocation of resources and the necessarily controversial assessment of policy outcomes. So, for example, before independence people in Nigeria tried to avoid being counted to avoid being taxed while after independence they were intent on being counted in order to benefit from the future allocation of resources. Indeed censuses in many African contexts continue to encounter the raw politics of regional and ethnic concerns because of such dynamics. Second, he uses further cases of crop data in Malawi and the question of how to assess the effectiveness of price liberalization and fertilizer subsidies and demonstrates the hugely diverse numbers of agricultural households that make significant differences to yield estimates. Third is the case of Tanzania and the ways in which national income data is estimated and revised to account for the relationship between 'formal' and 'informal' activity. The system changed in 1992 (dated back to 1987) to assume that informal economic activity declined as the formal sector grew where previously it had been assumed to be the reverse. The new data presented a 62% higher level and presented completely different growth dynamics. How then can the pre and post 1987 be reconciled to tell a story about growth? It is likely therefore that the result has been in part to over-estimate growth in the liberalisation period – an outcome itself vital to the assessment of economic reform policy. Jerven notes that, unlike most such adjustments, this revision was so well documented that a decade later it was available to be reviewed. More broadly he points out that such upward revisions in national accounts are a normal process but that many countries have not done it and that there are many hurdles to it being done systematically including the resources available. This in particular leads to the need for much more attention to the availability of meta-data – that is, greater transparency about how data is collected, how adjustments are made and the re-basing of indices carried out.

These stories are fascinating in revealing the dynamics of data production. Even if his cases sometimes seem a little dated, what they do is develop an argument that these are not random biases but are determined by political economy: the interests of politicians and policy makers both nationally and internationally affect and are affected by these data. He concludes that GDP data "is a product of a process in which a range of arbitrary and controversial assumptions are made" but that the point is not to ignore numbers, it is to support the systems by which they are produced and to do better in using them. For this it is necessary to build the capacity of the systems involved, but other critical skills are also needed. These are primarily the qualitative skills of anthropologists, historians and political scientists in understanding the influential factors at work in their production in order to make assessments of how they can be interpreted and used.

This indictment of the current state of official statistics on African development (which Jerven himself points out is not the first), would seem to re-affirm the huge space for the generation and use of numbers that have tighter feedback loops to their sources and are therefore better understood in terms of what they really represent. The rise of participatory methods in the early 1990s gave rise to a discussion of how the numbers they produce could be aggregated, made more robust and used at scale for policy planning, monitoring and evaluation at the same time as empowering local people and communities in those processes and thereby improving the relevance and impact of that action. **Who counts?** presents an overview of the state of this field using twelve case studies.

Jeremy Holland presents the broad agenda of the volume as seeking to address the way in which participatory statistics: first, allow the quantification of difficult to measure qualitative changes especially those such as empowerment, governance, accountability. Second, the ways in which they can be standardized and taken to scale, and retain contextual specificity in the process. Third is the scope that new technology offers new potential for making these data much more immediately accessible, useful and accountable to both their generators and analysts. The case studies offer evidence of these developments while also demonstrating that they are timely and powerful for analysis; effective for monitoring and evaluation and offer routes to assessing the extent and pathways of change (attribution).

The case studies present a variety of approaches to generating numbers: ranging from community planning to produce spatial 3D models using GIS data; to assessing the nature of vulnerability to climate change in urban areas in Kenya and Nicaragua; to quantifying empowerment outcomes in community groups in Bangladesh; and assessing the effectiveness of commercial livestock de-stocking as a response to drought Ethiopia. The most interesting in terms of the issues of scale and how such processes relate to government policy is the case study of community planning in the *Ubedehe* scheme in Rwanda. This is a Government approach to de-centralized planning backed by the provision of community development funds to implement prioritized actions. The process has generated detailed social maps kept locally on cloth in over 14,000 villages along with detailed poverty assessments of their residents. This was the only case which reported on some of the power dynamics involved in such data collection and use in participatory planning with the comment of one senior district official that the *Ubedehe* planning process “ challenges our power.....it is very difficult for the District to give up power in such a way” (p56).e

The range of examples leaves one in little doubt that there is huge potential for their effective use and the “win-win” results that can be achieved, but inevitably raises the question as to why more progress has not been achieved. Indeed, a few of the case studies seem dated and perhaps suggest that forward movement in their adoption has not been as significant as hoped. The Afterword by Robert Chambers offers an importantly more sanguine assessment of the state of the field. He identifies three key blocks. First, is the current concern with rigour – especially in impact evaluation - and the mindsets of policy-makers now concerned with scientifically establishing what works through the use of randomised control trials. This he points out is generally an approach that is not appropriate to the complex, diverse, unpredictable and emergent conditions in which much development is taking place. Second, is risk-aversion, routinization and inertia - such approaches require creativity, time and money and hence create challenges to business- as-usual for professionals in the sector. Third, there is a shortage of creative facilitators and inadequate embedding of teaching of these methods in training programmes.

The book is therefore a useful overview of the state of the field in offering concise case studies that present inspiration for those trying to better embed participatory statistics in their practice. It does not however really deal with technical issues facing trade-offs involved in developing indicators or addressing their robustness; nor does it systematically assess the organizational contexts and requirements which enabled these examples to take place. Apart from Chamber’s Afterword it presents more of an ongoing rallying call than a more critical assessment of the underlying issues of how to do it and what the dynamics of doing it in practice really are.

Poor Numbers reminds us in no uncertain terms that statistics are the outcome of social and political processes – including those of resource allocation to their production. In the wake of this, *Who Counts?* presents the possibility of an alternative paradigm to data generation: one which is relevant, timely and engaged in empowering people and communities in the assessment of their own development. This is a process in which the social and political processes of defining; measuring and using data are explicitly part of the dynamics of development and not swept away into a backwater and disguised as objectivity. In this light it is less surprising that the participatory statistics paradigm is slow to gain ground.

Susan Johnson, Centre for Development Studies, University of Bath

09/02/14