What is the Data Revolution?

_A document to outline the shape of the data revolution and explore its components_

**Why Data Matters**

The Millennium Development Goals demonstrated the power of setting global goals to inspire and galvanize people across the world. But to turn inspiration to action, data are required to track, monitor, and implement goals. With better data, we can monitor progress towards achieving goals, and learn and adapt to improve the ways we tackle global challenges.

Most importantly, the availability of data empowers people. It arms them with information and allows them to hold leaders accountable for their promises.

Sadly, the availability quality and accessibility of the data we have today just aren’t good enough. Too often, development efforts are hampered by a lack of the most basic data about the social and economic circumstances in which people live. This requires a commitment to changing the way we collect and share data, both from the bottom up and the top down.

**Some Signs of Progress...but huge gaps remain**

The availability of information has improved during the implementation of the MDGs, but much better data are necessary. We have yet to establish an accurate picture of how many people are living in extreme poverty today; without that, it is very hard to work out the best ways to move that number to zero by 2030.

The weaknesses of data on hunger were brought into stark relief once the food crisis hit – while the FAO initially said the number of hungry people had increased by over 200 million following the 2008 price shock, it was later forced to suspend publication of data on hunger due to methodological problems. Data on births and deaths are scarce – every year, around 50 million births go unregistered. And despite the clear importance of jobs, labor force data remain poor – there is no integrated, high quality and representative set of labor force surveys, making it difficult to understand and tackle this universal challenge.

We need to fill these gaps, but go beyond. We need a data revolution.

**So what is the data revolution?**

At its heart, the data revolution comprises two main objectives: 1) the integration of statistics into public and private sector decision making; 2) building trust between society and state through transparency and accountability.

There are four components to this revolution:

**Quality and Timeliness:** Our current knowledge about development is not good enough. Basic numbers on extreme poverty, for example, often change dramatically when updated, revealing discrepancies and the unreliability of underlying data. Numbers are calculated from models, rather than reality, which means that strategies and plans are based upon the set of assumptions included in these models.
Time lags for reporting MDG-related outcomes remain unsatisfactorily high. On average, the most recent household surveys measuring national poverty are nearly five years old. Serious gaps remain, including more than 40 countries which lack sufficient data to track performance against MDG1 (Eradicate extreme poverty and hunger).

We need to improve the availability, quality and timeliness of baseline data, disaggregated by sex, age, region and other variables, will be needed, and should be adapted to measure and monitor outcomes for the vulnerable and marginalized in any given society. Geocoding and other new technologies, combined with improved survey techniques and less expensive ways to gather information, can help bring this about.

**Data Gaps:** The post-2015 agenda will be a sustainable development agenda, and therefore more comprehensive and more complicated than were the MDGs. So in addition to improving data on current measures, measures for new areas of the agenda will need to be developed and refined. This is especially important in an integrated agenda, where social, economic, and environmental issues are to be measured and addressed comprehensively. There has been progress on the System of Environmental-Economic Accounting (SEEA) and natural capital accounting, but much more needs to be done.

Indicators in areas such as institutions and governance also need continued refinement, as the proxies used are often poor measures for the important information they are intended to capture.

**Transparency, accessibility, and availability:** Crucially, data empowers people. It gives them the information to hold leaders accountable for their promises. Today there is a growing appetite for budget transparency, in both the public and private sectors. Governments and business have an opportunity to adapt the way they operate, recognizing that greater transparency can lead to better outcomes. To realize these opportunities, data must be disseminated in ways that make the information accessible and useable, encouraging multi-stakeholder engagement and innovation.

**Harnessing diverse sources of knowledge:** There is also a myriad of innovative but small-scale initiatives that are using mobile technology, crowd sourcing and other advances to gather vital information and track and monitor outcomes in real-time. For example, the first assessments of living conditions in South Sudan, where formal statistical surveys are not feasible, have been done using SMS technologies. Stimulating innovation in data systems will also require a cultural shift that recognizes that top-down approaches are not the only way to yield useful information. Communities, private philanthropic organizations, civil society organizations, and other groups are especially important in generating, and bringing to the public discourse, these new sources of information.

**How can we bring this revolution about?**

- Establish country-owned modern national statistical systems with the national statistical office in a coordinating role (including certification of statistics generated by other agencies).
- Increase resources for statistical systems – allocating more funding, including to necessary infrastructure.
- Focus on building statistical capacity, especially in developing countries. This is a slow, deliberate process that takes resources and a renewed sense of urgency, broadening the donor base, well-designed statistical development plans, pooling resources, and coordinating support. We need
to work with academic experts to help address knowledge gaps on developing and utilizing more sophisticated data tool kits, and promote technical assistance in areas such as household surveys, demographic and health surveys, and statistical software and modeling tools.

- Build the infrastructure to collect this kind of detailed data - mobile and landline data networks and digital national identity card systems, for example. With this infrastructure in place, smart cards and other digital mechanisms can record individual transactions to see who accesses public services in health, education or social assistance and how those services affect their income and well-being.

- Draw on promising new technologies and tools as appropriate - mobile technology to monitor outcomes, satellite imagery, geo-coding, crowd-sourcing, telephonic household surveys, perception surveys, smart cards, digital mechanisms, as well as data visualization to engage the broader public.

- Engage policymakers and local leaders in the move to make data transparent and easily accessible.

- Create space for civil society to ensure these promises are fulfilled, and especially that we ‘Leave No One Behind’ and that the rights of marginalized groups are ensured.

- Engage with private sector leaders to push the culture of transparency and accountability in the private sector, and to collaborate on the use of new and existing technologies and open data to share information.

- Work now to ensure that a baseline for post-2015 targets is in place by January 2016.

The revolution requires aligning ODA and other investments to focus on accurate measurement of outcomes, to spur the data revolution. Rather than replicating existing initiatives, such as the Partnership in Statistics for Development in the 21st Century (PARIS21), the idea is to channel energy and resources into ensuring cooperation and the optimal production of relevant, timely, and accurate statistics.

Here are three very practical things that can be accomplished in the short term to get this revolution started.

1. Push to establish baseline data for 2015 – this will require leadership at the top, with the heads of multilateral organizations pushing to ensure that the right data is in place to begin measuring the post-2015 agenda.

2. Organize a Global Partnership for Development Data with official agencies, foundations and beneficiary national governments participating in the governance structure. This body would be charged with the process of helping to build country statistical systems.

3. Urge private NGOs and foundations to report systematically on their flows.

Each of these immediate steps is entirely doable and would change the data landscape dramatically, empowering change in the way we fight poverty and injustice. The data revolution can bring us closer to a 2030 where all people realize their rights and live in a world that is more equal, more prosperous, and more sustainable.