

# HOW TO BUILD STATISTICAL CAPACITY



Your 10-minute guide to building capacity in data and statistics for the SDGs and beyond

Despite progress over the last 15 years, statistical capacity in many developing countries still hovers at a low level. Here, we share insights from PARIS21 experts and partners on improving countries' ability to collect, analyse and disseminate data at a time when demand for it could not be greater.

## KEY MESSAGES

- The demand for improving statistical capacity has never been as high as it is today with the adoption of the Sustainable Development Goals (SDGs).
- Statistical capacity refers to a country's ability to meet user needs for high quality data through the continuous improvement of skills, technical and management capacity.
- Effective and sustained capacity building is about long-term structural investments and real knowledge transfer; it can often take decades to achieve.
- National statistical systems should autonomously determine the direction of their capacity building programs. They should be empowered to bring together public, private and not-for-profit actors to exploit new data sources for more granular, timely and cheaper statistics.
- Donors must step up support to statistical capacity building by establishing continuous aid flows to national statistical system budgets.

## WHY STATISTICAL CAPACITY BUILDING AND WHY NOW?

Sustainable development can become the new paradigm only if countries are able, first, to take stock of progress based on high quality data and, second, to develop sustainable policies and actions based on insights gained. Yet many poor countries struggle even today to provide the most basic data.

Pressure is on to remedy the situation, however, and it is coming from many sides. The Sustainable Development Goals (SDGs) process will make unprecedented demands on developing countries especially to produce more and better data for monitoring, reporting and, hopefully, policy and decision making at national and sub-national levels. In addition, the data revolution is underway, marked by an explosion in the volume, variety and velocity of data and in the number of new tools. Countries need to know how to take advantage of both. Finally, citizens are calling for access to statistics with which they can hold leaders to account.

## WHAT IS "STATISTICAL CAPACITY"?

Statistical capacity is the sustainable ability of countries to meet user (government, policy makers, researchers, citizens, business) needs for high quality data and statistics (i.e. timely, reliable, accessible, relevant). The focus is usually on "official" statistics, i.e. those produced by public authorities based on internationally agreed standards.

Statistical capacity building refers to the improvement of skills, experience, and technical and management capacity within the national statistical system (NSS) comprising of public, private for-profit and non-profit institutions. Contractors, consultants or contracting agencies usually carry out this work.

Statistical capacity is measured at four levels – human, technical, financial and organizational.

	Examples of statistical capacity building
<b>Human</b>	Improvement of knowledge and skills through trainings and degree and non-degree courses on statistics and related areas; instilling confidence in statistical staff across technical areas to manage statistical processes; developing training programs for a non-technical audience.
<b>Technical</b>	Specialised training for statistical staff on methodologies (e.g. survey and census, statistical methodologies, data mining, data processing, data analysis), specialist inputs (e.g. information and communication technology) and trainings on cross-cutting issues such as disabilities, gender, disaster relief and climate change.
<b>Financial</b>	Improvement of financial management and the entire budgeting process, including ability to a) identify priority needs across the statistical system (e.g. Country Reports on Support to Statistics to better allocate domestic and external resources) and b) develop proposals for financing those needs (e.g. National Fund for the Development of Statistics in Benin); preparedness for participation in donor coordination groups.
<b>Organizational</b>	Investments in system infrastructure, and collaboration and coordination between and among statistical stakeholders; governance and leadership within an organization; support to develop or improve statistical legislation; reform of legal framework.

## WHAT ARE THE KEY INGREDIENTS TO SUCCESSFUL CAPACITY BUILDING?

While there is no formula, there are clear indications of what works at each level.

### Human

- **Recruit and manage for retention.** National statistical offices (NSOs) must offer incentives for trained staff to stay on the job – a living wage, a career trajectory, professional development opportunities. This leads to better recruitment (i.e. attracting more and better candidates, including college graduates), retention and staff who are motivated and committed.
- **Phase out long-term technical support.** Long-term external consultants are usually embedded within an NSO to train technical staff. But often, rather than transfer knowledge, consultants create a dependence on their presence, making it impossible for them to leave. Instead consultants should conduct on-the-job training wherein staff operationalize learning and apply it to their work while training is on-going. Management must also be on board.

### Technical

- **Schedule trainings and inputs according to established needs of the NSS.** Often donors provide statistical support according to their own priorities and funding cycles rather than to the National Strategy for the Development of Statistics (NSDS) where capacity building needs have already been identified.
- **Training is often provided as an incentive to staff,** but frequently the wrong person is trained or they are trained in the wrong things. Management should provide training only when there is demonstrable need and technical ability is clear.

### Financial

- **Track government and donor contributions to statistical development over the years.** If an NSS can quantify contributions and their sources, it gives them some sense of how much control they have over the statistics they develop. It also enables better management of resources for statistics development. Both are key determinants of the quality of statistics.

## Organisational

- **Legislation is needed to outline roles and responsibilities of all NSS stakeholders.** This is especially true for NSOs, not only as providers of basic statistics but also as coordinators of the entire statistical system and as the centre of quality control.
- **Build leadership in the NSS.** Too often, the head of the NSO – who has the role of coordinating the NSS — sits low within the government hierarchy, making it difficult to negotiate and make demands of other stakeholders.
- **Prepare NSSs to autonomously determine the direction of their capacity building programs** in terms of need, timing, sequencing, budgeting and ownership over implementation. They should also be empowered to bring together public, private and not-for-profit actors to exploit new data sources for more granular, timely and cheaper statistics.

Statistical capacity building is not about quick wins and short-term solutions. It requires long-term planning and investments, and can take decades to achieve.

## WHERE HAS STATISTICAL CAPACITY BUILDING BEEN EFFECTIVE?

### Senegal: Faster data collection

In 2002, Senegal took four years to finalize their census. In 2013, the country turned out its results in one year. How? Through Personal Data Assistants (PDAs), which came through cooperation with the Brazilian Institute of Geography and Statistics (IBGE). The IBGE provided hardware in the form of PDAs and training in the use of the tool.

### 80 Countries: Ramping up user access

The Accelerated Data Program has assisted nearly 80 countries in installing a National Data Archive (NADA) system. The NADA is an online cataloguing application allowing access to survey microdata. It lets users browse, search and download data and related survey documents. With NADA, countries now deliver data on demand in formats that are useable for analysis, significantly improving public user access to survey data.

### Philippines: Getting poverty numbers right for better service delivery

The Philippines embarked on several poverty mapping projects to identify the poorest populations and more efficiently allocate limited food, health and education resources locally. Using small area estimation techniques, the Philippine Statistics Authority (PSA) was able to scale its poverty statistics from the national, regional and provincial levels down to the municipal and city level. These local poverty-level estimates served as inputs to national and local government poverty reduction programs such as the conditional cash transfer, which invests in education and health for children. Over 4 million households are eligible to receive health and education grants, which amounted to US\$ 202 million as of early 2015. The program was carried out with technical and financial support from the World Bank. Three external consultants trained local staff and gradually phased out their support. Now the PSA manages the program with public funding and is considering expanding to create local estimates for specific sectors.

### Africa: Consensus building for impact

In 2009, the African Union adopted the African Charter on Statistics, which recognises that statistics are essential for the continent's integration and sustainable development. The charter – which nearly half of African countries have ratified —

calls for harmonizing statistical information gathering, production and dissemination, as well as for the coordination of statistical activities. This demonstrates the priority given to a common and federated approach to reinforcing country capacity for monitoring data. African countries also implemented the Strategy for the Harmonization of Statistics in Africa (SHaSA) to ensure the comparability of statistics generated on the continent. The African Data Consensus was also adopted, following recognition of the data revolution's capacity to drive positive change.

## IS STATISTICAL CAPACITY BUILDING EXPENSIVE?

**F**unding statistical capacity is not expensive. Recent estimations suggest that to properly measure the SDGs, domestic and external resources will need to be increased by less than half a billion dollars per year.

Given the data demands of SDG implementation, donors must step up their support – currently very low at US\$ 439 million. This would not require massive increases in financing but rather building continuous aid flows to NSS budgets. Donors should be encouraged: an analysis of the World Bank Statistical Capacity Indicator showed a 24% improvement in statistical capacity in all countries since 1999. In particular, African countries have made progress, as evidenced by the tremendous increase in NSDS plans across the continent.

While financial support is not the only thing needed, it is clear that if countries are serious about implementing the SDGs, support to statistical capacity building must be increased.

Join the movement advocating for better capacity building in data and statistics by following us on Facebook and Twitter [@ContactPARIS21](#), [#datarev](#) and [#statcap](#).

Share success stories and let us know about upcoming events and projects on [contact@PARIS21.org](mailto:contact@PARIS21.org).

Help raise awareness about capacity needs on the ground.



The Partnership in Statistics for Development in the 21st Century (PARIS21) promotes the better use and production of statistics throughout the developing world.

This paper is one in a series of knowledge briefs gathering insights and best practices from PARIS21's work.

[www.paris21.org](http://www.paris21.org)

### References

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