Data for Development: An Agenda for German Development Cooperation

Summary

Data is a central but underestimated prerequisite for the realisation of the 2030 Agenda. Although technical innovations such as smartphones or the internet of things have led to a data explosion in recent years, there are still considerable gaps in the availability and use of data in developing countries and development cooperation (DC) in particular. So far it is not possible to report regularly on the majority of the 230 indicators of the *Sustainable Development Goals* (SDGs).

Already in 2014 an independent panel of experts, called for nothing less than a data revolution to support the implementation of the SDGs in their 2014 report to the UN Secretary-General, *A World that Counts*. Data is one of the key requirements for planning, managing and evaluating development projects and strategies. The aim of the data revolution for sustainable development is 1) to close data gaps with the aid of new technologies and additional resources, 2) to strengthen global data literacy, promote data use and enable equality of access, 3) to create a "data ecosystem" that follows global standards in order to improve data quality, enable data aggregation and prevent abuse.

The data revolution for sustainable development is a challenge for all countries. There is a lot of room for improvement in both partner countries and all areas of German policy making. This paper focuses on German DC.

Overall, the subject of data has to date received little attention in the organisations of German DC and their projects. The demand for evidence- and data-based work is often limited to evaluation.

A results framework to support portfolio management in German DC does not exist. Monitoring at project level is often not sufficient, as data quality is frequently poor and capacity is lacking. In the partner countries the implementing organisations (IOs) often introduce parallel structures for monitoring and evaluation (M&E) in order to keep track of the measures implemented, instead of using and strengthening national statistical systems as much as possible. Collected data and project progress reports are usually not published.

The following recommendations can be derived from the analysis:

- German DC should agree on common data standards and principles for data use, such as *Open Data by Default*. At the same time, personal rights should also be ensured.

- The Federal Ministry of Economic Cooperation and Development (BMZ) should work with all German DC actors (other ministries, IOs, non-state actors) to develop a data strategy that takes into account the different data sources and types, builds upon common standards and principles and aims to promote a data culture in all areas of German DC.

- At international level the German government should take an active role in the realisation and further development of the *Cape Town Global Action Plan for Sustainable Development Data*.

- Germany should increase its financial contribution to the development of data and statistics in partner countries, stop the use of parallel M&E systems in the medium term and promote the support of national statistical systems in all DC measures.

Introduction

The subject of "data" is gaining increased interest in development policy debate. The reasons for this are the rapid pace of technological development on the one hand and trends within DC on the other.

The continuous advance of technological innovation has enormous potential for all areas of policy. More data can be collected and processed faster, more cheaply and in greater detail. The number of data sources and users is increasing all the time and the data available is growing exponentially. At the same time, demand for data in DC is growing. For over a decade now researchers, but also decision makers, have been calling for increased focus on evidence. Against the background of the refugee crisis and criticism of the effectiveness of DC it is increasingly important for donors to show and report on the effects of DC funding. Efficiency issues are also playing an increasing role as the value for money debate shows. Without data and without a culture that ensures the responsible use of data, an increased focus on evidence-based policy in DC is not conceivable. The indicator catalogue of the SDGs has also led to increased demand for data.

At both national and international level pilot projects and initiatives are already under way for the use of digital technologies. There are also individual studies and initiatives on data in DC, such as the *Data for Development. What's next?* study commissioned by the BMZ. Thus far, however, German DC has lacked comprehensive concepts and programmes for closing data gaps and promoting a data culture and data-based work in all areas of DC and with all actors.

Status of the data revolution in partner countries

The goal of the data revolution for sustainable development is sufficient, high-quality data, that is demanded, used and accessed by all actors in a meaningful and responsible manner. Achieving this goal requires considerable action, as described in the *Cape Town Action Plan for Sustainable Development Data* of the UN Statistical Commission. Challenges range from the collection of data to the establishment of common standards.

Data collection: Overall there is not enough data and two thirds of SDG indicators cannot be reported on regularly at the moment. There is a lack of reliable basic data in many countries. For example, 44 percent of all countries have no detailed data on birth and mortality rates. Rural areas in particular often have no administrative data in digital format, making analysis difficult and forwarding to third parties error prone. Where data does exist, it is frequently insufficiently disaggregated, with the result that data cannot be used to trace developments at regional level or for different sections of the population. This means that no sufficient data base exists with which to implement the SDG principle of *leave no one behind*. As with many areas of policy, the national statistics offices are often underfunded. Of 81 national statistics plans, only 17 are fully funded (of which eleven are in Europe). According to the OECD (2017), approximately US$ 686 m per year in DC funding needs to be invested in the development of data and statistics in order to report on those SDG indicators in developing countries which are already operationalised. This corresponds to a relatively low additional expense to donors, of approximately US$ 200 m per year.

Box 1:	Examples for the use of open data
To monitor deforestation in Brazil and Indonesia, *Global Forest Watch* evaluates satellite data in real time. This has a number of positive effects. For example, the reaction time of the fire service to forest fires in Brazil has fallen from 36 to four hours and the data evaluated can be used in court cases for the prosecution of illegal loggers.	
Source: Verhulst & Young (2017)	

Open data provision: Data from DC projects or from the statistical systems of partner countries is not automatically shared with other actors in open formats and under open licences. One exception is financial data for DC, which is published in the standard of the *International Aid Transparency Initiative* (IATI), but has so far proved relatively difficult to use. Amongst the partner countries for German DC there are few that have launched open data initiatives, such as Kenya, Ghana, Indonesia and Nepal. The *Open Government Partnership* (OGP) initiated in 2011 has been able to achieve progress in this respect. However, only ten African and eight Asian countries are currently OGP members.

Data literacy: The number of data-oriented organisations and companies in partner countries is growing continuously. Examples of local pioneers include the Open Institute in Kenya, Penplusbytes in Ghana and Open Cambodia. However, these are exceptions, and data literacy is inadequate in the majority of partner countries. There is a risk that quality and cost of internet access, low education levels and language barriers exclude people from the data revolution for sustainable development, with inequality rising.

Responsible data: Data can not only be used for development, it can also be abused, e.g. by authoritarian regimes or to discriminate against specific groups when granting access to services. Data protection is becoming increasingly important, as new data is often collected passively, i.e. without the direct knowledge of the people leaving a digital footprint. Regulation of data use is insufficient in many partner countries. National legal frameworks are increasingly being developed to strengthen data protection. However, the legal position is not always coherent. In addition, in international DC projects it is often unclear which data protection guidelines are to be applied.

Standards: A lack of standards makes the cross-border use and aggregation of data particularly difficult, since datasets have different licences, data protection terms and varying operationalisation of indicators.

Data for development in German DC

In international comparison, Germany is not a pioneer in the provision and use of data. The German government only joined the OGP at the end of 2016 and has been lagging behind in its implementation of the G7 *Open Data Charter* of 2013. However, the appointment of a minister of state for digital affairs at the chancellery and the announcement of a second open data act in the 2018 coalition agreement indicate the will of the new government to make up ground. There are high hopes in German DC for the innovative potential of digital technologies, as illustrated by the Digital Agenda of the BMZ and the accession of the GIZ to the *Digital Development Principles*. According to the BMZ, 350 projects with a focus on digital technologies were carried out in the scope of German DC in 2016. Such pilot projects and flagship projects are extremely important for learning. But there is currently a lack of measures for establishing data culture at all levels, including projects at partner country level. Although data is used when allocation decisions are taken, data is not considered systematically. Efficiency issues play a subordinated role and so far there is no results framework to support portfolio management and the reporting of results with the aid of key indicators. At project level there is a lack of guidelines for handling data. When measuring results, the quality of the data utilised is often inadequate and details of data sources are imprecise. Financial data, project titles and projects descriptions are published in the IATI standard. But other project data and data from research projects, such as monitoring data, data sets of household surveys and project progress reports are not collected following common standards and licences.

There is currently no systematic analysis of data use regarding non-state DC. However, evaluations of individual projects suggest that action is also required here. In some cases, partner organisations on site do not have basic data for their target groups (how many groups of farmers, in which village, supported with how many loans, since when). Monitoring systems often serve to collect data for donors but not for internal management or to be accountable to target groups.

Action required on the part of the German government

To utilise the potential of data in DC, actions in four areas are proposed.

Data culture: For data to have a positive effect on development and the tackling of poverty it is essential that data and digitalisation are recognised as important issues across the organisations of German DC. The leadership levels of ministries should take a proactive approach to communicate and demonstrate the importance of data, data generation and use to the IOs. In addition, staff and project partners should receive more advice and training on the subject of data. Account should be taken of reservations about data-based work, whilst capacities should be strengthened and the added value of data for own work

highlighted. The goal of a new data culture should be to create awareness of the potential and risks of data.

Support for national statistics: The need for action also exists with regard to the support and utilisation of national statistical systems in partner countries. Germany's contribution to the global development of data and statistics is modest – between 2011 and 2015 Germany contributed US$ 37 m, less than two percent of global support. Projects in the fields of technical and financial cooperation (TC and FC) often introduce parallel M&E systems, independent of one another. The 2016 progress report of the Global Partnership for Effective Development Co-operation (GPEDC) shows that just 52 percent of German DC interventions use data of the partner countries. Data collections that are intended to measure the progress of DC measures are often not co-ordinated with all programme partners, the national M&E actors and other donors. Increased co-ordination and harmonisation of reporting obligations with other donors can avoid duplication and increase the availability and quality of data. German DC should offer more support to national data collection, managed by the national statistical offices and also delivering disaggregated data at local level.

Basic principles: In order to make appropriate use of the broad field of data and digitalisation, it would be helpful if an agreement was reached within German DC on basic principles. These basic principles may be established upon existing international agreements, such as the EU *General Data Protection Regulation* or the G7 *Open Data Charter*, the *Open Data Charter* of the Web Foundation or the *Principles for Digital Development*. Such basic principles could define clear values and goals for the use of data and form the basis for detailed guidelines. One example of a possible basic principle is *Open Data by Default*. This would not only concern the work within projects, but also the research funding with DC funds and the promotion of national statistics systems.

Data standards: The better data can be linked, the more valuable it is for the analysis, decision-making and control of processes. This applies to DC in particular, where numerous actors collect data. Standards enable the linking of data from different sources. For example, data protection standards increase trust in the exchange of data. Transparency standards define what data may be published. Licensing standards inform data users of the terms of use for data. Technical standards facilitate the import of data to different software environments. Standards for content stipulate, for example, what data may be collected on household income. One sector in which initial steps are already being taken to introduce global standards is agriculture. In the scope of the *Global Open Data for Agriculture and Nutrition* (GODAN) initiative the *Data Ecosystem Working Group* addresses standardisation in this field.

Recommendations for German DC

The BMZ should join with all actors of German DC (other ministries, IOs, non-state actors) in developing a data strategy that takes account of the different data types and

sources. The strategy should be orientated towards making use of the potential of data in all work areas and work levels, as well as preventing risks. It should build upon existing experience, be updated regularly, co-ordinated with the IOs, apply to the entire German DC, focus on national M&E systems and cover the aforementioned four areas of action.

At international level the German government should support the implementation and further development of the *Cape Town Global Action Plan for Sustainable Development Data* in order to promote the creation of a data ecosystem on the basis of common standards. The expertise in the field of data protection can be a specific contribution of the German government in this international effort.

The German DC organisations should create internal infra-structures co-ordinated with one another, promoting a data culture in their own work. This includes updated role descriptions for data protection officers, who are committed to both the protection of personal rights and the principle of maximum openness, and the communication, saving and publication of data to the latest technical standards. In addition, advisors or focal points should be set up for DC employees in Germany and partner countries, in order to support the mainstreaming of a data culture and encourage the consideration of the potential and risks of data.

The BMZ can systematically support the national statistical systems in the partner countries. On the one hand, DC projects with the primary goal of strengthening national statistical systems should receive increased support. On the other hand, the support of national M&E systems should become a systematic component of all bilateral TC and FC projects. In all projects funds should be provided to strengthen or expand the capacities of the local project partners. The option of using national M&E systems should always be examined and granted priority.

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