5

Data for decision-making

- To end extreme poverty we need better and more data on people and resources so we can target the poorest people everywhere. Policy and decision-making can only be as good as the data that informs them.
- There are multiple sources of data – such as survey, administrative, big and citizen-generated data – that can be improved and used to inform policy and monitor progress in complementary ways.
- To inform the end of poverty, data needs to be:
  - Disaggregated by gender, age, disability, income quintile and geographical location.
  - Joined up across datasets so investments can be compared with the needs and their impact on the poorest people to track whether the right resources are benefitting the right people.
- For data to be used as a tool in decision-making:
  - Countries must own and develop their own national data systems and thereby develop a culture of data use.
  - The international community has a supporting role to play by investing in core statistical systems and data collection that reflects national priorities.

To achieve the end of poverty we need data on who and where people in poverty are, how people experience poverty and the impact that different resources, investments and actions have on their lives. Data coverage and quality are not sufficient to accurately monitor progress of the sustainable development goal (SDG) of 'ending poverty in all its forms everywhere'.[1] We need investments in data collection, including baseline data, to inform progress. Without this, efforts to reach the poorest people and make the investments needed to end poverty cannot be appropriately targeted and their success cannot be measured.

Different types of data can be drawn on and improved and used to meet these data gaps. Official data, particularly administrative and civil registration data, is central to identifying and targeting poor people. Countries should invest in core national statistical systems that enhance progress and accountability on poverty reduction to ensure that data collected meets national and sub-national government needs and improves data use. Making data fit for use and developing a culture of data use are two key challenges to ensuring it can be used effectively to reduce poverty. The international community has a strong supporting role to play, aligning with national priorities in developing data systems.

The data provides an incomplete picture

There are large gaps in data on people's needs, including who and where people in poverty are, the conditions that contribute to and keep them in poverty, and the type of poverty they are experiencing. Data tracking what and where investments are being made in developing countries is lacking, including who is benefiting from these investments and the impact they have directly on the poorest people.

Poverty data

Poverty data is typically based on surveys, and these are often infrequent and inconsistent across countries and years. For example, for 17 countries 2011 estimates of global extreme poverty measured as PPP $1.25/day incorporate data from surveys conducted in 2004 or earlier (see Chapter 1). For the 28 countries for which survey data is entirely missing, figures are derived from regional averages, which may bear little resemblance to actual country contexts (such as in the case of North Korea).[2]

Data disaggregated both by geographical location at sub-national level and by social group – which can be used to measure where progress is being achieved and by whom – is also lacking. Disaggregated data by age, gender, disability, income quintile and location would enable progress and inequalities to be tracked across groups. World Bank data on extreme poverty is not disaggregated by gender, which means we cannot accurately measure the progress of women compared with men. Data is lacking to monitor the poorest people's progress, whether poverty is defined by income or other indicators of wellbeing, such as access to nutrition and health. Since 1998 only 0.6% of the benefits of economic growth worldwide have gone to the poorest 20% of the world's population (see Chapter 1). Data disaggregated into quintiles for each indicator of wellbeing can help monitor the progress of the poorest 20% of people worldwide.

Data on domestic and international resources

Poor-quality data on domestic and international resources means that there are significant gaps in our understanding of the landscape of resources available, including both their scale and impact (see Chapters 2 to 4). It is not yet possible to accurately assess the comparative advantage of each resource in financing the end of poverty. Nor can we fully understand the roles that different resources play in reducing poverty or the interrelationships between them.

There is not enough data on domestic public resources, by far the largest resource, to understand where, when and for whose benefit they are being used. Comparable, timely data on domestic spending by sector is lacking, which means that government spending on education compared with agriculture, for example, cannot be accurately tracked across countries. And while most aspects of data on aid flows have improved since the MDGs, in particular the traceability of aid, data on wider forms of official finance are lacking. This makes it difficult to assess the scale of investments made, the financial instruments used, and how people are benefitting from these investments. In turn, this lack of data makes it difficult to fully assess the impact of different resources on people in poverty. Data on private finance is also partial; for example, there are no systems that comprehensively estimate the sectors in which foreign direct investment is being made. Better visibility on all forms of finance would help to systematically exploit synergies between the different providers of finance, both official and private.

Using different types of data to monitor progress

Multiple sources and types of data can be drawn on to improve our understanding of the scale and nature of poverty and how resources are impacting people's lives. Consequently there is opportunity for a wide body of data to inform policymaking and resource allocation to support the goal of ending poverty.

Civil registration and vital statistics data

Civil registration and vital statistics data collected by national statistical offices captures basic information on people, such as births, deaths and marriages. Accurate civil registration and vital statistical data is essential for counting and locating people, a prerequisite for identifying who and where people in poverty are (see Box 5.1). Goal 16 of the SDGs includes the target of providing identity for all by 2030, including by birth registration.[3] Yet comprehensive coverage of the civil registration of births is currently only available for 12 of 55 countries in Africa (see Figure 5.1).[4]

Administrative data

Administrative data is maintained by government departments to record their operations and interactions with citizens. It is the major source of information on access to services, on government spending and for outcome indicators such as school attendance and vaccination coverage. Administrative data can be a key way to identify and target poor people, and understand how resources are responding to needs. For example, in Uganda administrative data from the Ministry of Education on primary school performance can be used to analyse patterns in education outcomes, and combined with Ministry of Finance data on education funding (see Chapter 3). It is maintained on a

daily basis, and well-run systems are therefore capable of creating accurate and up-to-date statistics to inform targeting of poor people.

Survey data

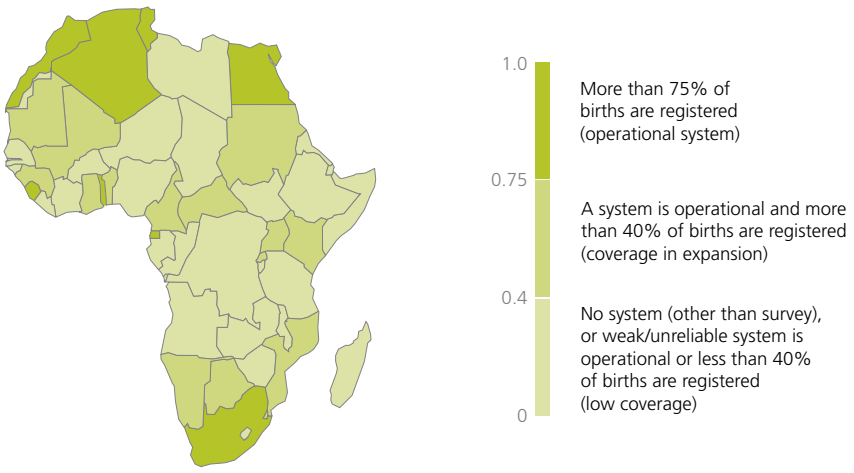
National statistics offices use surveys to collect data from representative sample populations. This provides information on people's needs and quality of life, for example through income poverty indicators, and so helps assess the impact of policies and investments. But some countries lack up-to-date survey data: estimates of global poverty for 2011 drew on surveys from before 2005 for 17 countries (see Chapter 1). A quarter of African countries have not completed a household survey since 2008 or earlier (see Figure 5.2). Furthermore, household surveys cannot accurately indicate where poor people live because of incomplete coverage, and can often exclude extremely poor people who may not be part of a household.[5] Innovative survey methods are being developed to collect better data. For example, the World Bank distributed mobile phones to collect real-time information from people in South Sudan, a country where institutional capacity to collect data is weak.[6]

Citizen-generated data

Citizen-generated data can provide real-time information on people's needs and the resources reaching them. It can be used, for example, to gain feedback on the impact of resources or to identify priorities held by different groups of people. Such data is growing. For example, CIVICUS mapped citizen-generated data worldwide, uncovering over 60 initiatives mostly initiated by civil society organisations.[7] It is also starting to be drawn upon by governments themselves. For example, in Uganda a **Community Information System**, owned by citizens and managed by the Uganda Bureau of Statistics, is empowering communities to collect, manage and use data. Through the collection efforts of village data recorders, sub-district data for 47 of Uganda's 112 districts is becoming available through the system.

FIGURE 5.1

Most African countries do not have functioning birth registration systems



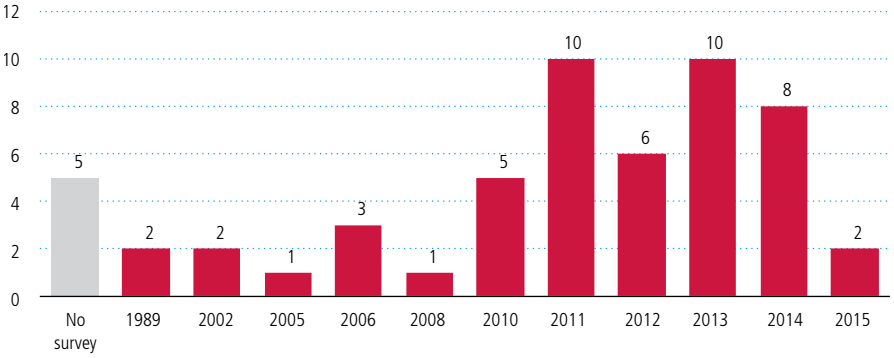
Source: Development Initiatives based on a range of sources, see tinyurl.com/omhvewt

Explore further: Coverage of birth registration (http://bit.ly/1G0cVVq)

FIGURE 5.2

A quarter of African countries have not conducted a household survey since 2008

Number of African countries by year of completion of most recent household survey



Source: International Household Survey Network and USAID *Demographic and Health Survey Program*

Explore further: Latest household surveys (http://bit.ly/1iKwRHa)

Big data

Big data is extracted from satellite images, mobile phone records, internet search queries and financial transaction records, among other sources.[8] Big data can be used innovatively to provide correlations; for example, the World Bank is exploring how night-time illumination patterns captured by satellites can be used to map poverty.[9] Private sector actors are also exploring the potential of big data to inform development. For example, Orange sponsored the 'Data for development' challenge in Côte d'Ivoire to explore how mobile phone data can be used to

track the spread of disease.[10] This data could inform rapid response to disease outbreaks.

These different data types can be used in complementary ways to inform our understanding of needs and access to services and resources, and the effectiveness of investments, including by triangulating official data. Both private and public stakeholders have a role to play in collecting and sharing data to inform efforts to reduce poverty. An ecosystem of data producers and users working on a common agenda for better data can inform better allocation of resources to end poverty.

An agenda for better data: making data fit for purpose

Action to end extreme poverty needs to be informed by accurate data on people living in poverty, as well as the services and resources they have access to. Key means of making data fit for this purpose are disaggregating it, ensuring the data is comprehensive, timely and open, and joining it up.

Disaggregated data

Disaggregated data both on resource flows and on the people such investments are serving is essential to ensure that no one is excluded from efforts to reduce poverty. We cannot target the poorest people appropriately unless we know exactly who and where they are – and this requires disaggregated data. The Addis Ababa Action Agenda highlights the need for disaggregated data as "an essential input for smart and transparent decision-making, including in support of the post-2015 agenda and its means of implementation."[16] Data disaggregated at the lowest level possible, by social grouping and geographical scale, is needed to meaningfully focus on people. Disaggregation between groups of people can help track inequalities across gender, age, disability and income level. Geographical disaggregation to the lowest level of administration can highlight sub-national inequalities between regions.

Disaggregated data on resource flows is needed to understand exactly where investments are being made and who is benefiting from them. For example, since 2010 data on aid to water and sanitation can be disaggregated into aid going to water supply only, and aid going to sanitation. This has subsequently highlighted the underinvestment in sanitation, a pre-requisite for good health. Despite poor performance against MDG sanitation targets, water supply projects have continued to receive the bulk of water and sanitation aid, accounting for two-thirds of such assistance in 2013.[17]

BOX 5.1

Targeting social assistance programmes in Indonesia through better data

Good data on people can be the foundation of effective resource allocation and programming, such as the targeting of social assistance programmes. In Indonesia, the Family Hope Programme (Program Keluarga Harapan) is a conditional cash transfer programme for reducing poverty administered by the Indonesian Ministry of Social Affairs. The programme aims to provide the poorest 5% of the population with cash transfers of Rp. 600,000–2,200,000 per year. The programme began in 2007 and served 3.2 million households in 2014 (see Chapter 1 for an analysis of sub-national poverty trends in Indonesia).[11] Households were targeted based on their poverty levels and other demographic characteristics. To find the poorest set of households, the Indonesian Bureau of Statistics reviewed a 2005 list of poor households, and visited all potentially eligible households to ensure the right people were being targeted.[12] The government concluded that this targeting could have been improved. The national household survey on which selection criteria were based may not have been representative at the district level, and a lack of up-to-date data may have led to high exclusion errors. A poverty database combining up-to-date administrative data, combined with socioeconomic survey data on the districts, would have allowed households to be targeted more efficiently.[13] While up-to-date administrative data can help identify poor people, survey data can provide further information on people's quality of life to inform the most appropriate form of policy action, such as the appropriate amount of cash transfers that would help households move above the poverty line. In 2011, the government developed the Unified Database, which identifies the 40% of households in the lowest socio-economic bracket. It does this by mapping the results of the 2010 population census with the 2010 social economy survey and other sources of information such as findings from consultations carried out with people in poverty.[14] The Unified Database is now being used to improve the targeting of the Family Hope Programme and informs multiple other programmes, such as the rice subsidy programme and health insurance programme.[15]

Comprehensive data

To effectively manage and allocate resources to end poverty, national governments need to access information on the totality of investments made by aid donors, as well as other public and private stakeholders. In Nepal, the Aid Management Platform captures data on international resources for reducing poverty. Data from the national Aid Management Platform was used to inform the new Development Cooperation Policy in 2014, including setting minimum thresholds for how much aid can be funnelled into a single project.[18] But it does not capture information on all resources, for example domestic contributions.[19] Following the April 2015 earthquake, there was a lack of comprehensive data on all financial resources mobilised in response to the emergency.[20] The Nepali organisation Young Innovations responded to this information gap by developing the Open Nepal Earthquake Portal to capture data about total pledged and disbursed relief funds and to share the data in a central platform. The Earthquake Portal takes data from a wide range of secondary sources, including the UN Office for the Coordination of Humanitarian Affairs' Financial Tracking Service and media reports, and crowd sources information for additional flows. The data gathered reflects financial flows from other national governments, multilateral organisations and NGOs, as well as domestic sources, corporations and people.[21]

Timely data

Timely data is also important for poverty reduction policymaking. As noted above, poverty data in many countries is years out of date, meaning that aid agencies allocating resources for reducing poverty are unable to fully incorporate recent trends and changing contexts into their decision-making. From a government's perspective, timely and accurate forward-looking data is also important to enable planning and coordination of resources. Yet forward-looking data on planned aid spending was found to be insufficient for budget preparation by 59% of respondents in a 2014 survey (see Box 5.2 for an example on Canada's aid).[22]

Open data

Open data – data published in a common, open format with an open licence to enable use and re-use – allows it to be more accessible to policymakers, civil society and other data users.[23] Accessible data can support accountability, as it can enable people to understand government decisions, and help them identify which resources should reach them. The lack of data on how domestic revenue is allocated erodes trust between citizens and governments (see case study on the demand for information in Liberia from the Institute for Research and Democratic Development).[24] Open data can support improved accountability, building better relations and trust between civil society and government.

Joined-up data

Joining up data means the ability to compare and combine data sets. Currently, we cannot easily combine resource flow data with poverty indicators, or link input and outcome data for service delivery. This is because different countries have different methodologies, definitions and institutional mandates. To combine resource flows with poverty data, we need consistent information from multiple sources, for example from donors' aid budgets, with budgets of NGOs receiving aid, with local schools' budget and results data. Developing and applying common standards across multiple types of data is a significant undertaking.

A good example to illustrate the challenge of joining up data that comes from incompatible standards is the health sector categories used by the World Bank, the OECD CRS, the UN Classification of the Functions of Government (COFOG) and the US National Taxonomy of Exempt Entities (NTEE). There are a number of exact matches across some categories (such as between the World Bank and the CRS definitions of 'population and reproductive health services'), and some close matches, such as between the CRS and World Bank 'population and reproductive health services' category and the NTEE's 'reproductive health' category. In the vast majority of cases, no match is easily made, for example between the CRS 'nutrition' category, for which no equivalent exists in the UN's COFOG or the NTEE classification, and only a broader one in the World Bank's 'nutrition and food security'. This demonstrates a significant challenge to tracking and aggregating financial resources to health sectors.

But the benefits of joined-up data can be substantial. For resource flow data, joining up different data sets on resources helps us to see the whole resource picture. Connecting resource flow data to socioeconomic indicators will enable assessments of the impact of resources on poverty reduction. Joined-up data across countries can also allow comparisons that could support political economic processes such as the African Integration. Adopting common monetary and fiscal policies, for example, requires an understanding of different economic contexts across countries based on comparable data.[25]

BOX 5.2

Improving the usability of resource flow data: the International Aid Transparency Initiative

The International Aid Transparency Initiative (IATI) is a reporting standard that aims to improve the transparency of aid, development and humanitarian resources to increase their effectiveness in tackling poverty. It was launched at the Third High Level Forum on Aid Effectiveness in Accra in 2008 in response to donor commitments on transparency and accountability.[26] IATI allows external resource flow data to be compared in an open format. Because the IATI standard is open, any stakeholder can apply this reporting standard to their data. Forward-planning data can also be reported through IATI. The standard allows organisations to publish many aspects of their future plans, covering both those at the country level and those related to specific projects.

The Department for Foreign Affairs, Trade and Development (DFATD) in Canada publishes detailed information on its forward plans through IATI.[27] The Department has published plans to spend 927 million Canadian dollars (CAD) (US$706 million) in 2016 and CAD 646 million (U$491 million) in 2017.[28]

By comparing how much DFATD plans to allocate to a country against its budgets for specific projects in the country, local partners from the government or other sectors can see how much money remains unallocated. This information is very valuable to partners that are looking for funding for planned projects.

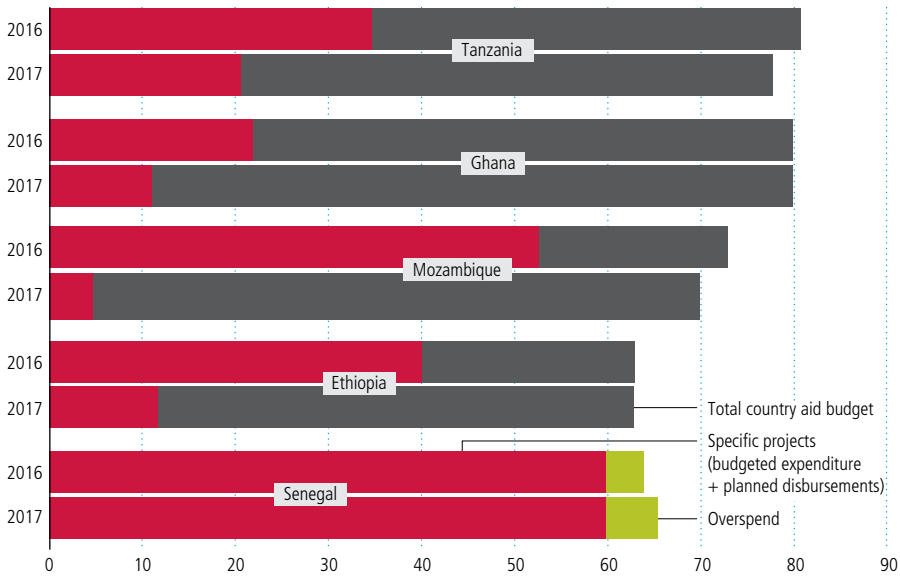
For many of the largest recipients of DFATD aid, a significant proportion of planned spending for 2016 and 2017 remains unallocated to specific projects. In Tanzania, the largest recipient, over 70% of spending for 2016 and over 80% for 2017 remains unallocated. The picture is similar for the second and third largest recipients, Ghana and Mozambique, while in Ethiopia larger proportions of the budget are already allocated to projects and in Senegal there is a small projected overspend.

Improving reporting by donors of forward-looking data through IATI would allow national governments to better understand planned investments in their countries, including on which projects. National governments could then use this information when making decisions about how to allocate national resources.

FIGURE 5.3

Detailed data on donors' planned aid spending, such as Canada's, is becoming available through IATI

CAD, million



Notes: Explore further on the d-portal page for the Department for Foreign Affairs, Trade and Development Canada. 2016 data is for 1 April 2016–31 March 2017, and 2017 for 1 April 2017–31 March 2018.

Source: d-portal and the International Aid Transparency Initiative data published by the Department for Foreign Affairs, Trade and Development Canada.

Developing a culture of data use, led by national institutions

Three elements can help ensure that data is both fit for use and used effectively towards ending poverty: national ownership, partnerships and commitments.

National ownership

National institutions are the drivers of ending poverty, and best placed to diagnose, prioritise and design investments to address domestic problems. National ownership of data and systems is needed to sustainably drive a culture of data use in decision-making. National strategies should drive the development of data and systems based on national priorities that reflect the different drivers of poverty in different countries. Data governance and accountability structures must also

be in place to define data ownership and address data privacy concerns. For example, in South Africa, the government's commitment to evidence-based policymaking has been driving increasing demand for and use of data.[29] The Department of Performance Monitoring and Evaluation was established in the Presidency in 2010 to generate evidence to inform policies. Evidence generated through a range of evaluations on early childhood led to a new Early Childhood Development Policy developed in 2014. This provides a framework for a comprehensive package of new and integrated services to fill gaps identified in the evaluations.[30]

Investments are needed to create and improve sustainable data systems, including establishing data infrastructure to efficiently store data. Many developing countries need substantial external assistance to establish systems, and the international community can support the up-front investments needed. Capacity needs to be built to support national systems and structures in data collection, analysis and dissemination. This will be important not only for government agencies, but also for the wider ecosystem of data users and producers. Rwanda's second National Statistical Development Strategy, for example, emphasises improving the "quality and dissemination of statistics and public statistical literacy" to enable citizens to develop capacity to generate, demand and understand data.

Partnerships

Partnerships and cooperation are instrumental to ensuring that data is fit for use. Partnerships between different data users and producers, including private and public stakeholders and academia, can help join up comprehensive data to end poverty.

At national and sub-national level, bureaucratic alignment between government bodies, such as national statistics offices, line ministries and provincial authorities, can improve how data collection responds to the information needs of policymakers. In Uganda, for example, the UBOS Strategic Plan provides for integration and streamlining of sectoral statistical requirements into the national statistical system.[31]

Regional and international organisations can support capacity development and access to funding.[32] The UN Declaration on the post-2015 development agenda includes a commitment by UN member states to intensify efforts to strengthen statistical capacities in developing countries, recognising the role of international cooperation.[33] Global initiatives exist to support this agenda, including the Partnership in Statistics for Development in the 21st Century (PARIS21) and the UN Global Partnership for Sustainable Development Data, to be launched at the UN General Assembly in September 2015.[34]

Aligning the international community to national priorities and systems is a key principle of aid effectiveness, recognised since the First High Level Forum on Aid Effectiveness produced the Rome Declaration on Harmonisation in 2002.[35] More recent discussions on development effectiveness have placed increasing emphasis on developing countries owning development priorities, and on data and evidence to drive a focus on results. The Fourth High Level Forum on Aid Effectiveness, held in Busan in 2011, includes a commitment to accelerate efforts to use data to guide investments.[36]

BOX 5.3

Aligning to national results framework in Bangladesh

Donors aligning to national governments' results frameworks at various levels, including for strategy and planning, is a key principle of aid effectiveness supporting national ownership. In Bangladesh, the Development Results Framework is used to monitor progress against the country's Five Year Plan (2011–2015). The framework is designed to be incorporated into the systems of government line ministries and development partners. The UN has linked its Development Assistance Framework 2011–2016 to the Development Results Framework and draws on indicators from the Bangladesh Bureau of Statistics. The World Bank has also linked components of its Country Assistance Strategy 2011–2015. But some development partners and line ministries in the government have not yet incorporated the framework into their planning. Constraints to further aligning the framework are institutional, for example lack of capacity in line ministries, and technical, such as gaps in the coverage of indicators. Overcoming these challenges will allow greater alignment to the framework and ownership of progress by the national government.[38]

Donors should focus on strengthening core statistical systems, rather than on multiple, often duplicative short-term and narrow baseline surveys and project impact assessments. Donors are not yet sufficiently aligned to national systems and further progress is needed, as found by the Global Partnership for Effective Development Cooperation (see Box 5.3 for an example on Bangladesh).[37]

Commitments

Commitments to common goals and agendas can help drive progress and coordination. For example, the Africa Data Consensus sets a common vision among African Union member states to develop a culture of data use through a profound shift in the way that data is harnessed in decision-making. The Eighth Joint African Union-Economic Commission for Africa Conference of Ministers of Finance, Planning and Economic Development endorsed the Africa Data Consensus in March 2015.[39] Another example is commitments to the transparency agenda, which have driven increased reporting to the IATI standard by over 300 organisations since 2011.[40] Principles, such as data being 'open by default', can also be adopted to ensure data is accessible to and usable by the public and complies with data standards. Time-bound objectives and frameworks, such as national action plans and the Africa Data Consensus roadmaps, can drive monitoring of progress and accountability.

Summary

To end poverty in all its forms everywhere, we need data on exactly where people in poverty are, their quality of life, and the impact of resources on their wellbeing. This data is lacking – we don't accurately know where the world's poorest people are, or how many of them are women, for example. We also need data on domestic and international financial flows to fully understand all resources, and their comparative advantage in targeting poor people.

To inform investments toward the end of poverty, data must be disaggregated, timely, open, comprehensive and joined up. Disaggregated data by age, gender, disability, income quintile and location can drive targeted investments and track progress across groups. Different types of data – including survey, administrative, big and citizen-generated data – can be used in complementary ways toward this goal.

Developing a culture of data use will require partnerships between private and public data users and producers. If data is fit for use, it can support better resource allocation and help build trust between citizens and governments. Strengthening national systems for data collection and sharing needs investments, including from the international community.