ITALIAN AGENCY
FOR DEVELOPMENT
COOPERATION

THE **ROLE** OF **STATISTICS** IN **DEVELOPMENT COOPERATION**

Information and knowledge are an essential basis for deciding. Born at the beginning of the 19th century, official statistics have contributed to the construction of modern societies. Committed to capturing the changes taking place in societies, they play a key role in the advancement of knowledge and decision-making at all levels as they provide an information infrastructure that meets the needs of citizens, public decision-makers, researchers and the media.

Official statistics are therefore public assets

FOREWORD

This document updates the previous "Statistics as knowledge: indispensable for cooperation, strategic for development" adopted by the DGCS in May 2015.
Since then, there have been many changes, starting with the adoption of the 2030 Agenda and the related Sustainable Development Goals (SDGs) that replaced the Millennium Development Goals (MDGs).
The document aims to offer a reflection on the importance of statistics in development cooperation and a synthesis of the international debate in this field. It also intends to provide useful elements to support the programming of Italian Cooperation and the implementation of initiatives aimed at strengthening the capacities of individual countries to produce statistical data and information in compliance with international standards and principles, and to promote their use for the planning and monitoring of effective and inclusive policies aimed at achieving development objectives.
The document does not exhaust the various themes and implications of the link between statistical capacity building and development, but aims to identify its main aspects for the actions and strategies of Italian Cooperation in the sector.
The work, coordinated by Simonetta Di Cori and carried out in collaboration with Elisabetta Di Pietrantonio and Tiziana Pellicciotti, was supported by the National Institute of Statistics and the Departments of Statistical Sciences of the Universities of Padua and Rome 'Sapienza'.

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SUMMARY

ACRONYMS

APS	Public Development Assistance
CTGAP	Cape Town Global Action Plan for Sustainable Development Data
DAC	Development Assistance Committee of the OECD
DGCS	Directorate General for Development Cooperation of the Ministry of Foreign Affairs and International Cooperation
FAO	Food and Agriculture Organisation
GIS	Geographical Information Systems
Istat	National Institute of Statistics
MDGs	Millennium Development Goals
NSDS	National Strategies for the Development of Statistics
OECD	Organisation for Economic Cooperation and Development
OSC	Civil Society Organisations
Paris21	Partnership in Statistics for Development in the 21st Century
RBM	Result-Based Management
SDGs	Sustainable Development Goals
SDMX	Statistical Data and Metadata eXchange
UNFPA	United Nations Population Fund
UNSD	United Nations Statistics Division

1. THE CENTRAL ROLE OF STATISTICS IN DEVELOPMENT PROCESSES

"To ensure that no one is left behind and to transform the world into a better place for future generations, we must develop statistical capabilities towards the realisation of 2030 Agenda".

United Nations, 2015

Statistics is a fundamental tool for understanding social, economic and environmental phenomena and is therefore an indispensable instrument of knowledge for the formulation, definition and implementation of policies and for the governance of any country.
Development policies have always found in statistical surveying, measurement and analysis a fundamental support, enabling them to effectively represent and interpret the state of affairs and the goals to be achieved in order to bring about real and profound changes.
Statistical information that complies with strict quality principles (up-to-date, disaggregated, timely, relevant and reliable data) makes it possible to represent complex situations and phenomena concisely and immediately, and enables comparisons to be made and social, economic and environmental trends and developments over time and space to be assessed using shared and comparable methods.
There is a growing awareness that the absence of quality data is reflected in the inability to formulate and monitor effective and inclusive policies, responsive to different national, regional and global contexts and their evolutions.
The European Central Bank states that "in order to make well-founded decisions, high-quality statistics are needed" , statistics that are produced in accordance with international standards and principles. The intention of statistical cooperation is therefore to support the national statistical institutes of the partner countries, many of which have weak statistical systems that are unable to produce reliable data that represent the basis for knowledge of any phenomenon and for the choice of appropriate development policies.
In development cooperation, statistical information plays a strategic role as an indispensable infrastructure for the design and definition of policies as well as for the sound and democratic governance of each country. Access to quality national statistics is considered an indispensable prerequisite for the definition of national development plans, for the functionality of a state's institutions and for the democratisation process in each country: think for example of the preparation of electoral rolls, which is impossible without an adequate population database.
Statistical data is the only valid tool to assess progress in each country and to measure the achievement of the goals defined in the 2030 Agenda and the ambitious leave no one behind principle.

Quality statistical data is needed in every country to guide the adoption of sustainable development programmes and to assess the effectiveness of the actions undertaken. Data are essential for the assessment of the results of government and development policies by decision makers and national and international donors.
Statistics, which are indispensable for cooperation and strategic for development, are in fact essential for assessing, for example, levels of poverty, access to schooling and health services, for analysing public health and the incidence of diseases, minority rights, gender equality, income distribution, and the economic fabric of countries. Without quality data, it is not possible to plan and formulate interventions that are truly effective and responsive to the development needs of countries and societies.
However, even today, significant deficiencies in statistical capacities in the partner countries do not allow for an exact knowledge of certain phenomena of global significance that can currently only be estimated.
This is the case when calculating the one billion people living in poverty and the 35% of births that are not registered, a figure that exceeds 60% in many African countries. Obviously, these figures are based on estimates, often produced by international bodies, which necessarily exclude millions of people belonging to the most marginalised segments of the population and hardest hit by poverty such as women, minors, refugees, people fleeing war, migrants, nomadic and pastoral communities.
A key example is civil registration, which is still weak if not non-existent in most lower or lower middle-income countries: even when children are duly registered at birth, many of them are left with no trace of the registration that has taken place. In East and Southern Africa, for instance, only about half of all registered children have a birth certificate. Worldwide, 1 in 7 registered children do not have a birth certificate. In many countries, this is due to registration costs that are too expensive for the poorest. Elsewhere, however, the birth certificate is simply not issued to families. As is well known, the absence of population registers generates numerous problems,

[1] https://www.ecb.europa.eu/explainers/tell-me-more/html/statistics.it.html

even favouring organised crime in many countries. Indeed, the exploitation of children and women and trafficking in human beings or organs are facilitated by the lack of registration of children at birth.
Failure to register a birth results in the absence of formal recognition by the state, which prevents children not only from obtaining a birth certificate but also from having access to medical care, primary education and many other services while, as they grow older, the lack of an official identification document may result in a child marrying, working or being enrolled in the army before being of legal age to do so. Failure to register the birth, therefore, opens the way to a long series of possible violations of a child's rights.
To give another example that dramatically affected the world's population during this period, consider the role that statistical data played in the COVID-19 pandemic, which showed how the timely availability of reliable and disaggregated information was instrumental in the adoption of specific policies, decisions and rapid governmental action to counter the spread of the virus.
During the emergency, the weaknesses of many countries, especially in Africa, and the structural fragilities of their national statistical systems were further highlighted, which to date show that, according to official data, the African continent is less affected by the pandemic than the rest of the world.
In addition to a structural weakness, the spread of the virus has in fact slowed down the activities of the national statistical institutes in many countries, which have been prevented from collecting data and conducting surveys in the traditional way, thus further delaying the availability and accessibility of key information.
The fact is that no one really knows what is happening in Africa, as well as in many other countries, in the absence of official, reliable and immediate data on the causes of death or on economic trends (monthly or quarterly) that can measure the impact of the epidemic on the economic fabric of countries in the short term.
Deaths from COVID-19 have escaped counting, few tests have been performed on the African continent, and it is plausible to think that many deaths from COVID-19 have been attributed to something else, so much so that it has been stated that in Africa the dramatic lack of data risks masking a "silent and hidden" epidemic that would conceal the true situation on the continent.
In short, in the field of development cooperation, statistics plays a key role for:

- a correct and timely identification of needs
- the negotiation of commitments for development
- more effective allocation of funding
- an approach based on the results of cooperation interventions that takes into account qualitative-quantitative indicators for the formulation, monitoring and evaluation of activities.
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Finally, it is worth emphasising the increasing importance of thinking about the right balance between granular and timely data that can ensure rapid, appropriate and transparent reactions by governments, and their use in an ethical and responsible manner. The future focus must therefore be on good data governance, so that it is robust, transparent and democratic.
It is also from this perspective that the action of the Italian Cooperation has as its priority objective in the statistics sector the institutional strengthening of partner countries, in order to stimulate in their institutional counterparts an awareness of the pivotal role of independent and impartial public statistics for a modern and inclusive society.

2. THE INTERNATIONAL CONTEXT

In July 2015, during the Third Conference on Financing for Development held in Addis Abeba, the international community agreed on a new framework for the implementation and financing of sustainable development, recognising the need to strengthen the capacities of national statistical offices and data collection and analysis systems, especially in African countries, in order to ensure an adequate and reliable flow of available information.
With this in mind, an increasing number of partner countries are calling for the strengthening of their statistical systems in order to:

[2] *According to the World Health Organisation's Global Health Observatory, a total of 84 countries collect medium to high quality information on deaths and their causes, which means that the data are considered to be of sufficient quality to monitor trends in mortality by cause.*
At the other extreme, 81 countries collect very low quality data on causes of death or do not record deaths at all: all low-income countries and two-thirds of lower middle-income countries fall into this category.

- having reliable and accurate data to adopt timely and targeted development policies
- increasing the transparency of political decision-making processes and the accountability of governments
- monitoring the progress of national Poverty Reduction Strategies (PRSs)
- monitor progress towards the SDGs.
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In fact, we speak of ***development data***, data that can be used to shape development policies, to set the measurement of the SDGs and to monitor progress towards their achievement. They include both official statistics, produced by national statistical systems and government agencies, and unofficial statistics produced by development partners, such as the private sector, OSCs and others.
The "basic building blocks" include demographic statistics, economic statistics, basic administrative data (welfare, taxation, health, education), census data and data from key surveys (households, agriculture, etc.).
The following is an overview of the main and most recent initiatives and fora at international level that promote and support the quality, importance and dissemination of official statistics as a development tool.

THE STATISTICAL COMMISSION

Created within the United Nations in 1947, it represents the main entity of the world statistical system and brings together representatives of the statistical institutes of member countries and other relevant bodies in New York every year. It is the institution that makes decisions on statistics at the highest level, with particular reference to the definition of statistical standards and methodologies to be applied both nationally and internationally.
The Statistical Commission oversees the work of the United Nations Statistics Division (UNSD). Its 24 Member States are elected by the Economic and Social Committee on the basis of the following geographical distribution: African States (5), Asian States (4), Eastern European States (4), Latin American and Caribbean States (4), Western States, European States and others (7).
The mandate in Economic and Social Committee Resolution 1566 of 3 May 1971 states that the Commission assists the Committee:

- in promoting the development of national statistics and the improvement of their comparability
- in the coordination of the statistical work of specialised United Nations bodies
- in the development of the Secretariat's central statistical services
- advising United Nations bodies on general matters relating to the collection, analysis and dissemination of statistical information
- in promoting the improvement of statistics and statistical methods in general.

The Fundamental Principles of Official Statistics (UNFPOS)

adopted on 29 January 2014 by the United Nations General Assembly.

Principle 1: **Relevance, Impartiality, and Equal Access**. Official statistics provide an indispensable element in the information system of a democratic society, serving the Government, the economy and the public with data about the economic, demographic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by official statistical agencies to honour citizens' entitlement to public information.

Principle 2: **Professional Standards, Scientific Principles, and Professional Ethics**. To retain trust in official statistics, the statistical agencies need to decide according to strictly professional considerations, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data.

Principle 3: **Accountability and Transparency**. To facilitate a correct interpretation of the data, the statistical agencies are to present information according to scientific standards on the sources, methods and procedures of the statistics.

Principle 4: **Prevention of Misuse**. The statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics.

Principle 5: **Sources of Official Statistics**. Data for statistical purposes may be drawn from all types of sources, be they statistical surveys or administrative records. Statistical agencies are to choose the source with regard to quality, timeliness, costs and the burden on respondents. Principle 6: Confidentiality. Individual data collected by statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes.

Principle 7: **Legislation**. The laws, regulations and measures under which the statistical systems operate are to be made public.

Principle 8: **National Coordination**. Coordination among statistical agencies within countries is essential to achieve consistency and efficiency in the statistical system.

Principle 9: **Use of International Standards**. The use by statistical agencies in each country of international concepts, classifications and methods promotes the consistency and efficiency of statistical systems at all official levels.

Principle 10: **International Cooperation**. Bilateral and multilateral cooperation in statistics contributes to the improvement of systems of official statistics.

Currently, Italy is not a member country (24 countries are members with 4-year mandate) but every year it participates in the work with an official delegation including officers from Istat and AICS. During the 50th Session in 2019, the Statistics Commission reiterated the need to strengthen national statistical systems in all partner countries in order to provide the disaggregated data needed to measure progress on the 2030 Agenda.
Among the decisions taken at the 52nd Statistical Commission in 2021, it is worth mentioning the one in point j) that emphasises the need "*for enhanced technical and financial support for countries to build capacity for monitoring, for the production of SDG indicators and for the modernization of statistical systems, including on SDMX, geospatial data integration and data innovation, in particular for African countries, the least developed countries, landlocked developing countries and small island developing States*".

GOAL 17
STRENGTHENING THE MEANS OF IMPLEMENTATION
AND RENEWING THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

Goal 17 focuses on strengthening the means of implementing the 2030 Agenda and promoting the global partnership for sustainable development. It therefore has a cross-cutting character compared to the other Goals, representing cooperation as a basic prerequisite for the implementation of the 2030 Agenda.
The different targets of the Goal refer to different areas within which to develop the global partnership: economic and financial, technological, capacity-building of the least developed countries, trade, policy coordination and coherence, multilateral collaboration, and finally improvement of statistical capacities to monitor progress towards sustainable development and the Agenda's goals, the latter area declined in targets 17.18 and 17.19.

17.18 By 2030, strengthen capacity-building support for developing countries, least developed countries and small insular developing states to significantly increase the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migration status, disability, geographic location and other relevant characteristics in national contexts

17.19 By 2030, building on existing initiatives, develop measurements of progress towards sustainable development that are complementary to GDP measurement and support statistical capacity building in developing countries.

THE 2030 AGENDA

With the adoption of the 2030 Agenda for Sustainable Development and the related SDGs on 1 January 2016, as a transformative and universal evolution of the MDGs, the importance of statistics in development processes was definitively established and the unpreparedness of many countries to address the challenges posed and the needs identified by the Agenda was highlighted, a weakness also related to the information and data production systems necessary for the realisation of the SDGs themselves.
The 2030 Agenda and the SDGs, which constitute the new framework for development after the conclusion of the MDG phase, represent a major event in that:
- a clear judgement was made on the unsustainability of the current development model, not only on an environmental level, but also on an economic and social level. The idea that sustainability is an exclusively environmental issue was thus overcome and an integrated vision of the different dimensions of development was affirmed;
- all countries are called upon to contribute to the effort needed to put the world on a sustainable path, without any longer distinguishing between developed, emerging and developing countries; each country must therefore commit itself to defining its own sustainable development strategy, enabling it to achieve its goals, reporting on its achievements within a UN-coordinated process;
- The implementation of the Agenda requires a strong involvement of all components of society, from business to the public sector, from civil society to philanthropic institutions, from universities and research centres to information and cultural stakeholders.
The 17 SDGs are broken down into 169 Targets that refer to different domains of development related to environmental, social, economic and institutional issues and are aimed at achieving sustainable progress. Of the 17 Goals, the last one explicitly refers to statistical capabilities and the need to use the tools of statistics to measure progress towards sustainable growth.
The United Nations Inter-Agency Expert Group on SDGs (UN-IAEG-SDGs), with its latest 2020 Review, produced a list of 232 indicators needed for monitoring the SDGs, which constitute the statistical reference framework worldwide.
The construction of the IT system for monitoring the SDGs is a necessity for the international community and for individual countries, which, regardless of their achievements on specific issues, must be equipped with the necessary tools for observing the distinctive phenomena of sustainable development.

[3] *Italy was a member of the Statistical Commission for two terms until 2018.*

[4] *The implementation process set two revisions, in 2020 and 2025, to ensure that the indicators were up-to-date, their classification in Tiers (I, II and III) and the necessary metadata prepared. The 2020 Revision of the UN-IAEG-SDGs indicators produced 248 indicators, 232 of which are different. (Istat, 'SDGs 2020 Report. Statistical information for the 2030 Agenda in Italy').*

UN WORLD DATA FORUM

With the aim of consolidating the role of data and statistics in measuring - at the national and global level - the effectiveness and progress towards the realisation of the 2030 Agenda, the United Nations sponsored the 1st World Data Forum in 2017, held in March 2017 in Cape Town. The subsequent edition of the Forum held in Dubai in 2018, and the one held virtually, due to the COVID-19 pandemic, in October 2020, continued to provide a space for dialogue and to promote participatory and consultative processes involving statisticians, users, governments, civil society, the private sector, donors and international bodies, with an approach that goes beyond the boundaries of official statistics. The Forum thus represents an event of global importance directly linked to the 2030 Agenda, the implementation of which it supports by promoting technological innovations and innovative approaches in data production, processing and communication, political and financial mobilisation in support of them, increased trust in statistics, standardisation, innovation and synergies between different *data ecosystems*[5].

WORLD STATISTICS DAY

The first World Statistics Day was established under the auspices of the United Nations in 2010. Organised every five years, the latest edition on 20 October 2020 *'Connecting the world with data we can trust'* was an opportunity for the world to highlight the need for reliable data to connect the world. On this occasion, UN Secretary-General António Guterres emphasised that *"current, timely and reliable data are needed to understand the changing world in which we live"*. He also called on all Member States, the UN system and other international organisations, as well as civil society, research institutes, the media and all producers and users of official statistics, to play their part *"to highlight the value of statistics in addressing the challenges of our time"*. He went on to emphasise that *"investing in data and statistics is the only way we will be able to make the decisions necessary to meet all current challenges and to achieve the SDGs by 2030"*.
On the same occasion, Stefan Schweinfest - Director of the United Nations Statistics Division - stated that *"as the overall data ecosystem evolves, our data standards, the independence of the national statistical system and the Fundamental Principles of Official Statistics contribute to building confidence in national statistical systems"*.

CAPE TOWN GLOBAL ACTION PLAN FOR SUSTAINABLE DEVELOPMENT DATA (CTGAP)

It was at the first World Data Forum that the CTGAP was presented, later adopted in March **2017** by the 48th United Nations Statistical Commission.
The CTGAP is an action plan describing the measures needed to modernise and strengthen national statistical systems, with a focus on infrastructure building and statistical capacity building at national and global level. It provides a comprehensive vision for the planning and implementation of actions for the realisation of the 2030 Agenda and a concrete list of actions to be undertaken for the strengthening and modernisation of statistical systems in all countries, developing the production of quality statistics and promoting partnerships and cooperation.
The *Cape Town Global Action Plan for Sustainable Development* calls for a commitment by governments, political leaders and the international community to take key actions in six strategic areas:

- coordination and leadership on data for sustainable development
- innovation and modernisation of national statistical systems
- strengthening of core statistical activities and programmes, with a focus on the monitoring needs of the 2030 Agenda
- dissemination and use of data on sustainable development
- multi-stakeholder partnerships for sustainable development data
- deployment of resources and coordination of statistical capacity development efforts.

Regarding the international consensus to strengthen public statistics, in 2018, during the second UN World Data Forum held in Dubai, the Dubai Declaration was presented, later adopted by the United Nations Statistical Commission in 2019.

[5] *In recent years, we are beginning to speak of data ecosystems as an evolution of traditional data production systems and of the relationships between producers (supply) and users (demand), made possible by the emergence of digital technologies, of new non-traditional sources, of new stakeholders and skills interacting in an increasingly interconnected environment. A shared definition of 'data ecosystem' is provided by the OECD: "Data ecosystem can be understood as the entirety of factors that condition the supply and use of development data and statistics in a specific country, including the institutional framework, technical capacity of producers, data and statistical literacy of users, and other resources'. (OECD Policy paper 'Key trends in development co-operation for national data and statistical systems', 2020)*

THE DATA REVOLUTION

The official emergence of the term data revolution occurred in 2015, with the report of the High Level Panel on the Post-2015 Development Agenda 'A new global partnership: eradicate poverty and transform economies through sustainable development' commissioned by the United Nations, referring to the explosion, particularly in the last decade, in the volume and production of available data coupled with the growing demand for data and its role in development processes from all parts of society.

The definition aims to go beyond the debate between supply and demand of data, emphasising its potential in addressing global inequalities and its use to monitor development progress and accountability of governments and institutions.

The concept goes beyond simply generating data: it is about providing the right data at the right time in the right format, which can provide the evidence to identify and address global problems and challenges, starting with poverty: data become useful information and generate shared knowledge, which guides the transformative actions to be taken for sustainable and inclusive development.

The Declaration leads the implementation of the CTGAP by focusing on the funding of public statistics and the consolidation of global national statistical systems through the allocation of adequate financial resources. Acknowledging that to date, resources allocated globally for public statistics and to support the data revolution and the implementation of the 2030 Agenda are limited and insufficient, the Declaration calls for increased funding for public statistics and the creation of innovative funding mechanisms for strengthening nationally produced data and individual statistical systems, which activate partnerships and include the mobilisation of national resources alongside international funding.

THE NEW EUROPEAN CONSENSUS ON DEVELOPMENT. OUR WORLD, OUR DIGNITY, OUR FUTURE

At the European level, in response to the challenges and perspectives of the 2030 Agenda, the EU signed in 2017 the Development Consensus Declaration 'The new European Consensus on development. Our world, our dignity, our future', aligning its development policies with the 2030 Agenda. The EU clearly recognises the need for strong and robust mechanisms, both national and supranational, regarding the monitoring and implementation of the SDGs:

"121. The EU and its Member States will strengthen the statistical capacity of developing countries, including by strengthening the capacity to produce and analyse data to inform policy and decision-making processes. Such data should be disaggregated, where possible, by income, gender, age and other factors, and the production of data on vulnerable, marginalised and hard-to-reach groups, as well as on governance and other topics, in line with the EU rights-based approach. There will also be investment in the strengthening of statistical institutions at sub-national, national and regional levels and the use of new technologies and data sources. The EU and its Member States will encourage their partner countries to include the voices of marginalised communities in the monitoring of the SDGs and to promote concrete mechanisms to this end."[6]

WORLD DEVELOPMENT REPORT 2021 - DATA FOR BETTER LIVES

In April 2021, the World Bank published its annual report 'World Development Report 2021 - Data for better lives', which for the first time focuses on data and its extraordinary potential, also made possible by the acceleration of technological innovation in the last decade, especially for the development processes of the least developed countries.

The report also highlights the potential risks of misuse of data, fuelling the increasingly heated debate on ethics and responsible use of information.

Also in 2021, the World Bank developed the Statistical Performance Indicators, a system of indicators for measuring the statistical capacity and performance of countries, which replaces the Statistical Capacity Index by also analysing new dimensions of statistical capacity such as data use, administrative data, geospatial dimensions and the infrastructure countries have. The indicators provide a comprehensive and immediate picture of the development levels and statistical capacity gaps of the 174 countries assessed; the methodological architecture of the indicator system is based on 5 pillars, summarised in the figure below:

[6] Joint Statement by the Council and the Representatives of the Governments of the Member States meeting within the Council, the European Parliament and the European Commission (2017/C 210/01)

Pillars	Dashboard Architecture				
Data Use (User Types)	Legislature	Executive	Civil Society	Academia	International Bodies
Data Services (Service Types)	Quality of Data Releases	Richness and Openness of Online Access	Effectiveness of Advisory and Analytical Services Related to Statistics		Availability and Use of Data services
Data Products (Topics)	Social (SDG 1-6)	Economic SDG (7-12)	Enviromental (SDG 13-15)	Institution (SDG 16-17)	
Data sources	Statistical Office (Censuses and Surveys)	Administrative Data	Geospatial Data	Private Sector Data/Citizen Generated Data	
Data Infrastructure	Legislation and Governance	Standards and Methods	Skills	Partnership	Finance (Domestically and from Donors)

3. INTERNATIONAL EFFORTS TO STRENGTHEN STATISTICAL CAPACITY

On the wake of indications from the international forum, recent years have seen an increased focus in development cooperation on the funding of official statistics, which is often considered inadequate for the growing development needs of most partner countries. The international community has undertaken a series of increasingly coordinated efforts to sensitise governments and donors to increase Official Development Assistance (ODA) resources for strengthening national statistical systems. However, financial aid for this sector still remains under-resourced: according to a recent report by PARIS21, assistance in this sector should be doubled from 0.3% to 0.7% of ODA. Support from partners, donors and external funding still remains crucial for a large number of countries.

PARTNERSHIP IN STATISTICS FOR DEVELOPMENT IN THE 21ST CENTURY (PARIS21)

As one of the main international stakeholders in the context of international cooperation for statistical capacity development, the Paris21 initiative was created within the OECD in 1999 in response to the recognition by leading international bodies of the challenges and difficulties faced by the national statistical institutes of partner countries in producing data due to limited resources allocated to them or a lack of attention from the governments themselves.

Paris21's efforts focus on supporting the use and production of quality statistics, promoting strategies and tools for advocacy of official statistics also through training and knowledge exchange initiatives.

Amongst the main activities of Paris21 is the support of low- and middle-income countries in the definition and implementation of National Strategies for the Development of Statistics (NSDS), which are programmatic frameworks supporting the coordinated development of national statistical systems and statistical production.

Another element that characterises the work of Paris21 is the promotion of dialogue between producers and users of statistics, which is reflected - amongst other things - in the annual publication of the above-mentioned PRESS/Partnership Report on Support to Statistics, a comprehensive and exhaustive report that annually photographs and documents international technical and financial efforts, achievements, difficulties and challenges still existing in the financing and support for statistical development.

The 2020 report highlighted among the main critical issues that have not yet been overcome:

- the fragmentation of support for official statistics by partners and donors;
- the stagnation, if not reduction, of funds allocated to official statistics both at national level and by donors, partially explained by the recent global economic crisis, and made even more evident by the COVID-19 crisis which has resulted in a redirection of funds and budgets towards more urgent and emergency issues;
- the Open Bern Network on Financing Data for Developmen the partial absence of communication and coordination between donors, and of alignment between donors and aid recipient countries.

[7] Paris21 Partner Report on Support to Statistics - PRESS 2020.

In recognition of the mismatch between the growing demand for quality data and funding for strengthening statistical systems, the Open Bern Network on Financing Data for Development was created in 2019. This is a multilateral alliance - whose main members are the OECD, Open Data Watch, Switzerland, the United Kingdom, Paris21, the United Nations Statistics Division and the World Bank - that supports the 2030 Agenda for Sustainable Development by promoting increased funding for data production. Focusing mainly on poor countries and fragile states, it advocates better identification of needs, better investment proposals and better coordination at national level.

Within the framework of the initiatives promoted by the Bern Network, of particular interest is the 'Clearinghouse for Financing Development Data', a service and information platform on global financing for development data. It is primarily a meeting and exchange place between 'supply and demand', between donors and aid recipient countries, aimed at promoting transparency and alignment of financing for the development of effective and inclusive *data ecosystems*, as well as coordination and sharing of activities at global level to overcome the fragmentation of the current landscape. The operational platform will be presented at the UN World Data Forum to be held in Bern in October 2021.

Still within the OECD, as of December 2019, the Development Assistance Committee (DAC) launched the 'Data for Development' initiative, which, starting from consultations among member countries with different approaches to development cooperation policies, launched a series of reflections, documents and concrete proposals to share priorities and strategies that are most appropriate and responsive to the upcoming global challenges: social, economic and environmental. The main objective is to identify and steer towards coordination, shared dialogue and inclusive development, the future trends of individual advanced countries in financing and supporting statistics towards low and middle income countries and the most fragile states.

Finally, in 2019, the Data for Now initiative was launched by the United Nations Statistics Division (strongly supported among the final decisions of the 52nd Statistical Commission) with the aim of consolidating collaboration and synergies between increasingly complex systems and enabling least developed countries to introduce innovative, effective, replicable and scalable solutions for the production of priority SDGs indicators into their systems. The initiative is based on the principle of ownership, putting national institutes at the centre of collaboration and strengthening existing processes and structures.

Italy has already financed, through an agreement with the Statistics Division in June 2020, the launch of an initial experimental phase of the initiative in two pilot countries, Colombia and Senegal.

4. ITALIAN COOPERATION'S COMMITMENT TO STATISTICS IN PARTNER COUNTRIES

Italy has for some time been carrying out interventions aimed at fostering the development of the statistical system of many partner countries, in the conviction that a correct formulation of development cooperation policies must have an up-to-date and reliable statistical information base, so that each country can better define its development plans and the donor community can offer more adequate assistance.

These interventions are designed to strengthen existing processes and infrastructures and to prepare local officials and statistical experts. The common objective of these interventions is to help build the information base in beneficiary countries that is necessary to govern socio-economic development processes, consolidate democratic institutions and facilitate the formulation, monitoring and evaluation of development programmes.

The first interventions in the field of statistics carried out by the Italian Cooperation date back to 1992, when activities were launched in Mozambique and Albania to strengthen the institutional capacities of the statistical centres - which over time have become true autonomous statistical institutes - with a particular focus on carrying out population and housing censuses[8].

[8] *In every country, the census contributes greatly to improving the information base needed for good governance, formulating, monitoring and evaluating development policies and social assistance programmes; especially in most partner countries, the traditional census is still the main source of statistical data on the size and spatial distribution of the population, as well as its structural and socio-economic characteristics, which is difficult, if not impossible, to obtain from other individual sources. The census can also satisfy the growing demand for disaggregated data needed to measure progress on the 2030 Agenda, especially when an assessment of the situation of the population classified by gender, age, geographical location, ethnicity, migration status, employment status, disability, etc. is required.*

Italian Cooperation then continued, also with technical assistance provided in collaboration with ISTAT, in numerous countries: Bosnia-Herzegovina, Burkina Faso, Cape Verde, to name but a few.
Starting in 2016, when it began operations, the IACS has financed numerous initiatives on the bilateral channel in favour of national institutes and statistical systems in partner countries.
In **Asia**, projects were financed in:

- **Myanmar** (2014-2016 and 2020-2023) for the local Central Statistical Institute to support economic surveys, production and dissemination of SDGs indicators, and staff training on statistical methodologies and analysis;
- **Vietnam** (2018 - 2021) for an intervention aimed at strengthening the capacity of the Central Statistical Institute for data production in key areas such as energy, environment and climate change, data dissemination and ICT infrastructure.

In the **Middle East**, projects were financed in:

- **Egypt** (2015) with the purchase of computer equipment for the data collection of the population census conducted in 2017;
- **Lebanon** (2018-2021) to strengthen the infrastructure of the Institute of Statistics, institutional strengthening within the framework of the country's statistical system, the introduction of new standards and methodologies such as SDMX/Statistical Data and Metadata Exchange and GIS/Geographic Information System, the strengthening of data communication and dissemination, and the analysis of social statistics on household income and living conditions;
- **Palestine** (2017-2021) with two initiatives to develop monitoring and reporting systems of key indicators related to the SDGs and the development of the statistical business register.

In **Africa**, projects were implemented and initiated in:

- **Ethiopia** (2016-2018) to provide technical assistance in the preparation of activities related to the population census;
- **Kenya** (2021-2023) to support the analysis and dissemination of population census results;
- **Tanzania** (2018-2021) for the strengthening of the production of demographic and economic statistics on the agricultural sector, businesses and prices, and for the development of the national population and birth register;
- **Tanzania** (2017-2018) with a regional initiative between Italian universities and the Eastern African Statistical Training Centre in Dar es Salaam, an institute for university-level statistical training aimed at English-speaking countries in East Africa.

In Latin America and the Caribbean, finally, with a regional approach:

- **CARICOM - Caribbean Community** (2018-2021) with an intervention aimed at sharing experiences, harmonising standards and methodologies and training the staff of member country institutes on the production and analysis of gender, agricultural and environmental statistics as well as the introduction of the international SDMX standard for data exchange and transmission.

In addition to participating in the main international discussion tables on the subject, the Italian Cooperation has financially supported the initiatives of some of the most active international organisations in the field of statistics, such as:

- **FAO**, in support of the Data to end hunger: 50x2030 initiative, a multi-partner intervention that unites leading countries in agricultural development and aims to support middle and low-income countries in Africa, Asia and Latin America by 2030. The initiative focuses on improving data collection on the agricultural sector at national level through the creation of new survey programmes and aims to achieve SDGs 2.3 and 2.4 targets
- **UNFPA**, with funding to support the implementation of population censuses in Myanmar and Mozambique
- **World Bank**, with the programme *'Partnership for Capacity Development in Household Surveys for Welfare Analysis'*, which consists of training programmes for African statisticians in household surveys in low- and middle-income countries, focusing on poverty, inclusive growth and food security.

The Project "Ethiopia - Capacity building in statistics - Population Census" (2016- 2018)

The intervention, carried out with ISTAT, was aimed at supporting the Central Statistical Agency (CSA) in the preparation of the 4th Census of Population and Housing, planned as part of the "2020 round of Population Census" and then suspended due to the country's political instability. Nonetheless, the reusability of the systems developed as part of this intervention and the technical partnership relations that were established made it possible to amplify the impact of the Italian initiative.

The approach adopted was focused on the application of the principles of process standardisation, flexibility and reuse of information technology solutions and knowledge, producing recommendations, guidelines and documentation to ensure sustainability, ownership of the innovations introduced and their reproducibility in an autonomous manner also for the management of future surveys. Ethiopia was among the first countries in Africa to plan a census based on the exclusive use of digital technologies both for land mapping (using mobile GIS technology) and for the data collection phase, which marked the transition from paper-based questionnaire to electronic questionnaire using mobile devices.

Italian support to the census, to which several donors and international partners contributed, focused mainly on i) the methodological and data analysis area and ii) the IT area, in particular with support for the development of a generalised survey monitoring system.

Other countries in Africa, which have decided to switch to electronic census, have used the monitoring system developed by the project, notably Malawi and Kenya.

In addition, the CSA shared its knowledge and lessons learned in various contexts, helping to stimulate South-South cooperation activities.

THE CHARACTERISTICS OF ITALIAN INITIATIVES TO SUPPORT PUBLIC STATISTICS

Italian initiatives in favour of statistics respond to needs expressed by partner countries, in line with the principles of *ownership*, alignment and harmonisation with national strategies and priorities.

The rapid developments affecting statistics and data production and analysis in general are broadening perspectives towards a *data ecosystem* approach and no longer exclusively towards official statistics systems as defined at the regulatory and legislative level by individual countries, with the **increasing involvement of new stakeholders and the adoption of innovative processes alongside traditional surveys and censuses.**

In this context, the Italian Cooperation gives priority to **strengthening the stakeholders and institutional systems** of the countries, which remain the main interlocutors and beneficiaries of Italian support.

The main features of the interventions being implemented can be summarised in the following points:

- **choice of national statistical institutes,** i.e. the relevant institutional bodies, as **privileged partners**, with a system-wide approach at national level involving other institutional partners wherever possible;
- ensuring **scientific and methodological alignment with good practice and the highest international standards**, always paying attention to incorporating and transferring elements of innovation in the definition and implementation of interventions;
- increasing attention to the implementation of projects that are not isolated but inserted, and therefore **complementary and functional, into broader programmes and strategies of the Italian Cooperation** in partner countries;
- technical assistance on horizontal topics (regulatory frameworks and organisational models, data dissemination and communication, ICT), as well as sectoral domains (censuses, demographic, economic, social and environmental statistics, etc.);
- constant search for a high **level of coordination and complementarity with other donors and development partners**, including through formal participation in coordination tables and mechanisms, where they exist, in order to support the absorption capacity of the partner country and to avoid overlapping and duplication of aid;
- **flexibility and the ability to respond quickly and effectively** to contexts in which working and cooperation conditions are often subject to rapid change;
- **average** time **duration of three to four years;**
- **training of official statisticians and officials of national statistical institutes and organisations** as a prerequisite for sustainability and ownership of partner country targets and results;
- **support for statistical training centres**, which in many countries often compensate for the absence of formalised academic and university courses specifically in the field of statistics.

The "Myanmar - Strengthening the Statistical Sector" Project (2014- 2016)

The first intervention in the statistical sector conducted in Myanmar between 2014 and 2016 with Istat's contribution, allowed the emerging Central Statistical Organisation of Myanmar to strengthen its capacity through targeted technical assistance and on-the-job training on specific production processes - with a focus on economic business surveys - and to overhaul and improve the quality of data dissemination through its two main data release channels, the Selected Monthly Economic Indicators and the Statistical Yearbook.

The initiative was an example of effective and fruitful coordination with key donors in Myanmar, highlighted in particular by the close collaboration established with UNDP for the implementation of the first Myanmar Business Survey to which Istat made an important methodological contribution. The project was included by the OECD as a case study in its 2017 Development Cooperation Report 'Data for Development'.

The "Sub-Saharan Africa: Strengthening the statistical sector for EASTC" Project (2017- 2018)

The "Strengthening the statistical sector" project, which was carried out at the Eastern Africa Statistical Centre (EASTC) in Dar es Salaam in cooperation with the Departments of Statistical Sciences of the Universities of Padua and Rome 'Sapienza', enabled the training gaps in modern statistical methodologies and techniques to be filled by African civil servants from public administrations and the non-profit sector and to transfer them specific skills needed for the analysis of primary and secondary source data.
Based on the needs identified in cooperation with the Institute's Department, professors from the two Italian universities held a popular series of short training modules for a total of 13 weeks and the participation of 328 students. Strengthening the skills of the specialists in the field on topics such as methodology of statistical surveys, visualisation and qualitative-quantitative analysis of statistical data, demographic analysis and projections, applied gender statistics, development of social indicators and methods for socio-economic impact assessment, was considered of fundamental importance for the enhancement of skills that are often not available at an academic level in African countries.

5. THE RESULT-BASED MANAGEMENT (RBM) APPROACH

In aligning the modalities of interventions with evolving national regulations and international developments, the IACS-DGCS Plan for Intervention Effectiveness 2020-2022 introduces new operational approaches, foremost among them an **RBM system of results-based management** that applies objective qualitative-quantitative indicators that meet internationally recognised standards and terminology.
This philosophy had already been identified in Article 2 of Law No. 125/2014, which states: "In implementing development cooperation initiatives, Italy ensures - among others - compliance with internationally agreed principles of effectiveness, in particular those of full ownership of development processes by partner countries, alignment of interventions with the priorities established by the partner countries themselves and the use of local systems, harmonisation and coordination between donors, results-based management and mutual accountability".
From a more strictly operational point of view, this approach is taken up in the "General Procedures for the granting of contributions and the management and reporting of initiatives promoted by public and private non-profit Cooperation Entities under Chapter VI of Law no. 125/2014" recently adopted by the Agency, in which it is stated that the RBM approach "also aims at favouring the collection of statistical data relating to the pursuit and achievement of the SDGs of the 2030 Agenda and the relative targets, in order to be able to produce an objective representation of the contribution made to their achievement by the initiatives promoted by cooperation subjects".
The **measurement of results requires a system based on precise indicators for monitoring and evaluating progress** and must therefore necessarily rely on the tools of statistics: from the design phase of an intervention, i.e. from the collection and analysis of data useful for defining needs and constructing the baseline, to the progressive monitoring of activities and the final evaluation of the results achieved, for which official data and statistics are a source of verification.
It follows that the **strengthening of the statistical capacity of the partner Countries will make it possible to bring all the actions of the Italian Cooperation back to the principle of *country ownership*** - one of the cornerstones of the Agenda for development effectiveness: for a full ownership of the development processes and the achievement of sustainable results, the national systems of the partner Countries will have to be strengthened through specific actions of capacity development also in the statistical sector. Consistently with this strategy, Outcome 4c of the Plan for Effectiveness adopted by the Agency commits the Italian Cooperation to increase the initiatives in this specific area for the improvement of the production of updated and reliable disaggregated data (excluding Fragile States as defined by the World Bank)[9].

[9] *The identified indicator related to Outcome 4c of the Plan for Effectiveness 2020 - 2022 is 'Number of projects with sector code (OE-CD-DAC) 16062', and foresees a gradual increase over the three-year period from a 2018 baseline of 14 to a 2022 target of 20 projects.*

6. RECOMMENDATIONS AND PROPOSALS FOR ACTION: THE PERSPECTIVES OF ITALIAN COOPERATION

The increasing availability of data, which can also be obtained very quickly, from multiple stakeholders (new institutional stakeholders, the productive world, civil society, etc.) poses new challenges in terms of **data quality and integration between** non-traditional and unstructured **sources**, as well as the **comparability and reliability of the available data.**

This wealth of data also opens up new opportunities, in particular in terms of greater knowledge (think of the possibility, for example, of georeferencing information or learning about phenomena at a disaggregated level), which are worth making part of the heritage of official statistics and development cooperation in this field.

The same increasing availability of data requires the **development and dissemination of effective and modern analysis tools**. In this context, support, also in terms of training, for innovative data science tools, the ability to access administrative data and methods for data integration, statistical methods for analysing new sources including big data, and in general advanced methods for analysing complex structures (textual data, social networks, etc.) and data management can complement the traditional methodology of statistical collection, processing and analysis. Fundamental remains the strengthening of IT skills related to the computational aspects required by analysis tools and IT architectures for data management and dissemination.

The strong push for the use of data also by new stakeholders requires ever greater efforts on the side of **dissemination of statistical culture and knowledge**, such as the use of indicators needed to:

- defining priorities for choices
- implementing monitoring processes
- adopting statistical methodologies for the evaluation of development interventions
- processing forecasts in health, economic, etc. contexts.

It will therefore be essential to **strengthen the skills of statisticians** in the partner countries **in the context of analysis, presentation of results and dissemination of statistical information**, so that the availability of data can increasingly respond to growing information needs.

As already highlighted, without quality data it is not possible to plan and formulate cooperation interventions that are effective and responsive to the specific development needs of countries and societies. This approach has been fully embraced by the IACS, which in its strategic documents recognises among its **priority actions for the next three years the increase in support for national statistical institutions.**

In fact, the Three-Year Planning and Steering Document 2019-2021 (DPTI) recognises "statistical capacity building" as a priority topic, in line with target 17.19 of the SDGs, proposing to gradually increase initiatives and projects aimed at developing partner countries' statistical institutions and systems.

The concrete commitment of the Italian Cooperation in the statistics sector is also explicitly recalled in the specific programming exercise for the year 2021 of the donated interventions, carried out by the DGCS with the contribution of the Agency, which calls for the strengthening of statistical capacities, with particular reference to the countries of Africa, to be given priority.

As underlined, producing quality data requires adequate and growing financial resources from the donor community. In adapting to this perspective in favour of **strengthening the capacities of the national statistical systems** and the production of development data, the Italian Cooperation proposes to work, in coherence and harmonisation with the development plans and national priorities of the partner Countries, in the following areas:

- support statistical institutes in **modernisation** processes, based on methodological and technological innovations, promoting digitisation, and the development of robust, effective and transparent governance systems;
- support for the increasing **use of administrative** and non-traditional sources;
- creation and development of **population registers**, particularly birth registers, in those African partner countries that do not yet have them;
- assistance in conducting **population and agricultural censuses**, which, by taking a snapshot of the demographic and socio-economic reality of each country, are indispensable for planning and still provide key information bases for countries;
- support for statistical offices in their data **dissemination** and **communication** activities, with a view to greater **user involvement** and increasing **accessibility and transparency** of information;
- technical assistance to statistical institutes for the production, release, reporting and monitoring of the most relevant **SDGs indicators** needed to track and assess the sustainable development processes undertaken by their countries and at the

same time the accountability and transparency of institutions;
- **specialised training** of officials from local statistical offices and young statisticians from the partner countries;
- **training on the importance of statistics in development cooperation** for AICS offices in Rome, Florence and abroad.

In addition, on a more operational level, the experience of the global health crisis caused by the spread of COVID-19, which had a **significant impact on ongoing projects in 2020**, deserves reflection.
In fact, if on the one hand there was the inevitable suspension of activities and freezing of initiatives in the initial period of the pandemic outbreak, on the other hand, a **rethinking of traditional technical assistance and training methods** was required, which in many cases involved reshaping and converting planned in-presence activities into remote activities, emphasising the importance of flexibility in the approach.
As in the case of cooperation in other sectors, this remodelling and the consequent revision of the projects' operational plans, carried out in consultation with the partner countries, represented an important moment of reflection, the appropriate exploitation of which may lead to an innovative redesign of certain cooperation methods.
At the national system level, it is considered appropriate to strengthen and increase collaboration with ISTAT and the sector universities, both in policy and programmes development and in project development in response to the needs of partner countries.
Finally, the analysis and evaluation of the potential involvement of new institutional partners, consistent with the cooperation framework deployed by the implementation of Law No. 125/2014, will deserve attention in the medium term.

GLOSSARY

This glossary, without claiming to be exhaustive, aims to provide some definitions of the main acronyms, terms and concepts in current use in official statistics that are also useful for those involved in development cooperation. It also contains a list of the main producers of official statistics that can be consulted for the planning and design of cooperation interventions.

Accuracy	It is the proximity of a measured value to the corresponding true value, also referred to an estimate. It can be expressed quantitatively by the reciprocal of the mean square error: the larger the mean square error, the lower the accuracy of the estimate and vice versa
Reliability	Reliability is the property of an instrument to achieve the same or little variation in results when used under identical conditions. It may relate to a source, a method, a procedure, etc. For example, reliable is a procedure from which little variable results are obtained in multiple applications of the same procedure. The term reliable is also used for an estimate when the overall error does not exceed a predetermined level.
Adequacy	It is the capacity of the data or statistical information system to satisfy the user's cognitive needs. Extrinsic quality of the data that can be specified by referring to the set of criteria that enable user satisfaction to be assessed. Among the main criteria are relevance, timeliness, transparency.
Public Administrations	Entities whose functions consist of producing services not for sale that are institutionally intended to serve the general interests of the community. In Italy, the public administration sector is divided into three sub-sectors: • Central administrations, which include the state administration in the strict sense (the ministries) and the constitutional bodies; central bodies with jurisdiction over the entire country (Anas, Cri, Coni, CNR, Istat, etc.); • Local administrations, which include public bodies whose jurisdiction is limited to a single part of the territory. They include: the regions, provinces, municipalities, public hospitals and other local economic, cultural, welfare, chambers of commerce, universities, provincial tourist boards, etc; • Social security institutions, which include central and local institutional units whose main activity consists in providing social benefits financed through contributions that are generally mandatory (Inps, Inail, etc.).
Population register	This is the resident population register that in Italy is kept at municipal level. It is continually updated by means of registrations due to birth of parents resident in the municipality, cancellations due to death of residents and registrations/deletions due to transfer of residence from/to another municipality or from/to abroad. The Anagrafe Nazionale della Popolazione Residente (ANPR) is the national database into which all municipal registry offices are merged.
Reliability	The ability of the data collected or the estimate to produce correct statistical evaluations of the phenomenon under investigation.

APS	Public Development Aid: is the total of all public transfers to developing countries or to an international organisation involved in development cooperation. The main objective of each transfer must be to promote the economic and social development of developing countries. Both central and local governments contribute to Public Development Aid through contributions to international organisations, aid credits and project activities. Public Development Aid is also the subject of an annual survey carried out in order to provide a tool for the comparative evaluation of the performance of donor countries and the actual benefits to recipient countries by the Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD), to which ODA is notified by the Ministry of Foreign Affairs and International Cooperation.
Baseline	Qualitative and quantitative information and data on the situation or conditions prior to the start of a programme or project with regard to the indicators and target group. The baseline describes a situation at time zero, in the absence of the actions we think will lead to change, and constitutes the reference point against which to calculate deviations in the main variables involved in the management of a project.
Benchmark	It is a benchmark used as a term of comparison to determine the validity of a valuation. It is a term borrowed from the language of economics, used when a company or individual investor wants to understand whether they are doing better or worse than the market. Benchmarking is done by choosing a dashboard of indicators that are objective, understandable, inexpensive to measure, and representative of a critical process. More generally today it is used as a synonym in the Italian language for "comparison".
BES (Fair and Sustainable Welfare)	The measurement of wellbeing and sustainability is an exercise carried out by Istat on the basis of a set of indicators (in 2020, the number of indicators rose from 130 to 152), updated and commented upon annually, through which the 12 domains relevant to these aspects are illustrated: health, education and training, work and life-time balance, economic wellbeing, social relations, politics and institutions, security, subjective wellbeing, landscape and cultural heritage, environment, innovation, research and creativity, and quality of services. All BES indicators are included in the Economic and Financial Document.
Big Data	The term Big Data literally refers to the vast amount of data and information that is acquired and managed on a daily basis by companies or entities, generally through digital systems. The term is used in particular with reference to the capacity (inherent to data science) to analyse or extrapolate and relate this enormous mass of heterogeneous data, of a complex nature, structured and unstructured (thanks to sophisticated statistical and computer processing methods), in order to discover links between different phenomena (e.g. correlations) and predict future ones. Big Data represent a new source of data.
Sample	Given a statistical population consisting of N units, with any N, a sample is called a set of the n units selected from the N that make up the population. It can be formed with probabilistic extraction criteria or with deterministic criteria. Sample techniques are used to estimate population statistics, e.g. averages, totals, ratios between variables. Estimates obtained from population samples are subject to sampling error.

Natural capital	It is the set of natural systems (seas, rivers, forests, fauna, flora) and the products of agriculture, fishing, hunting as well as the artistic and cultural heritage present in a given territory.
Human Capital	The set of knowledge, skills, abilities, motivations, emotions acquired during an individual's lifetime and aimed at achieving social and economic objectives, individually or collectively.
Cause of death	It is the "initial" cause of death, i.e. the condition directly responsible for death. It is defined and identified among all the diseases certified by the doctor on the death certificate, according to strict rules dictated by the World Health Organisation (set out in the International Classification of Diseases Icd-10) and is the most widely used and consolidated indicator for official statistics and comparisons at national and international level.
Census	It is a statistical survey aimed at ascertaining the numerical size of the population, its territorial distribution and its structural characteristics. It is characterised by instantaneousness, generality and periodicity. The survey may concern the population, of which it detects various socio-demographic characteristics; industry and commerce, of which it detects the nature, characteristics, workforce employed, and motive power used, of industrial and commercial enterprises; housing, agriculture, etc.
Social class	The social class is defined on the basis of the occupational position of employed persons aged 18 and over; the social class of origin is defined by the highest occupational position of the parents when the people being interviewed were 14 years old. The social stratification scheme known as Esec (European Socio-economic Classification) (Rose and Harrison 2010) is based on nine occupational classes that can be reconstructed through information on status, occupational position, sector of economic activity and code of profession. The classification includes: Large Business and Senior Managers, Middle Managers and Professionals, Managerial and Conceptual Employees, Non-Agricultural Self-Employed Workers, Agricultural Self-Employed Workers, Blue Collar and Production Technicians, Low-Skilled Tertiary Workers, Skilled Workers, Unskilled Workers.
Digital competences	Since 2015, the European Commission in agreement with the National Statistical Institutes has adopted a new methodology to measure the digital competences of individuals aged between 16 and 74. It measures the perception of individuals who have connected to the Internet in the last 3 months with respect to their ability to perform certain activities that define four competence domains defined by the "Digital Competence Framework": 1. Information skills: identifying, locating, retrieving, storing, organising and analysing digital information, and judging whether it is relevant to one's purpose; 2. Communication skills: communicating in digital environments, sharing resources through online tools, collaborating through digital tools, interacting and participating in the networked community. 3. Problem solving skill: solving technical problems, updating one's own and others' skills. 4. Software skills for content manipulation: creating content by processing text, images and video; integrating and reworking already published content; producing creative forms of expression, being aware of and applying intellectual property rights.

National Accounting	The set of all economic accounts describing the economic activity of a country or a territorial district. Its purpose is the quantitative observation and statistical study of the economic system or its component sub-systems at different territorial levels.
Labour costs	All expenses incurred by employers for the employment of employees. It includes employee remuneration (labour costs in the strict sense) and related intermediate labour-related costs (vocational training costs, personnel recruitment costs, possible sanctions) net of subsidies received.
Correctness	Property whereby the expected value of the estimator coincides with that of the estimated parameter. With reference to the data collected on the individual statistical unit, it expresses a measurement that is not affected by error; in other words, the data is correct if the value collected coincides with the true value.
CRS	Creditor Reporting System: this is the system created by the OECD into which the most relevant data on Public Development Aid is fed, providing basic information on the destination and objectives of aid, also for the purposes of comparison between member countries of the Development Assistance Committee (DAC). The data refer to individual programmes or projects with a focus on financial information. Donors are also asked to indicate whether or not each activity affects the environment and contributes to the markers identified by the Rio Convention (biodiversity, climate change mitigation, climate change adaptation, desertification).
Administrative data	Administrative data are defined as information collected and stored by an operator (public body or company) for the operator's own institutional purposes. This is the case, for instance, with data on transfers of residence or building permits collected at a municipality; lists of customers of a certain company kept for the purpose of subsequent invoicing, etc. In all these situations, the collection and subsequent processing of information is planned with the aim of achieving specific administrative purposes, relating to the individual units being surveyed. Also in a statistical survey, data are collected from the individual survey units, but not to be processed individually but only for statistical purposes. In other words, the unit identifier (if present) is only functional for the purposes of the statistical survey.
Personal Data	Personal data is information that identifies or makes identifiable, directly or indirectly, a natural person and that can provide information on his or her characteristics, habits, lifestyle, personal relationships, state of health, economic situation, etc.
Sensitive data	Sensitive data are a sub-group of personal data, linked to particularly sensitive personal information (political opinion, sexual orientation, medical information) and, since they concern the most intimate sphere of the person to whom they relate, require more rigorous processing, ensuring maximum protection and confidentiality.
Final figure	It is the one disseminated by the producer of statistics when he has completed the process of verification of a possible revision and validation
Provisional, preliminary data	This is what the producer of statistics makes available in advance, for reasons of timeliness of information, despite the fact that the process of verification, eventual revision and validation has not yet been completed

Statistical data	It is the result of the detection of a certain characteristic (which, however, is variable and can occur in different ways) on an individual in the statistical collective.
Unemployed	Non-employed persons aged 15-74 who have taken at least one active job search action in the four weeks preceding the week to which the information relates and are available to work (or start self-employment) within the next two weeks, or who will start a job within three months of the week to which the information relates and would be available to work (or start self-employment) within the next two weeks if it were possible to start work earlier.
Sampling error	Difference between the estimate and the true value that would have been obtained by examining the totality of the statistical units in the population. On average, the error decreases in value as the sample size increases, and is zero when the sample consists of the totality of the units that make up the population. The sampling error must be distinguished from the non-sampling error, which occurs even if the survey is exhaustive.
Exports (national accounting)	Transfers of goods and services from resident units to non-resident units. Exports of goods include all goods supplied to non-resident units, whether in return for payment or free of charge. They are valued at the Fob (free on board) value, which is the market price at the border of the exporting country. This price includes: the ex-factory price, trade margins, international transport costs, and export duties, if any. Exports of services include all services (transport, insurance, others) provided by resident units to non-resident units.
Administrative Sources	Administrative sources are information on statistical units collected by public administrations for their own purposes: the INPS, the motor vehicle register, or resulting from legal obligations. Examples: deaths, marriages, transfers of residence, crime reports, health facility data, school production.
Work force	The total number of persons employed and persons seeking employment.
GIS (Geographic Information Systems)	The set of hardware and software, geographic data and human resources designed to detect, input, update, manipulate, analyse and display georeferenced data, associating each geographic element with one or more alphanumeric descriptions.

IATI (International Aid Transparency Initiative)	It is a voluntary, multi-stakeholder initiative aimed at improving the transparency of development aid to increase effectiveness in the fight against poverty. IATI brings together donor and recipient countries, civil society organisations, governments and universities involved in development cooperation who work together to promote data transparency. At the heart of the initiative is the IATI Standard, a format and framework used by government donors, private sector organisations, national and international NGOs to publish all data related to international cooperation activities. Designed in close collaboration with key stakeholders in emerging countries, IATI aims to ensure relevance and usefulness for all the different stakeholders involved. Organisations publish their aid information in XML format in the IATI database, which becomes an "online catalogue" comprising all the data published by the different stakeholders. The choice of the XML format makes it easy to combine datasets from different sources, to update their data on a monthly, quarterly or half-yearly basis, to keep the information as up-to-date as possible, and to publish the data using a flexible standard that is independent of the type of entity or organisation carrying out cooperation activities. The database serves analysts, journalists, developers and the open data and transparency communities, who are building applications to provide information that is accessible and usable by all possible users.
Inactive	People who are not part of the labour force, i.e. those not classified as employed or unemployed. They consist of: • Those who have not looked for work in the last four weeks and are not available for work within two weeks of the interview; • Those who, despite not having looked for a job in the last four weeks, declared themselves willing to start a job within two weeks of the interview; • Those who have looked for a job in the last four weeks but are not available to start work within two weeks of the interview (potential labour forces).
Incidence	A mathematical relationship that measures the number of new cases of a specified condition occurring in a population over a specified period of time.
Statistical survey	Set of activities that are carried out in order to collect and analyse data concerning a certain phenomenon with the aim of describing the phenomenon examined. A statistical survey consists of four phases: design, realisation, processing and presentation.
Control survey	Survey conducted to carry out statistical quality control of the data. Control surveys may be carried out in conjunction with the main survey or after it.
Indicator	It is a synthetic measure, usually expressed in quantitative form, derived from one or more variables, capable of summarising the trend of the phenomenon to which it refers. Indicators of various kinds are used for the measurement and analysis of different phenomena: demographic indicators (on births, deaths, mobility, marriages, dependency); socio-economic indicators (on labour forces, professional position, activity, employment and unemployment, labour relations, income, etc.); quality of life indicators (housing, cultural consumption, health, well-being), etc. Indicators can be used to reveal positions or show positive or negative changes. They are fundamental tools for guiding decision-making processes.

Composite indicator	It represents a measure of the level of a complex phenomenon, which cannot be measured directly, and is constructed by combining thematic indicators into a single measure.
Sustainable Development Indicator	It is a statistical measure that gives an indication of the sustainability of development - social, environmental and economic. According to the UN's goals in Agenda 2030, the Sustainable Development Goals aim to achieve continuous improvement in the quality of life and well-being of citizens, without compromising the well-being of future generations. This involves the pursuit of economic progress, environmental protection and the promotion of social justice. For the monitoring of the 17 Sustainable Development Goals and 169 targets set by the 2030 Agenda, the United Nations has approved a list of 232 indicators to measure progress. Within the EU, Eurostat has identified around 100 indicators to measure aspects relevant to each of the Sustainable Development Goals, providing a statistical representation of trends in the eurozone over the last 5 and 15 years.
Environmental indicators	Among the most commonly adopted reference models in environmental investigations are the Pressures, States, Responses (PSR) model, proposed in the 1970s and subsequently developed by the OECD, and the Drivers, Pressures, States, Impacts, Responses (DPSIR) model, developed by the European Environment Agency, both of which are characterised by causal relationships: human activities exert pressures on the environment by changing the quality and quantity of natural resources (state). Society responds to these changes through environmental, economic and social responses.
Demographic indicators	They allow one to know certain phenomena relating to the population of a certain geographical area. The main demographic indicators are: • Birth rate or birth ratio: The ratio of the number of live births in the year to the average amount of the resident population (per thousand). • Mortality rate or mortality ratio: the ratio of the number of deaths in the year to the average amount of the resident population (per thousand). • Infant mortality rate or ratio: the ratio of the number of deaths in the first year of life to the number of live births (per thousand). • Perinatal mortality rate or ratio: the sum of stillbirths and deaths occurring in the first week of life as a proportion of the total number of births (per thousand). • Marriage rate or ratio: the ratio between the number of marriages celebrated in the year to the average amount of the resident population (per thousand). • Specific fertility rate or ratio: the ratio of live births to women of a given age (between 15-49) to the average annual female population of the corresponding age. • Total migration rate: ratio of the year's migration balance to the average amount of the resident population (per thousand). • Life expectancy at a certain age: the average number of years that an individual, having reached a certain age in completed years, still expects to live (calculated on the basis of the mortality table for the relevant period).
Index	It is a pure numerical entity, the result of the relationship between two phenomena. Its construction meets purely mathematical requirements, but it creates information: the cognitive meaning of the index is independent of that of the quantities being compared.

Consumer Price Index (CPI)	It is a statistical measure obtained by averaging the prices of a set of goods and services, weighted by the incidence of each of these assets on the whole.
HDI (Human Development Index)	In English HDI (Human Development Index), is a macroeconomic development indicator created in 1990 by Pakistani economist Mahbub ul Haq and endorsed by the UN, which in the same year presented the first Human Development Report, which combined the indicator on per capita income with those on life expectancy and education level. The HDI value, between 0 and 1, indicates how close each country has come to the following goals: • Life expectancy 85 years • Access to Education for all • Decent level of income The maximum theoretical value of the Index (HDI = 1) means that the country has met all the targets. The measures used for each variable are: • Longevity as measured by life expectancy at birth • The level of education as measured by a weighted average of adult literacy (two-thirds) and the primary-middle-high school enrolment rate (one-third) • The standard of living as measured by per capita income expressed in US dollars (PPP). Compared to the ranking outlined with GDP, there is no major change: OECD countries have the highest values and sub-Saharan Africa has the lowest. This has led many to consider the HDI as redundant, emphasising aspects already highlighted. Another critical element is the absence of reference to ecological aspects. Each year, however, all UN member states are listed and ranked according to the HDI and, based on the results, assessments of economic policies and quality of life are made.
Macrodata	Data resulting from calculations made on micro-data. Example: Aggregated data by gender of respondents.
Metadata	This is information about the data production process, i.e., the where, when, how and by whom the data were obtained. This includes all the information that makes it possible to retrace the stages of work in which the statistical investigation was carried out. It is the availability of metadata that substantiates the transparency requirement.
Microdata	Elementary data referring to individual units. Example: data for each respondent.
Social mobility	Social mobility refers to the passage of an individual or group from one social status to another. It can refer to the passage from one generation to another (intergenerational), or to changes that occur during an individual's lifetime (intragenerational). Absolute mobility is measured by the size of the flows of individuals moving from one class to another, while relative mobility is measured by the intensity of the influence of the positions of origin on the chances of reaching the various destination classes, i.e. by the closeness to the principle of equal opportunities of the mechanisms for allocating individuals and groups to the various classes.

Open data	Data that can be freely accessed, without patents or other forms of control restricting their reproduction and whose copyright restrictions are possibly limited to the obligation to cite the source. The term "open data" refers to the Internet as the main channel for data dissemination.
GDP (Gross Domestic Product at market prices)	An indicator of a predominantly macroeconomic nature, it is the final result of the production activity of resident producer units. It corresponds to the total output of goods and services in the economy, minus intermediate consumption and plus VAT and indirect taxes on imports. It is also equal to the sum of value added at basic prices of the various branches of economic activity, increased by taxes on products (including VAT and taxes on imports), net of subsidies on products.
Household purchasing power	Real household gross disposable income, obtained using the deflator of household final consumption expenditure expressed in values linked to a certain reference year. In the case of the household sector as a whole, the deflator of final consumption expenditure of households and non-profit institutions serving households is used, expressed in values linked to a certain reference year.
Absolute poverty	Absolute poverty is the condition of poverty in which one does not have - or has with great difficulty or intermittently - the basic resources for subsistence. The absolute poverty line represents the monetary value, at current prices, of the basket of goods and services considered essential for each household, defined according to the age of the members, the geographical breakdown and the type of municipality of residence. A household is absolutely poor if it incurs a monthly consumption expenditure equal to or less than this monetary value.
Prevalence	Proportion of subjects presenting a specific phenomenon in a defined group at a defined point in time.

Main producers of statistics at international level	Asian Development Bank (ADB) African Development Bank (AfDB) Bank for International Settlements (BIS) Cooperation Council for the Arab Countries of the Gulf (GCC) European Central Bank (ECB) Eurostat Food and Agriculture Organization of the United Nations (FAO) International Civil Aviation Organization (ICAO) International Labour Organization (ILO) International Monetary Fund (IMF) Office of the United Nations High Commissioner for Human Rights (OHCHR) Organization for Economic Co-operation and Development (OECD) Partnership in Statistics for Development in the 21st Century (PARIS21) United Nations Children's Fund (UNICEF) United Nations Conference on Trade and Development (UNCTAD) United Nations Development Programme (UNDP) United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP) United Nations Economic and Social Commission for West Asia (ESCWA) United Nations Economic Commission for Africa (UNECA) United Nations Economic Commission for Latin America and the Caribbean (ECLAC) United Nations Educational, Scientific and Cultural Organization (UNESCO) United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) United Nations High Commissioner for Refugees (UNHCR) United Nations Human Settlement Programme (UN Habitat) United Nations Industrial Development Organization (UNIDO) United Nations Office on Drugs and Crime (UNODC) United Nations Department of Economic and Social Affairs, Population Division (UN DESA/PD) United Nations Department of Economic and Social Affairs, Statistics Division (UN DESA/SD) United Nations World Tourism Organization (UNWTO) Universal Postal Union (UPU) World Bank (WB) World Health Organization (WHO) World Trade Organization (WTO)
Proxy	Statistical indicator describing the behaviour of a given phenomenon that cannot be directly observed.
PSN (National Statistical Programme)	This is the regulatory act that, on the basis of art. 13 of legislative decree no. 322 of 1989 and subsequent additions, establishes the statistical surveys of public interest entrusted to the National Statistical System and the related information objectives. It outlines the state of the art of official statistics by subject area, establishes the surveys, elaborations and project studies of public interest that Sistan bodies and organisations intend to carry out over a three-year period and identifies the relative objectives. The works included in the PSN are classified into five different types: Statistics from Survey (Sdl); Statistics from Organised Administrative Sources (Sda); Derived Statistics or Reprocessing (Sde); Statistical Information System (Sis) and Project Study (Stu).

Quality of statistical data	It is the correspondence of the data to the factual reality it is intended to quantify. The quality of the "data-product" is its ability to satisfy the properties guaranteed by the "producer". These properties concern two distinct areas, that of reliability which concerns the levels of accuracy of the estimates and that of adequacy which concerns particular aspects of the plan of a survey and more precisely those connected, on the one hand, to the definition of the objectives and, on the other, to the dissemination of the results. We speak in the latter case of timeliness of information, of transparency of data.
Quality of life	It is the perception that individuals have of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a multidimensional concept that can be measured through sets of indicators of the well-being of the population in its various dimensions. Well-being, in fact, depends on both material living conditions and individual perceptions of quality of life. Material conditions include income and employment and housing situation. The non-material dimensions of quality of life, on the other hand, include health, education, environmental quality, personal safety, civic engagement and work-life balance.
Quartiles, quintiles, percentiles	Values that result in a division of the distribution into equal parts: When the distribution is divided into 4 equal parts (q=4) we speak of quartiles (each part comprises 25% of the sample size of the total), into 5 equal parts (q=5) we speak of quintiles, into 10 equal parts (q=10) we speak of deciles, into 100p equal parts (q=100) we speak of percentiles.
Statistical register	It identifies a homogeneous, structured, up-to-date and authorised set of objects and properties recorded exclusively for official statistical purposes, by a body of the National Statistical System. The objects and data of a SR are determined by definitions and classifications which derive exclusively from statistical criteria related to the needs of official statistics. Objects identify statistical units. An RS is usually created and updated from a variety of sources: administrative, other RSs, statistical surveys. It contains mostly properties, statistical data, of a primary type. Examples of statistical registers: register of companies, households and individuals, register of economic units, etc.
Confidentiality	Condition of what is entrusted to discretion and secrecy. The condition normally concerns elementary data. Data for which there is a predetermined limit of dissemination and notoriety is confidential. This is in conflict with the need for dissemination and disclosure of the data, which can however be achieved after processing (rounding, perturbation, aggregation of several data, etc.) of the data itself, so that it cannot be traced back to the statistical unit with which it is associated.
Statistical secret	Exclusion of the possibility of identifying the statistical unit to which a publicly available data item refers. In some cases, information is allowed for privileged categories of users. Sometimes the term confidentiality is used. Out of respect for privacy, Italy adheres to the European convention that excludes questions about race, religion, political opinions, etc. for official statistics.

Time series	A historical (or time) series is a set of observations sorted with respect to time, and expresses the dynamics of a certain phenomenon over time: the trend of commodity prices, stock market indices, the BTP/BUND spread, the unemployment rate. Time series are studied both to interpret a phenomenon, identifying components of trend, cyclicality, seasonality and/or accidentality, and to forecast its future trend.
Census section	Minimum territorial unit of survey on the basis of which the census survey in each municipality is organised. Starting from the census sections, higher-level geographical and administrative entities (inhabited localities, sub-municipal areas, constituencies and others) are reconstructed by sum. Each census section consists of a single body delimited by a closed broken line and must be completely contained within one and only one locality. The municipal territory must be exhaustively divided into census sections; the sum of all census sections reconstructs the entire territory.
Sistan (National Statistical System)	It is the network of public and private entities that provides Italy and international bodies with official statistical information. Established by legislative decree no. 322 of 1989 and regulated by law no. 125 of 1998, its task is to provide Italy and international bodies with official statistical information. In addition to Istat, which is entrusted with the task of coordination, 57 public and private institutions of Sistan participate in the National Statistical Programme (PSN), contributing to the realisation of more than 800 statistical works including surveys, elaborations, project studies and statistical information systems.
ESS (European Statistical System)	The European Statistical System (ESS) consists of Eurostat (the European Union's statistical office), the national statistical institutes of the Member States and the other national authorities producing European statistics. The system ensures that European statistics produced in all EU Member States are reliable and follow common criteria and definitions, so that information is always comparable across EU countries. The ESS is established by the European Statistics Act, promulgated in 2009 by Regulation (EC) No. 223 of the European Parliament and of the Council and its revision by Regulation (EU) No. 759/2015. In 2005, the EU Commission adopted the European Statistics Code of Practice (with subsequent revisions. Most recently in 2017) as a self-assessment tool based on sixteen principles to be followed to ensure and strengthen the trust and quality of the European statistics developed produced and disseminated by the European Statistical System.
SMART	SMART is an acronym which, when attributed to an indicator, stands for specific, measurable, attainable or achievable, relevant, timely (or time-based) and indicates the criteria for the formulation of an indicator, which must therefore be specific, measurable, attainable, relevant and time-based.
Official statistics	Official statistics are defined as the statistical output contained in the national statistical programme, in the regional statistical programmes and, in general, that produced by the bodies and offices of the National Statistical System in the public interest. Official statistics must meet specific quality requirements. In 1992, the fundamental principles of official statistics were adopted by the European Economic Commission and subsequently by the United Nations (professional independence, quality, statistical confidentiality, impartiality, sound methodology, non-excessive burden on respondents, etc.).

Activity rate	It expresses the percentage of the population that belongs to the labour force (the sum of the employed and the unemployed). It is calculated as the ratio of persons in the labour force in a given age group (typically 15-64) to the total population in that age group, multiplied by 100.
Unemployment rate	It expresses the percentage of unemployed over the active population in the labour market. It is calculated by the ratio of the unemployed in a given age group (usually 15 years and over) to the total of employed and unemployed in that age group, multiplied by 100.
Employment rate	It expresses the percentage of the population in employment. It is calculated by the ratio of employed persons in a certain age group (usually 15-64) over the total population in that age group, multiplied by 100.
Timeliness	Aspect of data quality relating to the time lag between their collection and their availability. These can be considered timely if, in relation to certain objectives, they are disseminated in a timeframe appropriate to their achievement.
Trend	In the analysis of historical series, the trend indicates the underlying tendency characterising the trend of a phenomenon over a certain period of time. It is analysed using deterministic or stochastic models.
Transparency	It is the accessibility of all the information needed to assess data quality. It may refer to the results of a statistical survey, or more particularly to the operational steps of a single procedure, the term implies the availability of the information needed to make a judgement on the quality of the data. It is thus an expression of a particular attitude of the subject who, having carried out the survey, allows others to make a thorough assessment of his or her work.
Sample unit	One of the units composing the sample. It is worth distinguishing this denomination from that of "sampling unit", by which it is meant one of the units that make up an aggregate to be sampled, which are individual and indivisible at the time the sample selection is made. The units to be extracted may be defined on a natural basis (persons, de facto households, animals, etc.), on a legal basis (registry households), on an administrative basis (municipalities, hospitals) or on any other basis (areas into which a territory to be surveyed is divided).
Statistical unit	Elementary unit of the statistical population. It can be a natural person (the census taker, a person discharged from a nursing home), a legal person (the company), an institution (the school), an event (a wedding, a snowfall), etc.
Validation	Constant verification of data, information, research, through appropriate procedures.
Validity	It is used to indicate the rigorousness or consistency of a study. The use of the term "validity" implies a subjective judgement on the part of study examiners and is not quantifiable.

Expected value	The expected value of a random variable is given by the sum of the different values (future outcomes) of the variable weighted by the relative probability of occurrence given that, under conditions of uncertainty, a variable can take on n different values. The expected value of a statistic that depends on sample data and has a statistical distribution is also known as the mean or expectation.
Vital Statistics	English term for population statistics.

REFERENCES

- Ministry of Foreign Affairs and International Cooperation, 'Three-year planning and policy document 2019-2021'
- Ministry of Foreign Affairs and International Cooperation, AICS, AICS-DGCS Plan for effectiveness of interventions 2020-2022
- Eurostat 'Guide to statistics in European Commission development co-operation'
- OECD Development Co-operation Report 2017 'Data for Development'
- OECD Development Policy Papers 'Key trends in development co-operation for national data and statistical systems'
- UN 2020, 'How COVID-19 is changing the world: a statistical perspective - Vol.II'
- World Bank World Development Report 2021: DATA FOR BETTER LIVES