# Innovation and modernization of national statistical systems through "trusted data collaboratives"

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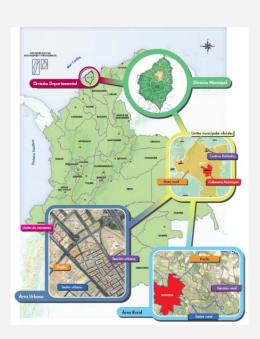


The Colombian National Statistical System has increasingly more and better statistics for the decision making process





SCIENCE AND TECHNOLOGY INTERNATIONAL TRADE CULTURE LABOUR MARKET SERVICES GOVERNMENT HEALTH POVERTY INDUSTRY MONTHLY INDICATORS ENVIRONMENT TRANSPORTATION EDUCATION AGRICULTURE QUALITY OF LIFE DEMOGRAPHY INFORMATION PRICES AND COMUNICATIONS PARTICIPATION TRADE



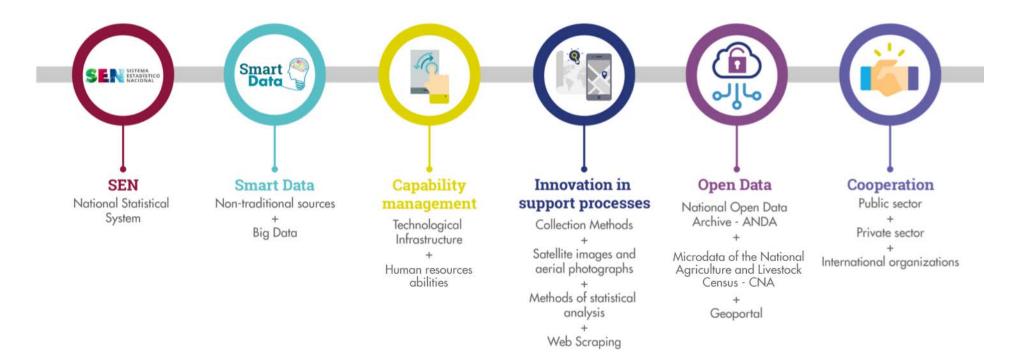
### More than 500

STATISTICAL
OPERATIONS
PRODUCED
BY MORE THAN
100 NATIONAL
INSTITUTIONS

Since 2014 DANE began its process of modernization and innovation aimed at impacting the generation, production and dissemination of statistics in Colombia, collaborations have been an important factor in achieving this.







The NSS allows us to improve the availability, quality, consistency and comparability of statistics and to reduce the duplication of efforts, and is the scenario to foster collaborations











Consists of Entities









### **ENSURES**

PRODUCTION AND DISSEMINATION OF OFFICIAL STATISTICS

**NATIONAL ADVISORY COUNCIL OF STATISTICS** 

### **COORDINATION INSTRUMENTS**



STATISTICAL REGULATION



STATISTICAL PLANNING



STATISTICAL
QUALITY
ASSESSMENT



ACCESS TO

ADMINISTRATIVE RECORDS

AND EXCHANGE OF

INFORMATION



The National Statistical Plan (PEN) is the five-year roadmap that will guide the entities of the NSS in the strengthening of the statistical activity in Colombia, establishing strategies and actions.

We are working on the incorporation of non-traditional and Big Data sources into the statistical process: **Smart Data**, It is not only about how big but, how smart is its use







### Objective > TO STRENGTHEN

**Strategy**Using data smartly



In capability management, We promote projects, courses and working groups to strengthen skills from our human resources and to improve our technological infrastructure.







# DANE actively promotes innovation to improve the sA2 port and core processes for generating strategic information

Innovation in

support processes





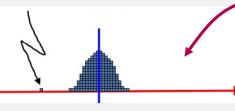


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#### Innovation in collection methods



Monitoring and control systems for the field operations of censuses and surveys.



Incorporation of statistical analysis methods for the identification of outliers in the CPI



Use of satellite images and aerial photographs to update the census framework for the design, operation and dissemination of the national population and housing census for 2018.



Web scraping for the update of hotels directory and exploratory project for the collection of CPI prices

**A2** AndresM, 06/11/2017

# In Open Data we have made efforts to increase access and dissemination of our information through better visualizations and datasets available on our website







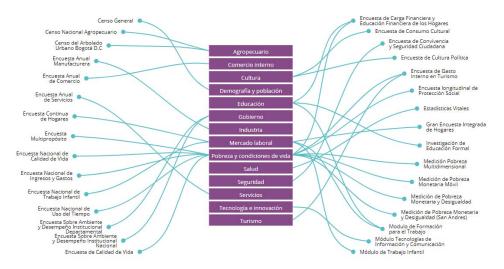
National open data file – ANDA: Availability of the microdata of the statistical research carried out by DANE.

30 Microdata sets avaible, including economic surveys



Visor de Microdatos Archivo Nacional de Datos (ANDA)

Este sistema permite la consulta por temática, operación estadística y año, de los diferentes microdatos anonimizados dispuestos al público por parte del DANE.



https://sitios.dane.gov.co/visor-anda/

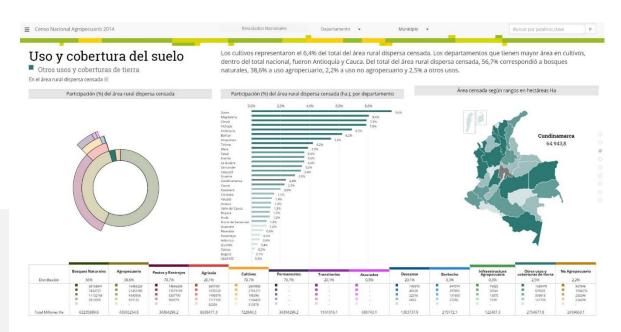
### **Open data:** Making information available to society by means of Web applications







Making the anonymized and geo-referenced microdata of the national agriculture and livestock census available.



https://sitios.dane.gov.co/cna-dashboard/#/national

Open data: the Geoportal combines statistical information integrated with the geospatial information adding value to the analysis of data



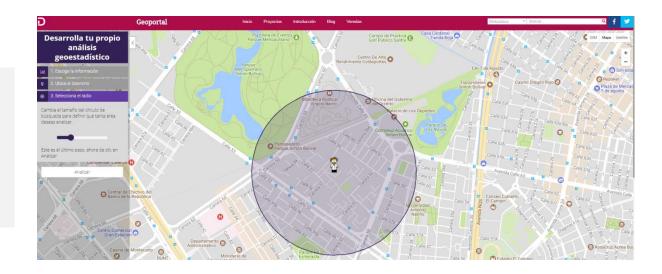




### Functionalities:

- Geovisor
- Visualization lab
- Data and metadata

### Users can build their own statistical analysis



https://geoportal.dane.gov.co/v2/

## **Strategic Alliances** are fundamental for trusted data collaboratives to foster the modernization and innovation of the statistical production.







### International organizations for research and development of methodologies

NASA – Availability of satellite images OPAL – open algorythms – development of open and available applications GPSDD – thematic and methodological experts CEPEI - statistical culture, data journalism



### **Private sector**

National Confederation of Chambers of Commerce
— Single Business Registry CLARO (Mobile phone operator) 23

#### **Public sector**

Ministry of Health and Social Protection
– Social Security Register
Superintendence of Notaries Public and
Registries and Cadastral Office – Land
Register

Ministry of Industry, Trade and Toursim

- National Tourism registry
- National planning Deparment

### Slide 11

Por favor cual es la diferencia a nivel oficial entre Registro predial y registro de bienes inmuebles, al traducirlo se ve igual, por lo que 23 me parece importante definirlos

Xime Diaz, 29/10/2017

Agregue la definición en inglés de los acrónimos Xime Diaz, 29/10/2017 25

We have made significant progress in terms of data collaboratives, but there are still challenges related to the access of data generated by the private sector.





Access and use of data should not depend on the particular interest of owners but rather on the pertinence and contribution of the data to the development of countries and societies, which is the actual meaning of "Leaving no one behind".







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