



**United Nations**

DESA  
Statistics Division

UN World Data Forum Webinar

## Visualizing Progress Towards the SDGs



## Making progress visible



Luis Gonzalez Morales

*“Our job is to set the stage  
to help users get to know the data in front of them  
to the point they can formulate and respond questions  
that help them achieve their goals”*

Nathan Yau

## Vision

To make more and better data open, accessible, and used to the fullest extent possible in improving people's lives



Luis Gonzalez Morales



UNITED NATIONS



NATIONS UNIES



Luis Gonzalez Morales

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**STATISTICAL YEARBOOK** **1948**  
**ANNUAIRE STATISTIQUE**

FIRST ISSUE—PREMIERE ANNEE

Prepared by the Statistical Office of the United Nations.  
Préparé par le Bureau de Statistique de l'Organisation des Nations Unies.

LAKE SUCCESS, NEW YORK, 1949

#### 4. Infant mortality rates: 1932 - 1947 — Taux de mortalité infantile: 1932 - 1947

[Exclusive of stillbirths. Deaths per 1 000 live births in that year.]  
[Non compris les mort-nés. Décès par 1 000 naissances vivantes au cours de l'année.]

Country — Pays	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
<b>AFRICA — AFRIQUE</b>																
Egypt — Egypte.....	173.5	162.5	166.0	160.6	163.8	165.5	163.4	161.2	161.8	150.2	168.4	160.2	152.3	152.8	...	...
Union of South Africa <sup>1</sup> — Union Sud-Africaine <sup>1</sup> ..	68.6	61.0	60.8	62.8	59.1	56.6	51.7	49.5	50.1	50.9	47.6	47.3	42.5	40.3	35.9	35.2
<b>OTHER AREAS — AUTRES REGIONS</b>																
Algeria [Fr.] — Algérie [Fr.]																
Europeans — Européens.....	120.6	113.6	119.9	108.8	107.9	125.1	...	94.1	102.7	105.9	102.7	132.6	107.1	108.5	91.9	...
Moslems — Musulmans.....	88.9	84.5	90.6	82.4	76.5	<sup>2</sup> 88.6	...	...	...	...	...	...	...	...	...	...
Morocco <sup>3</sup> [Fr.] — Maroc <sup>3</sup> [Fr.].....	...	...	...	...	...	...	...	83.3	97.6	88.6	84.5	99.5	103.5	101.0	68.6	58.5
Tunisia <sup>1</sup> [Fr.] — Tunisie <sup>1</sup> [Fr.].....	...	...	...	...	...	...	...	...	...	...	...	153.6	118.0	93.3	94.8	...
Mauritius <sup>4</sup> [U.K.] — Ile Maurice <sup>4</sup> [R.-U.].....	159.0	131.5	129.8	139.4	142.3	154.4	162.5	157.5	162.0	134.8	163.4	141.6	141.0	188.0	145.2	113.9
Northern Rhodesia <sup>1</sup> [U.K.] — Rhodésia du Nord <sup>1</sup> [R.-U.].....	...	...	...	...	...	...	28.2	18.5	28.8	26.5	30.4	33.9	42.7	34.9	38.5	48.6
Southern Rhodesia <sup>1</sup> [U.K.] — Rhodésia du Sud <sup>1</sup> [R.-U.].....	54.9	55.4	44.8	48.1	49.2	50.5	38.8	45.4	40.6	42.5	40.0	39.9	44.9	35.3	30.3	38.3
South-West Africa <sup>1</sup> — Sud-Ouest Africain <sup>1</sup> ..	37.3	37.6	87.1	45.8	32.4	29.7	36.8	39.4	27.2	38.6	50.1	29.3	56.1	41.2	39.4	28.6
<b>AMERICA, NORTH — AMERIQUE DU NORD</b>																
Canada <sup>5</sup> .....	73.3	73.1	71.7	71.0	66.1	75.8	63.3	60.7	56.4	59.7	53.8	53.7	54.7	51.3	46.7	45.5
Costa Rica.....	155.1	163.7	135.6	157.0	152.9	141.7	121.7	140.1	132.4	123.5	157.3	116.8	125.0	110.1	101.6	84.4
Dominican Republic — République Dominicaine	...	...	...	...	48.1	47.2	49.8	49.7	61.3	59.8	51.8	72.5	108.6	90.1	89.4	98.9
El Salvador.....	134.0	141.0	136.2	140.3	120.3	133.4	117.2	115.6	120.8	105.3	117.5	110.0	117.9	108.0	113.0	96.4
Guatemala <sup>6</sup> .....	83.7	106.8	107.9	100.2	91.1	98.7	101.1	128.1	108.9	107.8	140.8	122.5	115.6	103.5	114.5	109.9
Honduras <sup>7</sup> .....	...	92.4	105.8	87.4	108.6	101.6	102.4	106.1	108.8	106.2	110.2	127.3	109.0	...	...	...
Mexico — Mexique.....	137.5	139.3	130.3	125.7	130.8	130.8	128.0	122.6	125.7	123.0	118.2	117.2	113.5	107.9	110.6	96.7
Nicaragua.....	...	102.6	107.9	105.6	98.6	93.9	92.4	93.5	108.8	103.2	129.7	100.4	112.6	92.6	101.2	101.7
Panama <sup>8</sup> .....	...	...	...	...	...	...	...	...	...	65.3	76.6	72.0	* 66.5	* 68.5	* 60.2	* 51.8
United States — Etats-Unis.....	<sup>9</sup> 57.6	58.1	60.1	55.7	57.1	54.4	51.0	48.0	47.0	45.3	40.4	40.4	39.8	38.3	33.8	* 32.0
<b>OTHER AREAS — AUTRES REGIONS</b>																
Netherlands West Indies — Indes Occidentales Néerlandaises.....	...	...	...	...	...	...	67.6	72.9	89.2	68.1	82.6	41.9	56.1	40.6	41.7	35.9
British West Indies — Indes Occidentales Britanniques																
Barbados — Barbade.....	198.-	235.-	256.-	219.9	198.0	216.6	220.9	193.0	180.0	...	...	...	...	...	...	163.4
Jamaica <sup>4</sup> — Jamaïque <sup>4</sup> .....	141.0	149.8	131.6	137.6	130.8	118.5	129.2	120.6	111.7	103.9	98.3	93.3	98.8	102.3	89.5	91.9
Leeward Islands <sup>10</sup> — Iles Leeward <sup>10</sup> .....	95.6	144.9	116.2	101.2	102.7	145.3	132.5	158.0	160.8	162.0	120.2	90.5	119.4	102.7	151.0	97.9
Trinidad and Tobago — Trinité et Tobago...	108.9	131.3	127.4	99.4	96.8	120.5	98.4	103.6	106.2	108.9	119.0	93.2	80.2	83.9	78.1	81.5
Windward Islands <sup>11</sup> — Iles Windward <sup>11</sup> ...	96.3	94.2	105.4	100.0	105.7	112.2	112.2	107.7	112.1	110.9	132.4	107.2	107.7	95.2	103.7	116.8
Panama Canal Zone [U.S.] — Zone du Canal de Panama [E.-U.].....	71.0	75.8	60.5	50.4	54.4	65.8	36.7	65.3	54.5	56.0	37.9	37.8	31.2	33.7	34.7	32.1
Puerto Rico [U.S.] — Porto-Rico [E.-U.].....	132.3	139.6	113.7	114.8	128.2	137.8	121.0	112.6	113.6	116.2	103.3	96.4	99.3	93.0	83.8	71.2
Virgin Islands [U.S.] — Iles Vierges [E.-U.].....	133.8	157.4	97.4	170.7	105.4	124.1	132.3	101.7	136.2	112.2	101.2	83.8	101.0	124.0	91.6	...

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POPULATION



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# The data revolution for sustainable development is here



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- **Today's technology** makes huge amounts of **SDG data** widely and easily accessible
- But data does not have much value in its raw state
- To support effective policy and decision making, what matters are the **insights** that **people** derive from it



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# Seeing is believing

- Data is much easier to grasp on a visual space





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## Visualization is about finding relationships in data

- Good data visualizations help user identify trends, patterns, and outliers that are not evident from the raw data
- Letting the users' brains find the patterns
  - Understanding changes over time
  - Identifying sub-groups within a population
  - Discovering patterns over geographic regions
  - Finding correlation and plausible causation





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## 2 types of visualization tools

- Exploratory
  - Help us quickly generate multiple views on the same dataset in order to discover significant, meaningful patterns in the data
- Explanatory
  - Help highlight what we've already discovered about the data and to communicate specific insights to a target audience

## Context



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- Data visualization is not just about chart and graph design—it also requires explaining the story behind the data
- A standalone chart is not enough to present information to an audience
- The way we design our visualizations will affect how users interpret the underlying information

## Data quality first



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- We need to know our source material to build a good visualization
- Only after we know that the data is accurate and reliable, we can move on to story telling and visual representation
- Data checking and verification is one of the most important parts of graph design

## Infographics: combining text, pictures and data visualizations

*“Converting complex bodies of knowledge  
into visual form is a high art.”*

Sandra Rendgen

## Some examples ...



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**United Nations**

DESA  
Statistics Division



**HIGH-LEVEL POLITICAL FORUM  
ON SUSTAINABLE DEVELOPMENT**

The Sustainable Development Goals Report 2019



Overview

Goal 1

Goal 2

Goal 3

Goal 4

Goal 5

Goal 6

Goal 7

Goal 8

Goal 9

Goal 10

Goal 11

Goal 12

Goal 13

Goal 14

Goal 15

Goal 16

Goal 17

Overview



The Sustainable  
Development  
Goals Report  
2019



End poverty in all its forms everywhere



## Colombia

- 1** No Poverty
- 2** Zero Hunger
- 3** **Good Health and Well-being**
- 4** Quality Education
- 5** Gender Equality
- 6** Clean Water and Sanitation
- 7** Affordable and Clean Energy
- 8** Decent Jobs and Economic Growth
- 9** Industry, Innovation and Infrastructure
- 10** Reduced Inequalities
- 11** Sustainable Cities and Communities
- 12** Responsible Consumption and Production
- 13** Climate Action
- 14** Life Below Water
- 15** Life on Land
- 16** Peace and Justice - Strong Institutions
- 17** Partnerships for the Goals

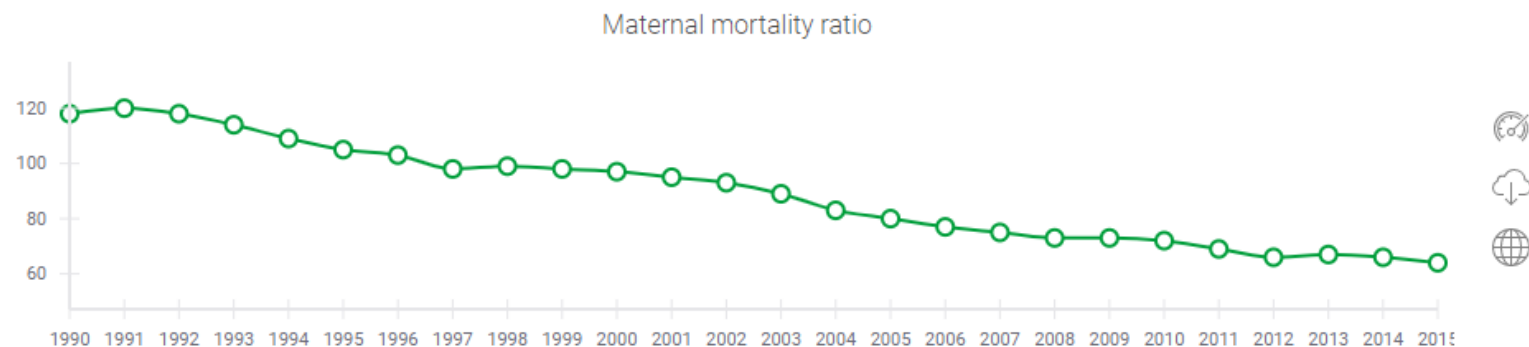
**3** GOOD HEALTH AND WELL-BEING


## Good Health and Well-being

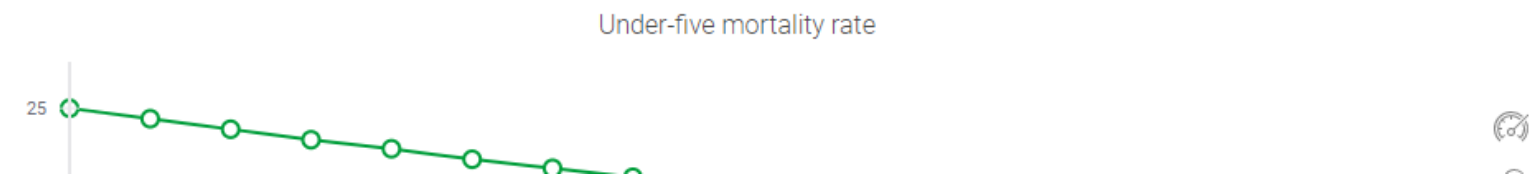
Ensure healthy lives and promote well-being for all at all ages



The maternal mortality ratio decreased from **118** per 100,000 live births in **1990** to **64** per 100,000 live births in **2015**.



The mortality rate of children under 5 years of age fell from **25** per 1,000 live births in **2000** to **14.7** per 1,000 live births in **2017**.





Today's national statistical systems are shifting towards a platform model of value creation





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## Modern data visualization platforms

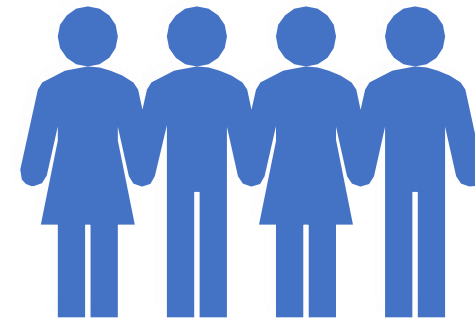
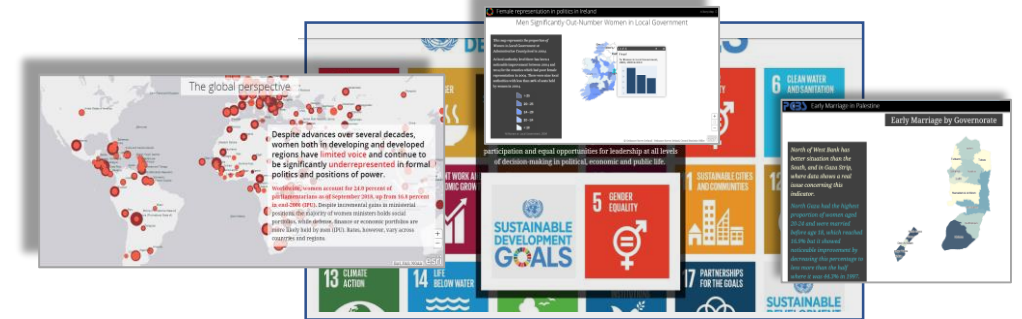
- **Interactive** engagement with all SDG data stakeholders
- Leveraging **web-based** technologies to help users
  - Discover
  - Access
  - Explore
  - Share
  - Use

# Collaborative data visualization



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- Bringing together ideas contributed by many independent participants





## Welcome to the Open SDG Data Hub

To fully implement and monitor progress on the Sustainable Development Goals, decision makers everywhere need data and statistics that are accurate, timely, sufficiently disaggregated, relevant, accessible and easy to use. The Open SDG Data Hub promotes the exploration, analysis, and use of authoritative SDG data sources for evidence-based decision-making and advocacy. Its goal is to enable data providers, managers and users to discover, understand, and communicate patterns and interrelationships in the wealth of SDG data and statistics that are now available.



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**Thank you.**