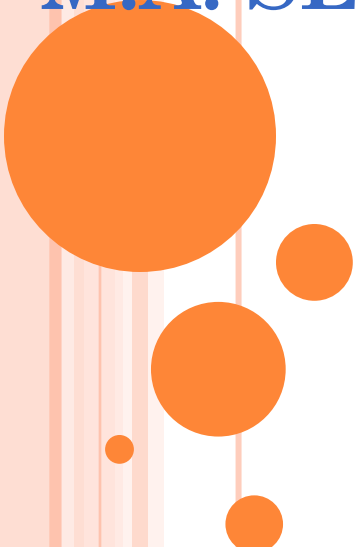


# **E-CONTENT**

## ***TOPIC-POPULATION DISTRIBUTION: WORLD PATTERNS AND THEIR DETERMINANTS***

### **M.A. SEMESTER-II, PAPER-VII**



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# WHY DO PEOPLE PREFER TO LIVE IN CERTAIN REGIONS AND NOT IN OTHERS???

- People make the real wealth of any country. They make use of the resources occurring in nature through their institutions and technology.
- The remark of George B. Cressey about the population of Asia that “Asia has many places where people are few and few place where people are very many” is also true about the world pattern of population distribution.
- Almost 90% of the world’s population live on 10 % of the earth’s total surface area.



# FACTORS INFLUENCING GLOBAL POPULATION DISTRIBUTION

## PHYSICAL FACTORS

### ○ **Climate**

People prefer to live in **temperate climates** where there is enough rainfall and no extremes of temperature.

A lack of fresh water for drinking or **irrigation** stops people living in an area.

Very high temperatures make farming difficult. **Dehydration** and **heat stroke** are other issues.

Areas with high humidity are also uncomfortable places to live and can be affected by **diseases** such as malaria.

Very cold temperatures make it difficult to grow crops or to build homes and **transport links** as the ground can be frozen for much of the year.

Frostbite makes it difficult to work outside for any length of time, and protective clothing would need to be worn.

### ○ **Relief**

Steep slopes make the use of machinery difficult. also make it difficult to build houses, roads and railways.

High, mountainous areas are too cold which makes it difficult to grow crops. And are often **remote** which makes them difficult to access.

Flat, low-lying areas have deeper soil which makes it easier to grow crops.



# CONTINUED.....

- **Natural resources**

Few **natural resources**, such as coal, in an area means there is a lack of industry and therefore a lack of **employment opportunities**.

**Scenery** is a resource and can attract tourists, bringing job opportunities.

- **Soils**

Areas with fertile **soils**, eg river deltas, are good for growing crops to feed the population.

Poor soils with few **nutrients** mean there will be a low agricultural output.

## HUMAN FACTORS

Jobs, e.g., in manufacturing and **service industries** encourage people to move to find work. **Tourism** can also attract visitors to an area, providing local people with jobs.

Areas with good transport links, such as roads and railways, will attract people and **industry** which creates employment opportunities.

Remote areas which are isolated and have poor transport links do not attract people.



# POPULATION DENSITY/PHYSIOGRAPHIC POPULATION DENSITY

- According to **Encyclopedia Britannica**, **demography** is the statistical study of human populations, especially with reference to size and density, distribution, and vital statistics (births, marriages, deaths, etc.).
- A population geographer explains population traits across space, works with demographers, asking why demographic problems vary not only from one region to another and country to country, but also within countries.
- Population density of an area is the measure of total population relative to its land size. It is also known as arithmetic population density. No country has an evenly distributed population and this measure can be misleading. For example: Egypt, with a population of 78.6 million in 2008, has a moderate arithmetic population density of 203 per square mile. Egypt's territory of 386,660 square miles, however, is mostly desert, and the vast majority of the population is crowded into the valley and delta of the Nile River. An estimated 98 percent of all Egyptians live on just 3 percent of the country's land, so, the arithmetic population density figure is meaningless in this case.



# PHYSIOLOGIC POPULATION DENSITY

- Physiological Population Density: It is defined as the number of people per unit area of agriculturally productive land (arable land). It is a more precise measure of population pressure on land of any country. For example:
- When we measure the entire population of Egypt in relation to the arable land in the country, the resulting **physiologic density figure for Egypt in the year 2008 is 6776 per square mile**. This number is far more reflective of Egypt's population pressure, and it continues to rise rapidly despite Egypt's efforts to expand its irrigated farmlands.
- Mountainous Switzerland's high physiologic density is 10 times as high as its arithmetic density. But at the same time, Ukraine, with its vast farmlands: its physiologic density is only 1.7 times as high as its arithmetic density.
- China and India have populations well over 1 billion, but according to the physiologic density, India has much more arable land per person than China.



# POPULATION DISTRIBUTION AND HOW GEOGRAPHERS REPRESENT!!

- Population distribution refers to the way people are spaced over the surface of the earth.
- People are unevenly distributed across the world and within a country. There can be areas where population is sparsely distributed and areas where there may be very high population density.
- Population geographers study population distributions—descriptions of locations on the Earth's surface where individuals or groups (depending on the scale) live. Geographers often represent population distributions on **dot maps**, in which one dot represents a certain number of a population.
- *Population Cartogram*: It is another way to represent population distribution. It is a geographical presentation of the world where the size of the countries are not drawn according to the distribution of land, but according to the distribution of people. Here, each square represents a certain number of a population.



# PATTERNS OF POPULATION DISTRIBUTION IN THE WORLD AND REGIONAL VARIATIONS

- To show the spatial distribution of the world's people, we need a *population cartogram*, a geographical presentation of the world where the size of the countries are not drawn according to the distribution of land, but according to the distribution of people.
- Max Roser, Hannah Ritchie and Esteban Ortiz-Ospina in their research article *World Population Growth* published in 2013 and revised in 2019 have developed the following population cartograms to depict the distribution of population of the world and their relative sizes.
- The cartogram is made up of squares, each of which represents half a million people of a country's population. For example, The 11.5 million Belgians are represented by 23 squares; the 49.5 million Colombians are represented by 99 squares; the 1.415 billion people in China are represented by 2830 squares; and the entire world population of 7.633 billion people in 2018 is represented by the total sum of 15,266 squares. Small countries with large population (Bangladesh, Taiwan, Pakistan, Indonesia or Netherlands) increase in size in the cartogram whereas large countries with small population become small in size (Canada, Mongolia, Australia, Russia etc)





# MOST POPULOUS COUNTRIES IN THE WORLD

- 13 countries in the world are home to more than 100 million people:

China (1.415 billion), India (1.354 billion), United States (326.8m), Indonesia (266.8m), Brazil (210.9m), Pakistan (200.8m), Nigeria (195.9m), Bangladesh (166.4m), Russia (144m), Mexico (130.8m), Japan (127.2m), Ethiopia (107.5m), Philippines (106.5m). A 14th country is very close though, Egypt is expected to reach 100 million next year.

- Together these 13 countries are the home of 4.75 billion people, 62% of the world population.
- Area of Russia is 11 % of the world's total surface area but has only 2% of the world population.



## The World's 10 Most Populous Countries, 2006 and 2050

Largest Countries in 2006	Population in 2006 (in millions)	Largest Countries in 2050	Population in 2050 (estimated, in millions)
China	1,314	India	1,808
India	1,095	China	1,424
United States	300	United States	420
Indonesia	245	Nigeria	357
Brazil	188	Indonesia	313
Pakistan	166	Bangladesh	280
Bangladesh	147	Pakistan	278
Russia	143	Brazil	228
Nigeria	132	Democratic Republic of Congo	203
Japan	127	Mexico	148

(Source: U.S. Census Bureau International Data Base, 2006.)



# PATTERNS OF POPULATION DISTRIBUTION IN ASIA AND OCEANIA

- Within this world region the population is very unequally distributed. South-East Asia is densely populated while large countries such as Mongolia, Australia, Kazakhstan, and the Asian part of Russia are home to relatively few people. And again within countries, there is very high population concentration.
- The metropolitan area of Beijing has the same population as all of Australia.
- Tokyo's population almost equals the population of all of Oceania.
- China and India are the two most populous countries of the world.
- More than a third of the world population – 36.2% – live in India and China.
- 60% of all Asians live in China or India.
- Today, both India and China have a larger population than the entire world population in 1850 (when the world population was around 1.26 billion people).
- Seven of the world's 13 countries with more than 100 million inhabitants are in Asia.
- The population of Asia has tripled in size since 1950.







# POPULATION DISTRIBUTION IN EUROPE

- 711 million people live in Europe, less than 10% of the world population.<sup>8</sup>
- Five European countries have a population that is larger than 50 million: The European part of Russia (110 million), Germany (82.3 m), the UK (66.6m), France (65.2), and Italy (59.3m).
- Some regions of Europe are very densely populated. The Netherlands has a population density of 505 people per km<sup>2</sup> (compared, for example, to the US with 35 people per km<sup>2</sup> ).
- The population of China is almost exactly twice as large as the population of Europe.
- While the population of Europe is small, the continent is economically very powerful and much richer than most other parts of the world. The per capita output and income of the Swedes for example is 30-fold higher than the per capita output and income of the Indians and 8-times higher than the per capita output or income of the Chinese.

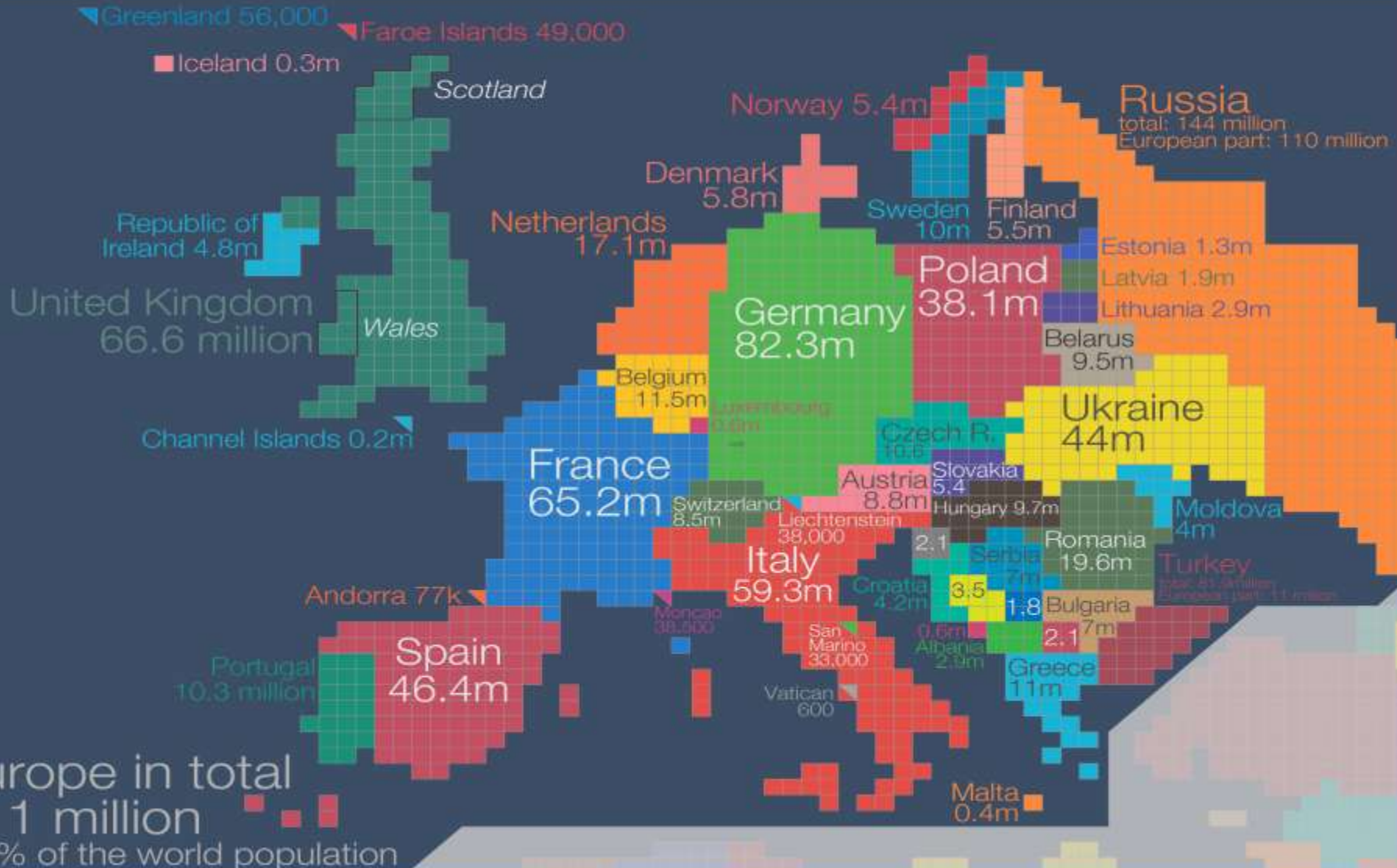


# Europe's Population in 2018

The country's size in this map represents the size of the population. Each square [■] represents 500,000 people, by Max Roser for [OurWorldinData.org](https://ourworldindata.org) – the free online publication that presents the data and research on how the world is changing.

Population data from the UN Population Division, Version 1 (September 2018).

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# PATTERNS OF POPULATION DISTRIBUTION IN AFRICA

- Africa is the second most-populous continent and is home to almost 1.3 billion people.
- 1-in-6 people in the world live in Africa.
- Two countries have a population of more than 100 million: Nigeria with 195.9 million and Ethiopia with 107.5 million.
- Population density varies hugely on the African continent. The largest African country is Algeria, but it is relatively sparsely populated. At the other end of the spectrum are Rwanda and Burundi. The two neighboring countries are densely populated and are both home to around 12 million people.







# POPULATION DISTRIBUTION IN AMERICAS

- The population of the Americas is roughly one billion (1.015 billion). 428 million live in South America and 587 are in North America, Central America, and the Caribbean.
- The USA – the third most populous country in the world – is by far the most populous country on the American continent. Its population is roughly as large as the population of the two runner-ups – Brazil and Mexico – combined.
- Canada has a population density of just 4 people per km<sup>2</sup> – in the cartogram the second largest country in world (by area) is reduced to not much more than a slim line of squares.
- The population density across the different South American countries is relatively similar.
- The population of the American continent has increased very rapidly over the course of the last few generations. Historical estimates suggest that in 1820 the population was only around 35.5 million. At the time this made up just 3.4% of the world population.
- Over the last two centuries the population growth rate in the Americas (28-fold) was much faster than in Europe (3-fold), Africa (14-fold), or Asia (6-fold).
- And some countries in the Americas had even faster population growth. The size of the US population in the 13 founding states at the time of *Declaration of Independence*, for example, is estimated to have been only 2.5 million.

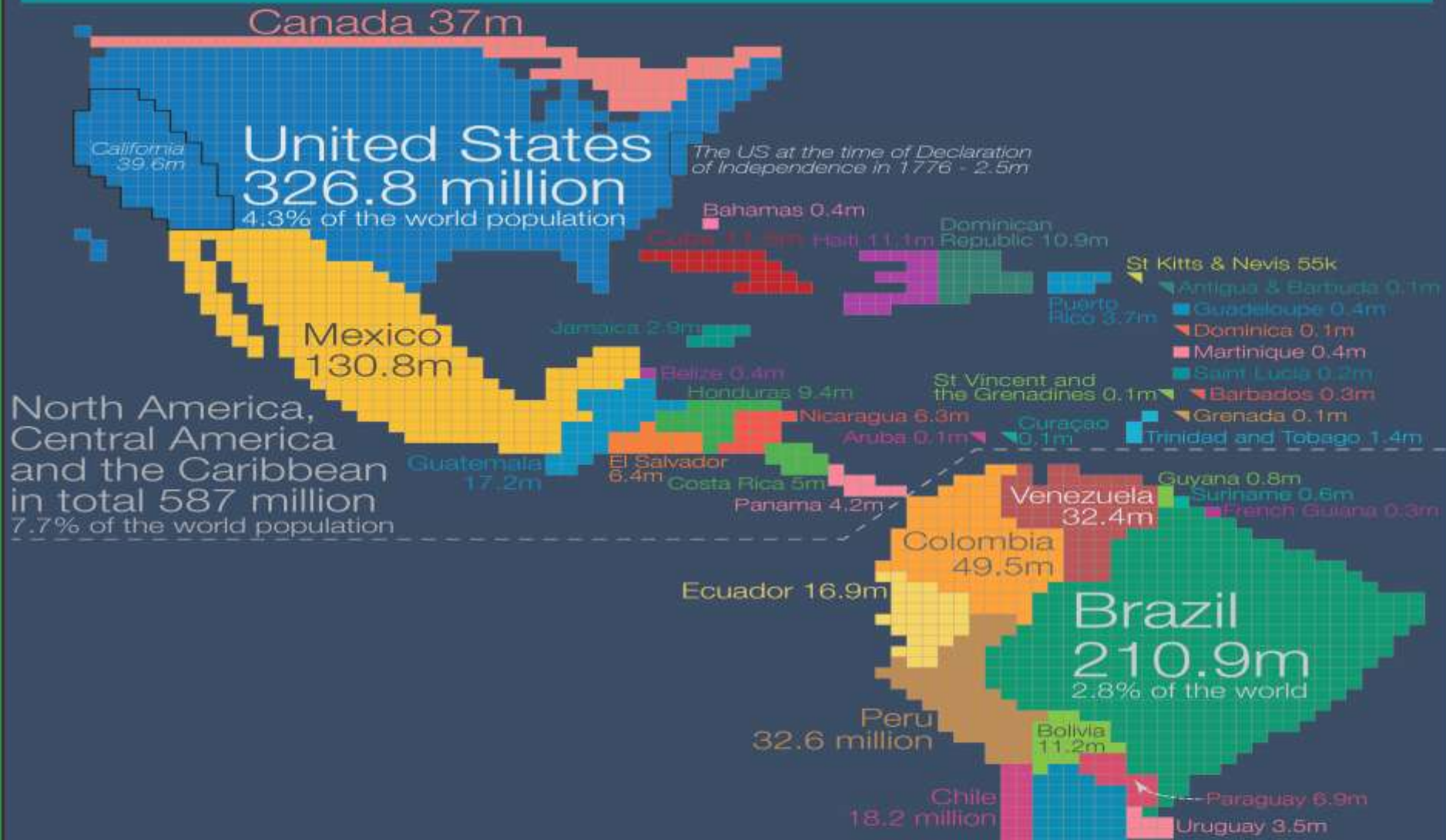
# Population of the Americas in 2018

The country's size in this map represents the size of the population.  
Each square [■] represents 500,000 people.

by Max Roser for [OurWorldinData.org](http://OurWorldinData.org) – the free online publication that presents the data and research on how the world is changing.

Population data from the UN Population Division.  
Version 1 (September 2018).

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# REGION WISE POPULATION DENSITY

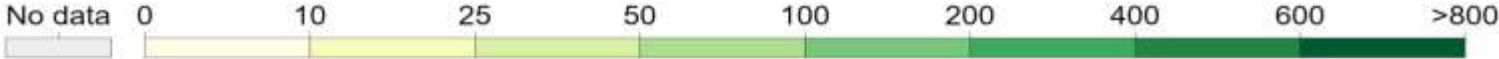
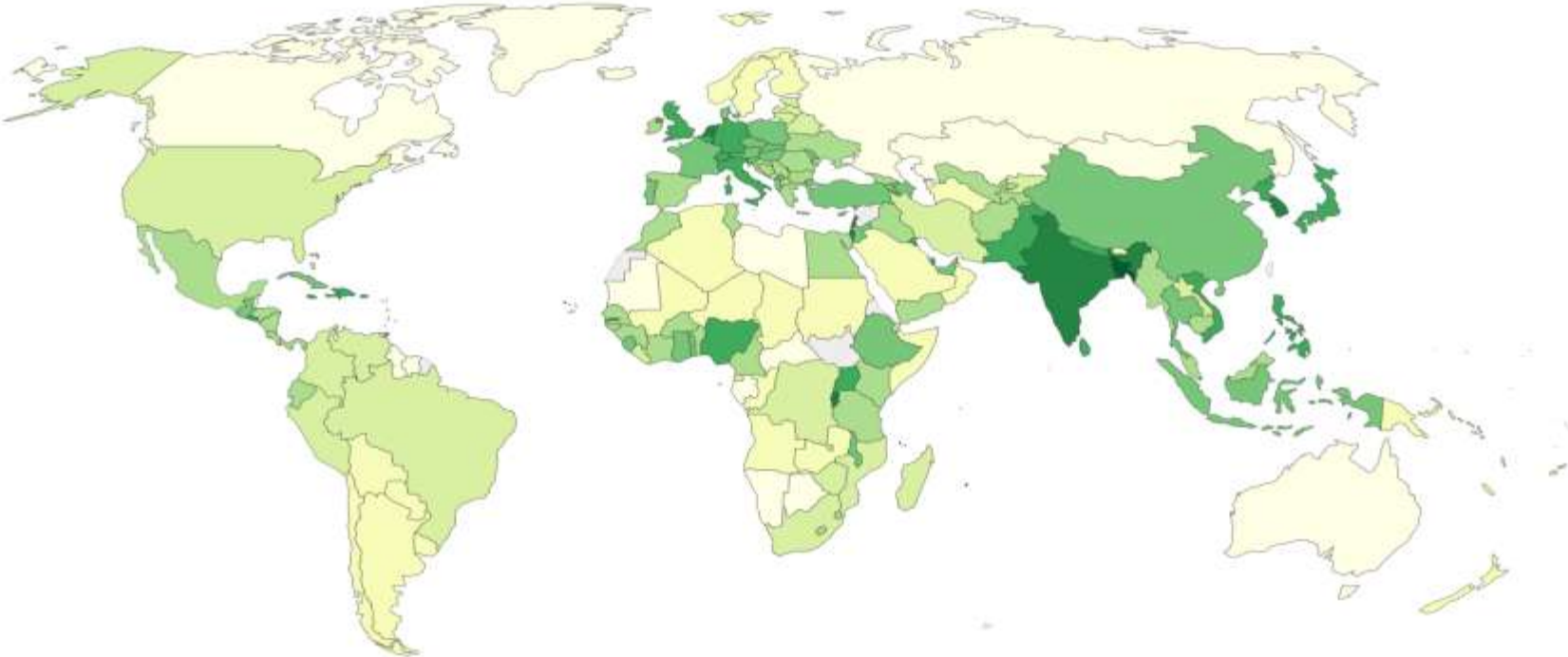
SOURCE: [HTTPS://WWW.WORLDMETERS.INFO/WORLD-POPULATION/POPULATION-BY-REGION/AS](https://www.worldometers.info/world-population/population-by-region/) ON  
22.07.2020

REGION	POPULATION	LAND AREA (Km Sq.)	DENSITY (P/Km Sq.)	WORLD SHARE( IN PER CENT)
ASIA	4,641,054,775	31,033,131	150	59.5
AFRICA	1,340,598,147	29,648,481	45	17.2
EUROPE	747,636,026	22,134,900	34	9.6
LATIN AMERICA & CARIBBEAN	653,962,331	20,139,378	32	8.4
NORTH AMERICA	368,869,647	18,651,660	20	4.7
OCEANIA	42,677,813	8,486,460	5	0.5

# REGIONAL VARIATIONS IN WORLD POPULATION DISTRIBUTION

## Population density, 2017

Population density is defined as the number of people divided by land area, measured in square kilometers (km<sup>2</sup>).



# MAJOR POPULATION CLUSTERS AT THE WORLD LEVEL!!

- At the global scale, there are four major population clusters, out of which three are in Eurasia (Europe and Asia combined). The fourth largest population cluster is in North America.
  1. **East Asia:** The most extensive area of dark shading lies in East Asia, primarily in China but also in Korea and Japan. Almost one-fourth of the world's population live here— 1.4 billion people in China alone. Along with that, ribbons of high population density extend into the interior along the Yangtze and Yellow River valleys. Farmers along China's major river valleys produce crops of wheat and rice to feed not only themselves but also the population of major Chinese cities such as Shanghai and Beijing.

CONTD.....

2. **South Asia** : In the dot map given here, the concentration covering India extends into Pakistan and Bangladesh and onto the island of Sri Lanka. Here, people again cluster in major cities, on the coasts, and along rivers, such as the Ganges and Indus.

The Himalayas in the north and the desert west of the Indus River in Pakistan make the physical geographical boundary of South Asia population cluster. Major share of its population constitute of farmers and therefore there is huge pressure on land.



# CONTD....

**3. Europe:** An axis of dense population extends from Ireland and the United Kingdom into Russia and includes large parts of Germany, Poland, Ukraine, and Belarus. It also includes the Netherlands and Belgium, parts of France, and northern Italy. This European cluster contains over 715 million inhabitants, less than half the population of the South Asia cluster.

The European population cluster includes many cities and towns, many of which developed as a result of the Industrial Revolution. In Germany, 88 percent of the people live in urban places; in the United Kingdom, 89 percent; and in France, 74 percent. With so many people concentrated in the cities, the rural countryside is more open and sparsely populated than in East and South Asia (where only about 30 percent of the people reside in cities and towns).



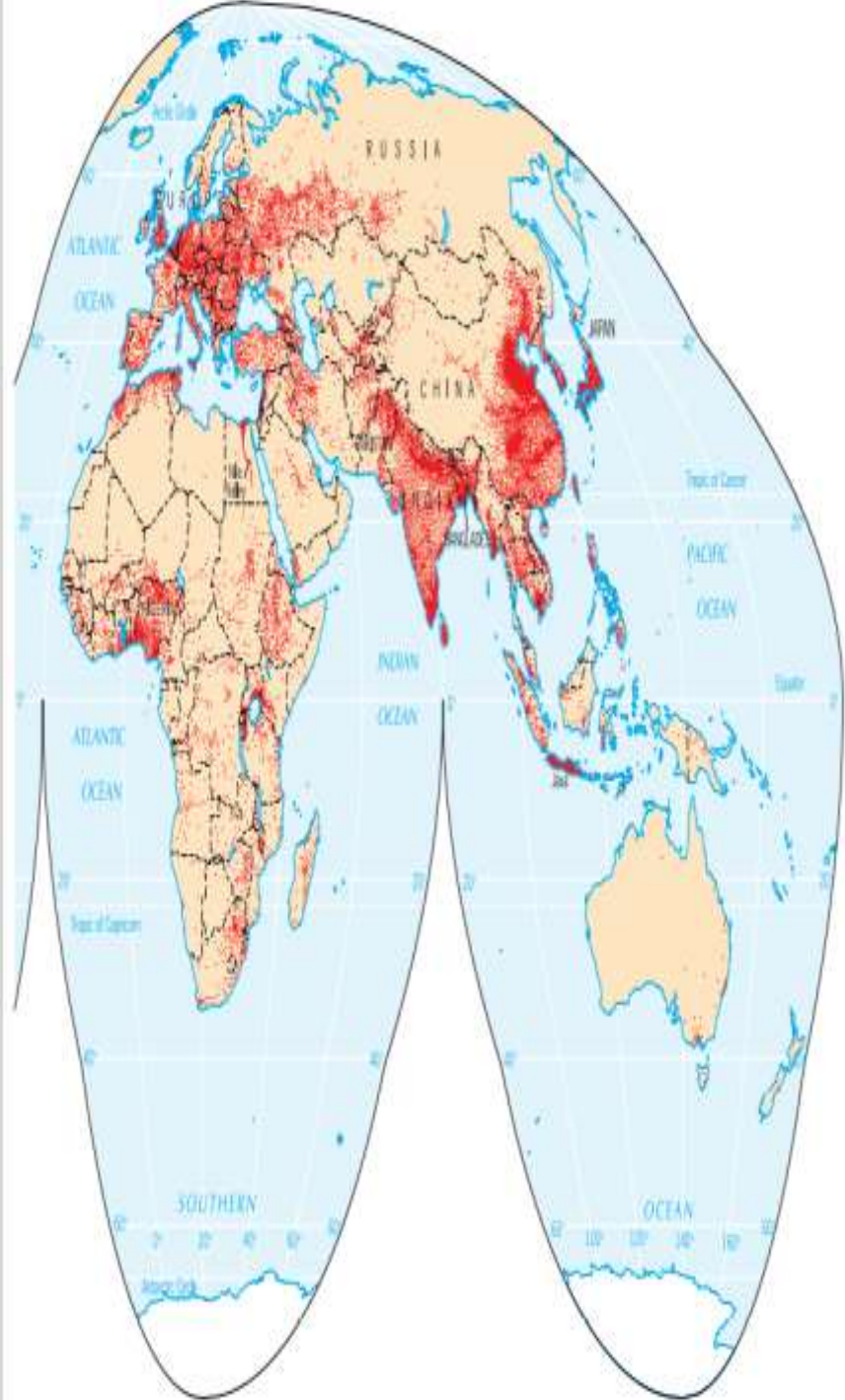
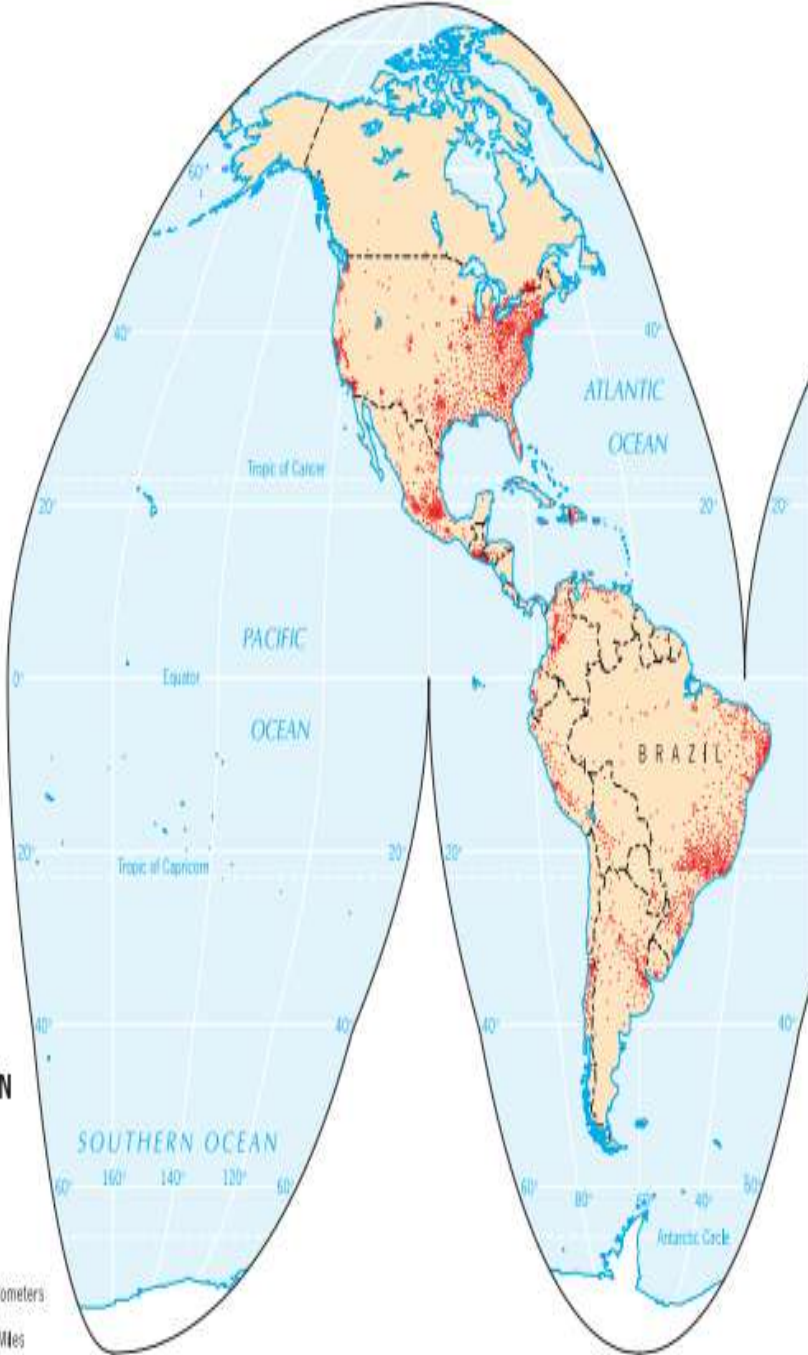


CONTD...

**4. North East America:** North America has one quite densely populated region that runs along the urban areas of the East Coast, from Washington, D.C. in the south to Boston, Massachusetts in the north. , the cities in this region agglomerate into one large urban area that includes Washington, D.C., Baltimore, Philadelphia, New York City, and Boston. Urban geographers use the term megalopolis to refer to such huge urban agglomerations. These megalopolis make 20 % of the US population.

The total population of megalopolis is 2.8% of the East Asian population cluster, and that the 5,309 people per square mile density of New York City is far less than the density in world cities like Mumbai, India, with a population density of 76,820 per square mile or Jakarta, Indonesia, with a population density of 27,137 per square mile





**WORLD POPULATION DISTRIBUTION**  
One dot represents 100,000 people

0 1000 2000 3000 Kilometers  
0 1000 2000 Miles

# POPULATION DENSITY OF SELECTED COUNTRIES OF ASIA IN 2017

SOURCE- WORLD BANK

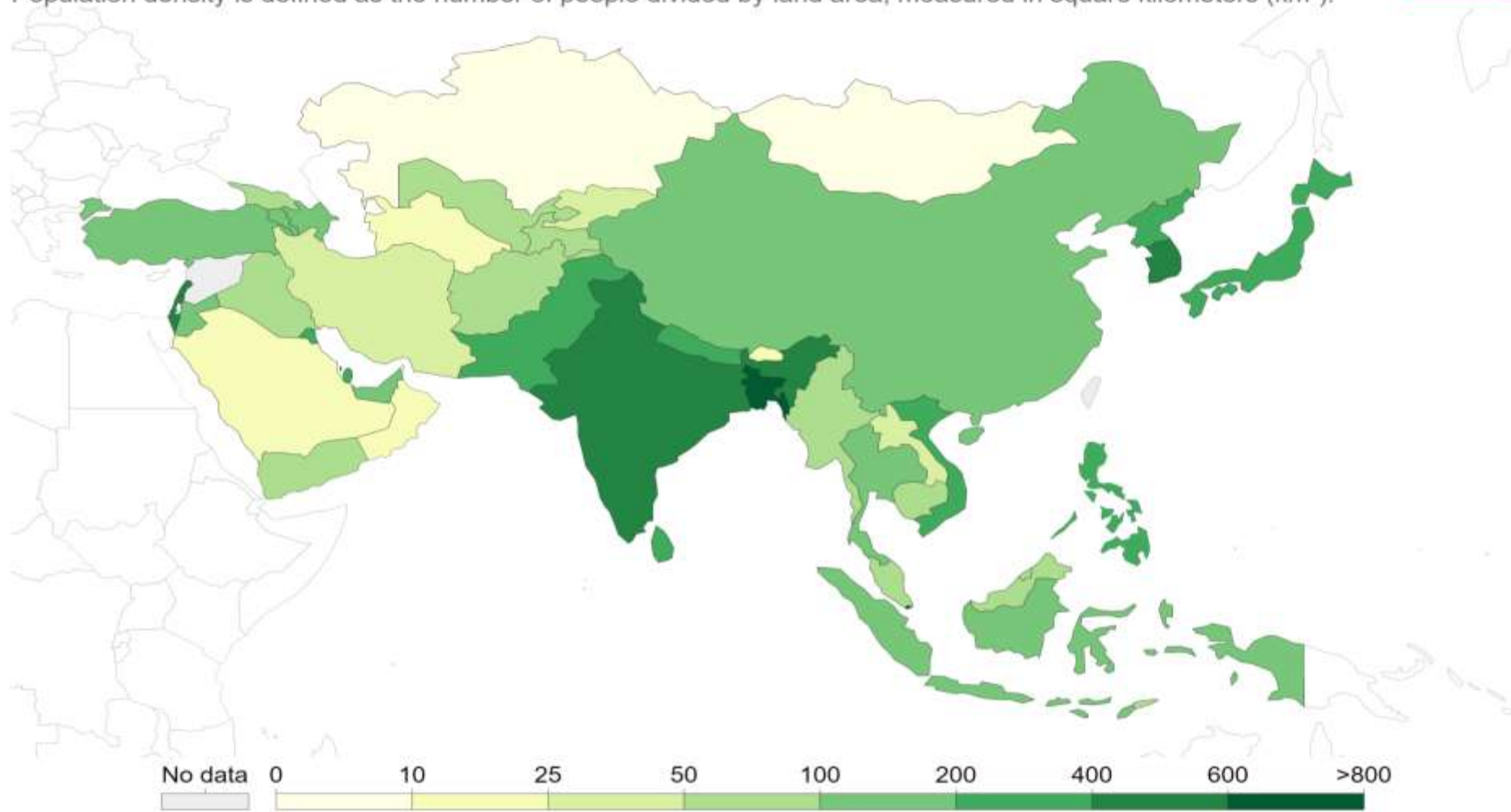
Sl No	Country/Region	Population density(Persons/Km sq.)
1	Singapore	7916
2	Bangladesh	1265
3	South Korea	528
4	India	450
5	China	148
6	Japan	348
7	Indonesia	146
8	Malaysia	96
9	Pakistan	256
10	Nepal	204
11	Saudi Arabia	15
12	Iran	50
13	Myanmar	82
14	Mongolia	02
15	Kazakhstan	07

# POPULATION DENSITY IN ASIA

## Population density, 2017

Population density is defined as the number of people divided by land area, measured in square kilometers (km<sup>2</sup>).

Our World  
in Data



# POPULATION DENSITY OF SELECTED COUNTRIES OF EUROPE IN 2017

SOURCE- WORLD BANK

Country/Region	Population Ghanadensity(Persons/Km sq.)	Country/Region	Population density(Persons/Km sq.)
Netherlands	509	Czech Republic	137
Belgium	376	Austria	107
United Kingdom	273	Hungary	108
Germany	237	Bosnia & Herzegovnia	68
Switzerland	214	Serbia	80
Italy	206	Albania	105
France	123	Greece	83
Portugal	112	Ukraine	77
Spain	93	Belarus	47
Ireland	70	Russia	09
Iceland	03	Slovakia	113
Denmark	137	Estonia	31
Norway	14	Latvia	31
Sweden	25	Lithuania	45
Finland	18	Romania	85

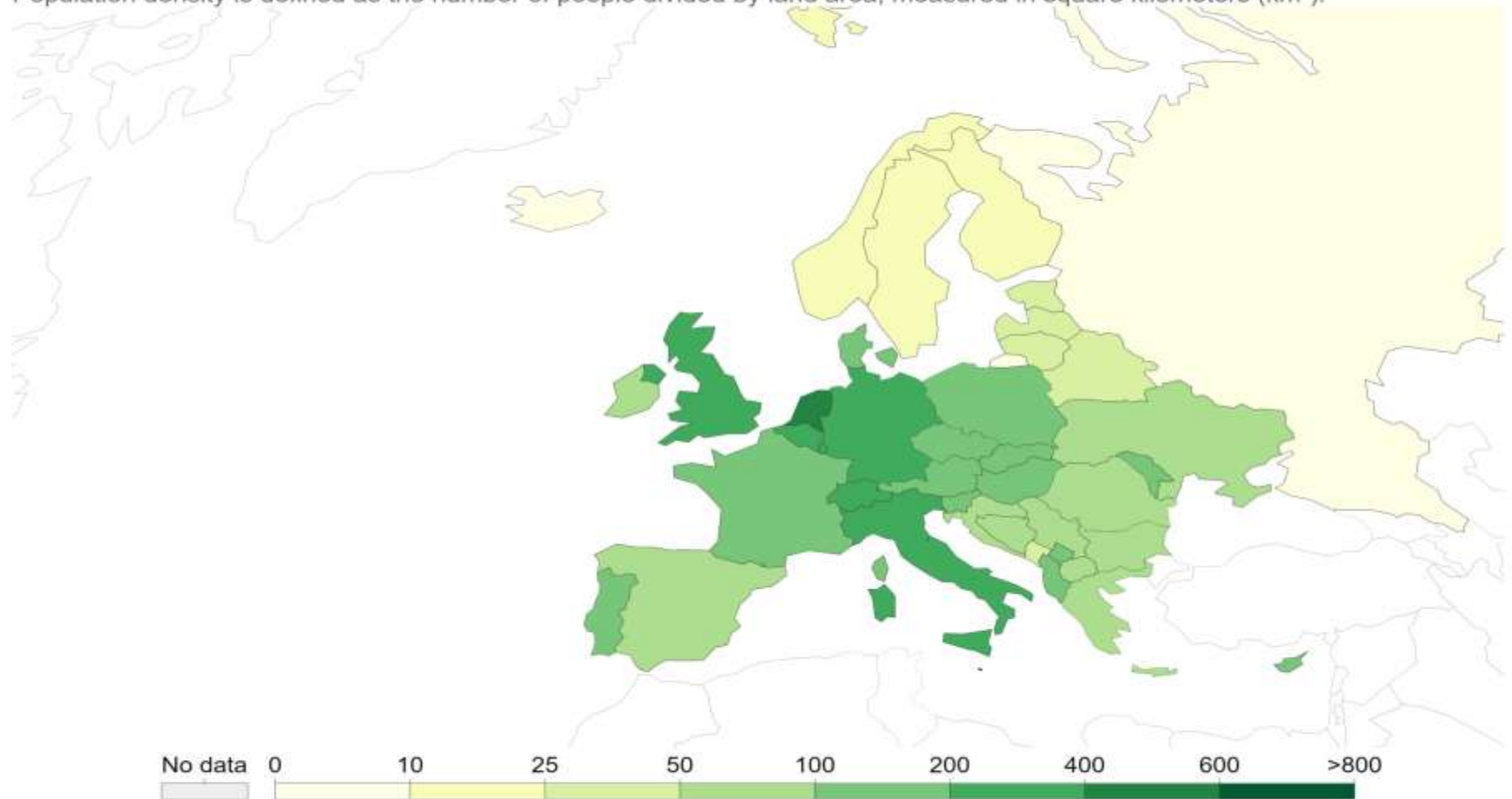


# POPULATION DENSITY OF EUROPE

## Population density, 2017

Population density is defined as the number of people divided by land area, measured in square kilometers (km<sup>2</sup>).

Our World  
in Data



# POPULATION DENSITY OF SELECTED COUNTRIES OF AFRICA IN 2017

SOURCE- WORLD BANK

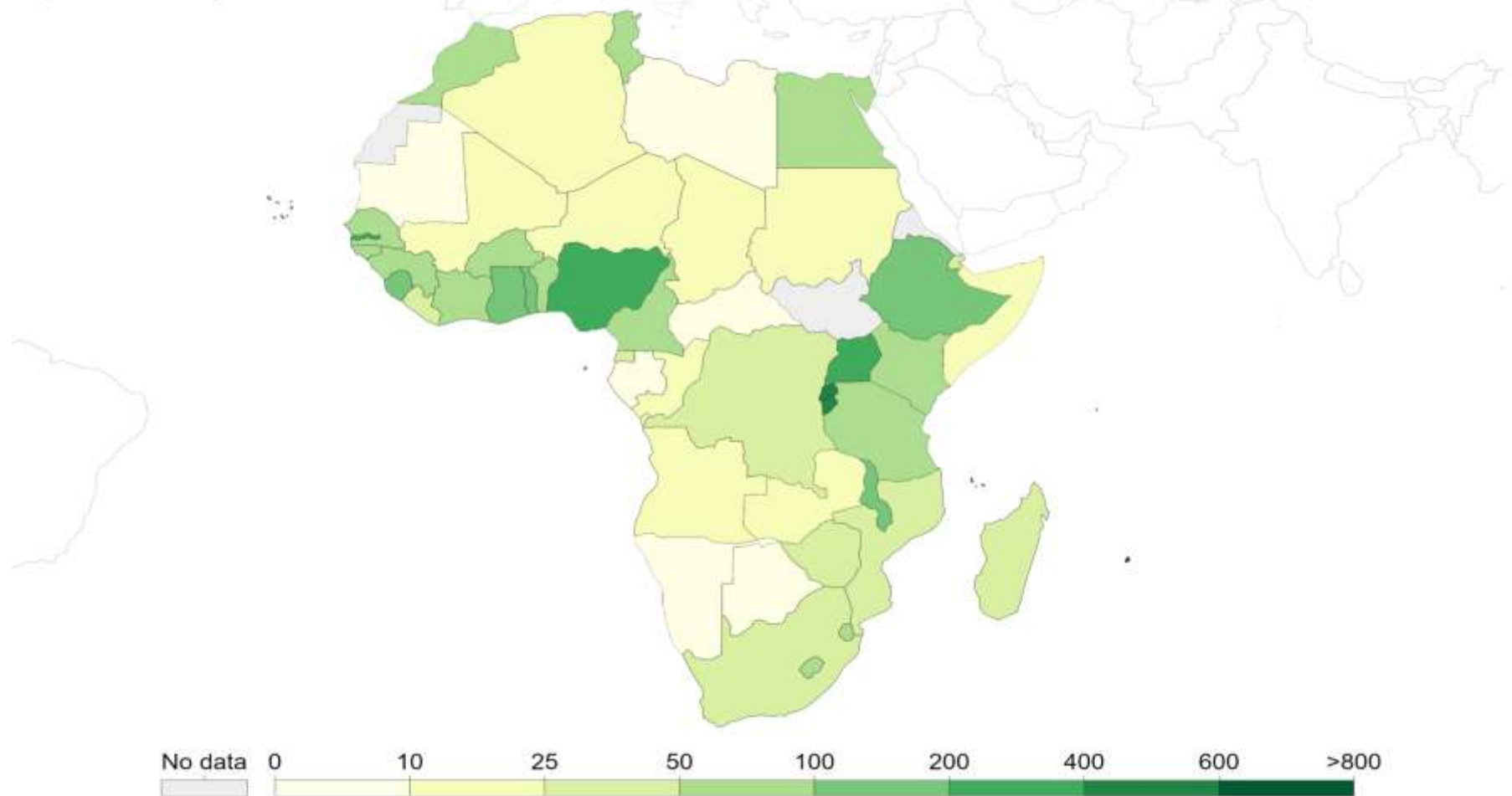
Country/Region	Population Ghanadensity(Persons/Km sq.)	Country/Region	Population density(Persons/Km sq.)
South Africa	47	Ghana	127
Namibia	03	Senegal	82
Botswana	04	Mali	15
Zimbabwe	43	Algeria	17
Mozambique	38	Morocco	80
Zambia	36	Libya	04
Tanzania	65	Tunisia	74
Kenya	87	Egypt	98
Ethiopia	105	Sudan	23
Burundi	423	Madagascar	44
Rwanada	495	Uganda	214
Somalia	24	Togo	143
Central African Republic	07	Sierra Leone	105
Congo	15	Niger	17
Nigeria	210	DRC	36

# POPULATION DENSITY IN AFRICA

## Population density, 2017

Population density is defined as the number of people divided by land area, measured in square kilometers (km<sup>2</sup>).

Our World  
in Data





# POPULATION DENSITY OF SELECTED COUNTRIES OF OCEANIA IN 2017

SOURCE- WORLD BANK

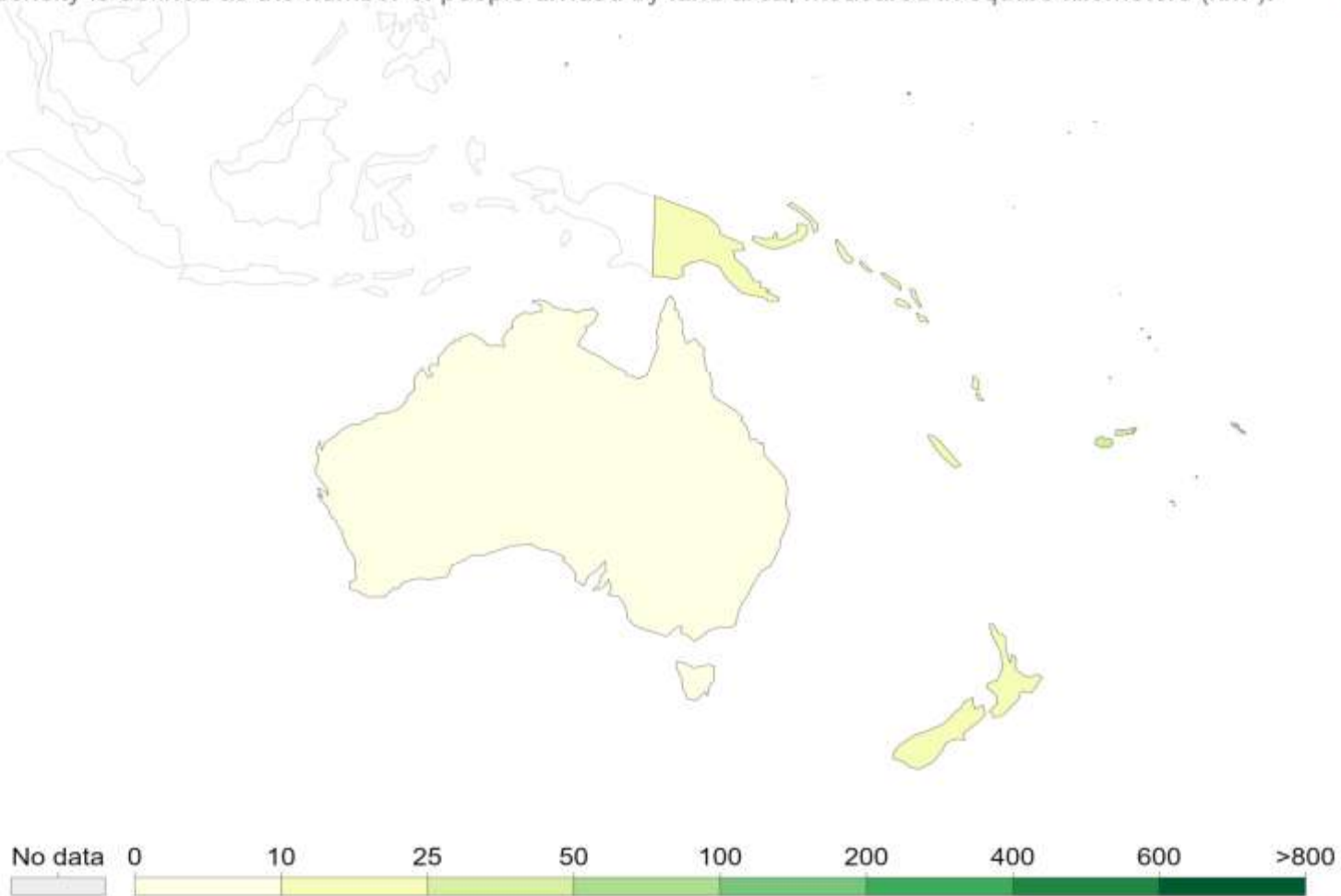
Sl No	Country/Region	Population density(Persons/Km sq.)
1	Australia	03
2	Papua New Guinea	18
3	New Zealand	18
4	Fiji	50
5	Samoa	69
6	Solomon Islands	22

# POPULATION DENSITY IN OCEANIA

## Population density, 2017

Population density is defined as the number of people divided by land area, measured in square kilometers (km<sup>2</sup>).

Our World  
in Data



# POPULATION DENSITY OF SELECTED COUNTRIES OF NORTH AMERICA IN 2017

SOURCE- WORLD BANK

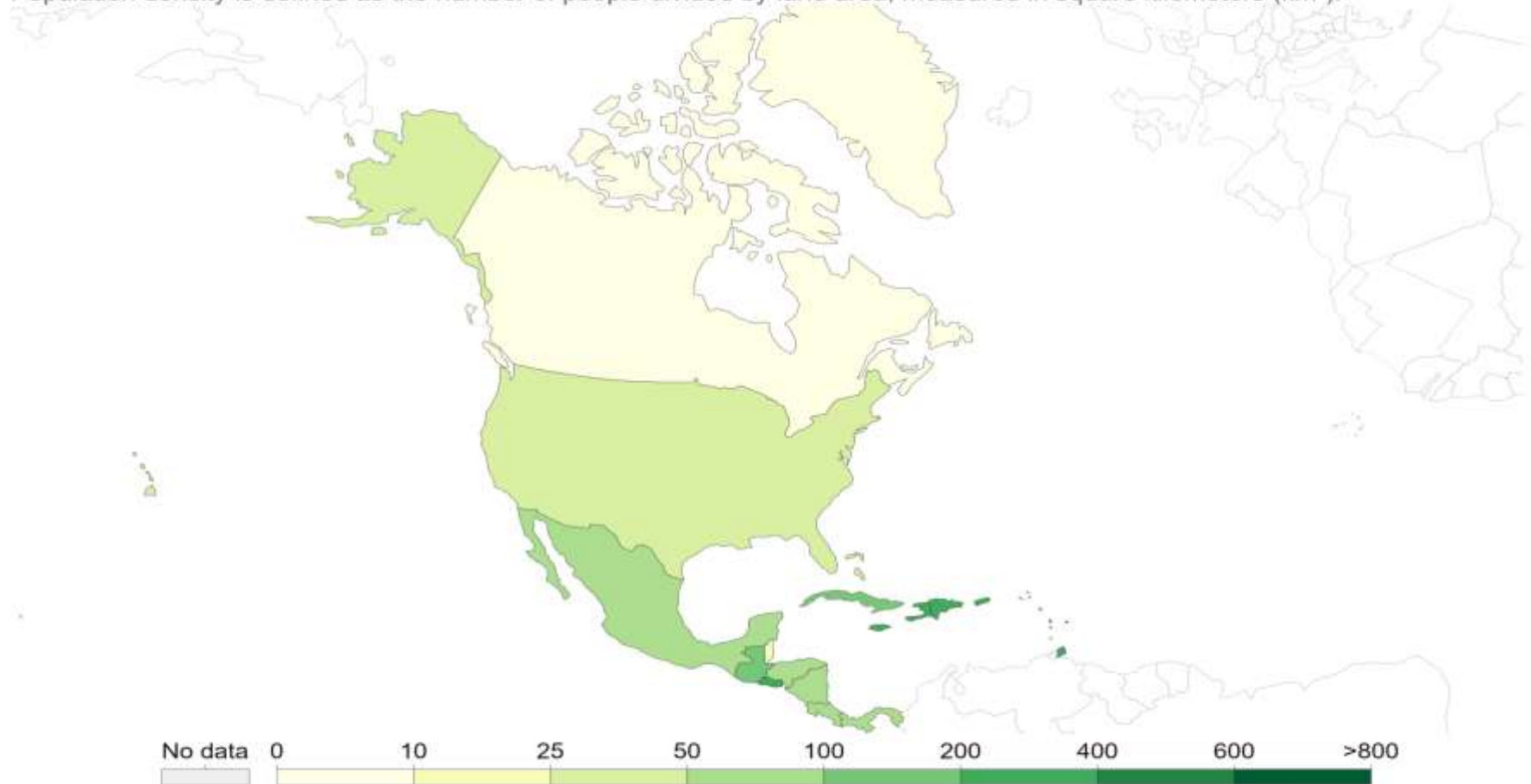
Sl No	Country/Region	Population density(Persons/Km sq.)
1	USA	36
2	Canada	04
3	Mexico	66
4	Guatemala	158
5	Honduras	83
6	El Salvador	308
7	Nicaragua	52
8	Costa Rica	96
9	Panama	55
10	Jamaica	267
11	Haiti	398
12	Dominican Republic	223
13	Puerto Rico	376
14	Cuba	110
15	Trinidad and Tobago	267

# POPULATION DENSITY IN NORTH AMERICA

## Population density, 2017

Population density is defined as the number of people divided by land area, measured in square kilometers (km<sup>2</sup>).

Our World  
in Data



# POPULATION DENSITY OF SELECTED COUNTRIES OF SOUTH AMERICA IN 2017

SOURCE- WORLD BANK

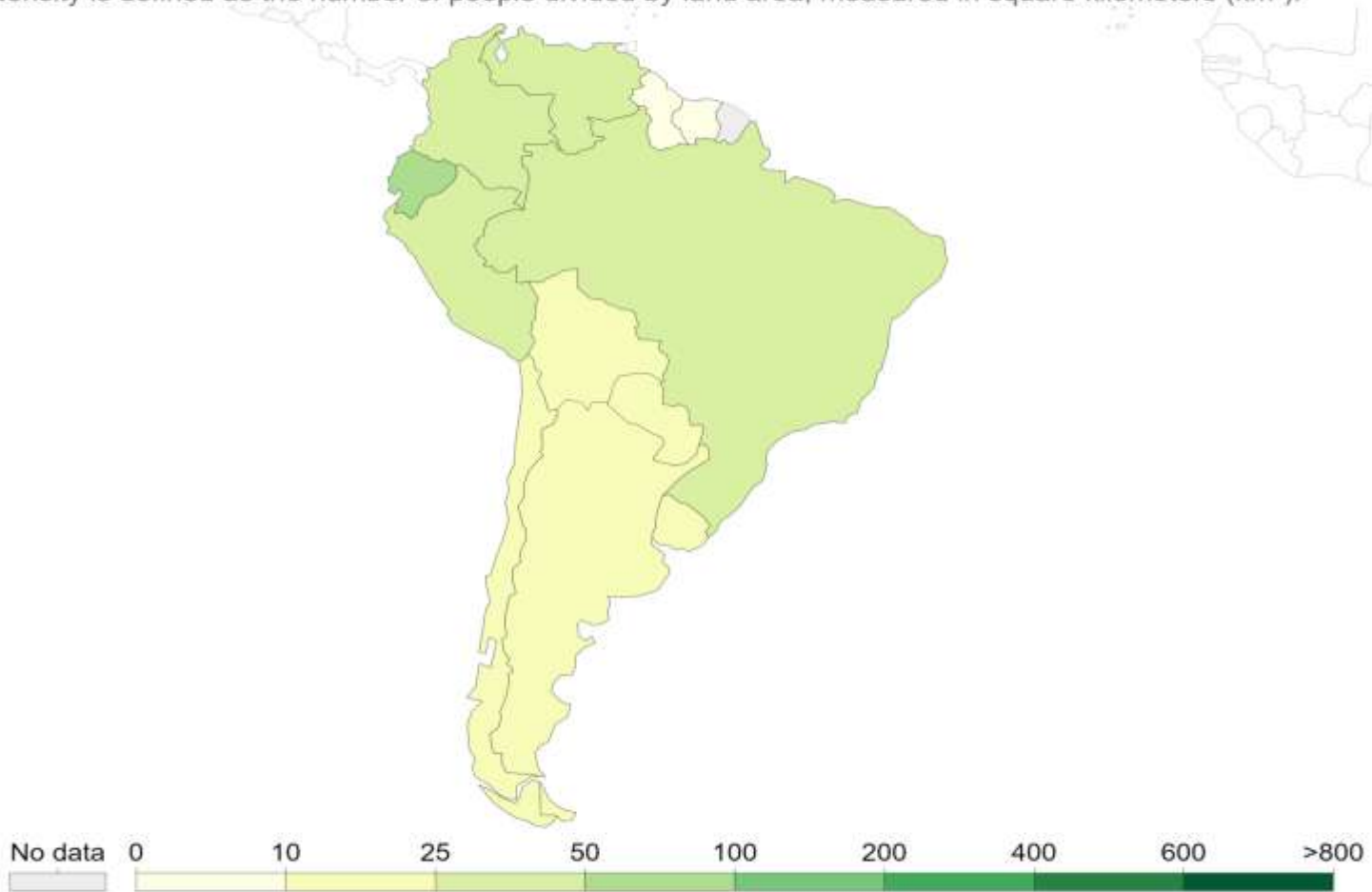
Sl No	Country/Region	Population density(Persons/Km sq.)
1	Ecuador	67
2	Colombia	44
3	Venezuela	36
4	Brazil	25
5	Peru	25
6	Chile	24
7	Uruguay	20
8	Argentina	16
9	Bolivia	10
10	Guyana	04

# POPULATION DENSITY IN SOUTH AMERICA

## Population density, 2017

Population density is defined as the number of people divided by land area, measured in square kilometers (km<sup>2</sup>).

Our World  
in Data



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Thank  
you!!!  
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