Business Analytics

1). About U.S.A

United States, officially **United States of America**, abbreviated **U.S.** or **U.S.A.**, byname **America**, country in North America, a federal republic of 50 states. Besides the 48 conterminous states that occupy the middle latitudes of the continent, the United States includes the state of Alaska, at the north western extreme of North America, and the island state of Hawaii, in the mid-Pacific Ocean. The conterminous states are bounded on the north by Canada, on the east by the Atlantic Ocean, on the south by the Gulf of Mexico and Mexico, and on the west by the Pacific Ocean. The United States is the fourth largest country in the world in area (after Russia, Canada, and China). The national capital is Washington, which is coextensive with the District of Columbia, the federal capital region created in 1790.

United States

The major characteristic of the United States is probably its great variety. Its physical environment ranges from the Arctic to the subtropical, from the moist rain forest to the arid desert, from the rugged mountain peak to the flat prairie. Although the total population of the United States is large by world standards, its overall population density is relatively low. The country embraces some of the world's largest urban concentrations as well as some of the most extensive areas that are almost devoid of habitation.

The United States contains a highly diverse population. Unlike a country such as China that largely incorporated indigenous peoples, the United States has a diversity that to a great degree has come from an immense and sustained global immigration. Probably no other country has a wider range of racial, ethnic, and cultural types than does the United States. In addition to the presence of surviving Native Americans (including American Indians, Aleuts, and Eskimos) and the descendants of Africans taken as enslaved persons to the New World, the national character has been enriched, tested, and constantly redefined by the tens of millions of immigrants who by and large have come to America hoping for greater social, political, and economic opportunities than they had

in the places they left. (It should be noted that although the terms "America" and "Americans" are often used as synonyms for the United States and its citizens, respectively, they are also used in a broader sense for North, South, and Central America collectively and their citizens.)

The United States is the world's greatest economic power, measured in terms of gross domestic product (GDP). The nation's wealth is partly a reflection of its rich natural resources and its enormous agricultural output, but it owes more to the country's highly developed industry. Despite its relative economic self-sufficiency in many areas, the United States is the most important single factor in world trade by virtue of the sheer size of its economy. Its exports and imports represent major proportions of the world total. The United States also impinges on the global economy as a source of and as a destination for investment capital. The country continues to sustain an economic life that is more diversified than any other on Earth, providing the majority of its people with one of the world's highest standards of living.

The United States is relatively young by world standards, being less than 250 years old; it achieved its current size only in the mid-20th century. America was the first of the European colonies to separate successfully from its motherland, and it was the first nation to be established on the premise that sovereignty rests with its citizens and not with the government. In its first century and a half, the country was mainly preoccupied with its own territorial expansion and economic growth and with social debates that ultimately led to civil war and a healing period that is still not complete. In the 20th century the United States emerged as a world power, and since World War II it has been one of the preeminent powers. It has not accepted this mantle easily nor always carried it willingly; the principles and ideals of its founders have been tested by the pressures and exigencies of its dominant status. The United States still offers its residents opportunities for unparalleled personal advancement and wealth. However, the depletion of its resources, the contamination of its environment, and the continuing social and economic inequality that perpetuates areas of poverty and blight all threaten the fabric of the country.

2). Socio- Economic Analysis and Indicators: (Parameter 1)

Socio- Economic Analysis:

Socioeconomic status is the social standing or class of an individual or group. It is often measured as a combination of education, income, and occupation. Examinations of socioeconomic status often reveal inequities in access to resources, plus issues related to privilege, power, and control.

U.S. Census Data and Statistics

The United States Census Bureau provides data about the nation's people and economy. Every 10 years, it conducts the Population and Housing Census, in which every resident in the United States is counted. The agency also gathers data through more than 100 other surveys of households and businesses every one to five years. You can explore the results of the surveys or find popular quick facts.

Indicators

2.1) Inflation (Consumer Price %)

Indicator Name: Inflation, consumer prices (annual %)

Source Note: Inflation as measured by the consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly. The Laspeyres formula is generally used.

2.2) GDP Growth %

Indicator Name: GDP growth (annual %)

Source Note: Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2015 prices, expressed in U.S. dollars. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making

deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

2.3) Unemployment

Indicator Name: Unemployment, total (% of total labor force) (modeled ILO estimate)

Source Note: Unemployment refers to the share of the labour force that is without work but available for and seeking employment.

2.4) Female Unemployment

Indicator Name: Unemployment, female (% of female labor force) (modeled ILO estimate)

Source Note: Unemployment refers to the share of the labour force that is without work but available for and seeking employment.

2.5) Male Unemployment

Indicator Name: Unemployment, male (% of male labor force) (modeled ILO estimate)

Source Note: Unemployment refers to the share of the labor force that is without work but available for and seeking employment.

2.6) Population

Indicator Name: Population, total

Source Note: Total population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship. The values shown are midyear estimates.

3). Data Analysis:

3.1) Inflation (Consumer Price %)

- Inflation measured by consumer price index (CPI) is defined as the change in the prices of a basket of goods and services that are typically purchased by specific groups of households.

- Inflation is measured in terms of the annual growth rate and in index, 2015 base year with a breakdown for food, energy and total excluding food and energy.

- Inflation measures the erosion of living standards.

- A consumer price index is estimated as a series of summary measures of the period-to-period proportional change in the prices of a fixed set of consumer goods and services of constant quantity and characteristics, acquired, used or paid for by the reference population.

- Each summary measure is constructed as a weighted average of a large number of elementary aggregate indices.

- Each of the elementary aggregate indices is estimated using a sample of prices for a defined set of goods and services obtained in, or by residents of, a specific region from a given set of outlets or other sources of consumption goods and services.

⠿ Columns	Year
☰ Rows	SUM(Inflation(Consu..

Inflation(%)

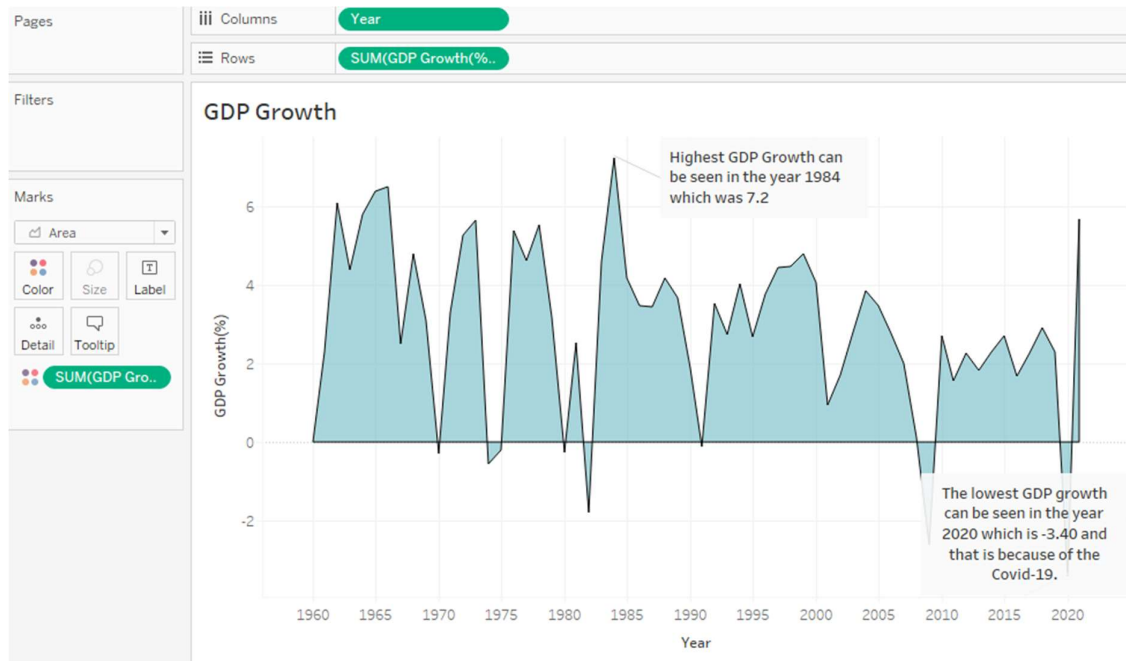The highest inflation% in USA can be seen in the year 1980, which was 13.5%
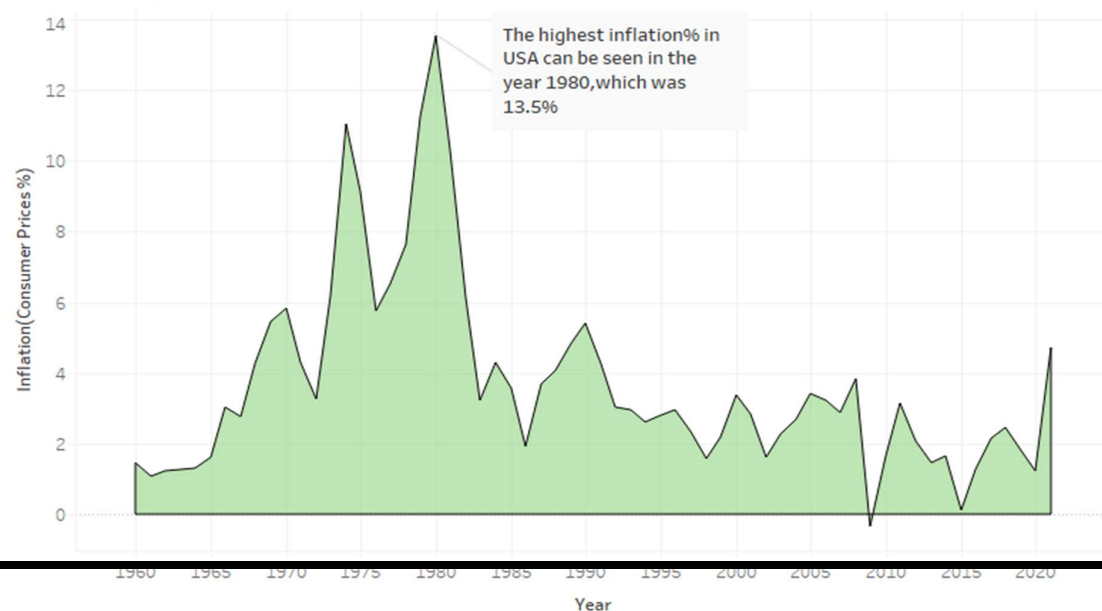
Interpretation:

- The above area graph depicts the percentage increase in the inflation which is consumer prices from the year 1960 to 2021.
- We can see that the highest inflation rate can be seen in the year 1980 which was 13.5% for the country USA.
- And the lowest inflation rate was reported in the year 2009 which was in negative i.e., -0.36.
- We can observe that there was a sudden spike in the inflation rate in the year 2021 which was 4.7% from 1.23% in the year 2020 and that is because of the Covid-19 pandemic.

3.2) GDP Growth %

- **Gross domestic product** (**GDP**) is a monetary measure of the market value of all the final goods and services produced in a specific time period by countries.
- Due to its complex and subjective nature this measure is often revised before being considered a reliable indicator.
- GDP (nominal) per capita does not, however, reflect differences in the cost of living and the inflation rates of the countries; therefore, using a basis of GDP per capita at purchasing power parity (PPP) may be more useful when comparing living standards between nations, while nominal GDP is more useful comparing national economies on the international market.
- Total GDP can also be broken down into the contribution of each industry or sector of the economy. The ratio of GDP to the total population of the region is the per capita GDP (also called the Mean Standard of Living).

GDP Growth

Highest GDP Growth can be seen in the year 1984 which was 7.2

The lowest GDP growth can be seen in the year 2020 which is -3.40 and that is because of the Covid-19.

Interpretation:

- The above chart depicts the GDP growth rate in % for the country USA from the year 1960 to 2021.
- From the above graph we can see that the highest growth rate can be seen in the year 1984 which was 7.2%.
- In the year 1982 the GDP of the country was in negative which was -1.80 and then it increased to 7.2% by the year 1984 that means there was increase in 5.4% in the span of two years.
- The lowest GDP growth can be seen in the year 2020 which is -3.40 and that is because of the Covid-19 pandemic.
- But then the GDP of USA increased to 5.6% in the year 2021 from -3.4 in the year 2020.
- Which indicates that there was increase in 2.2% of the GDP from the year 2020 to 2021.

3.3) Unemployment:

3.4) Female Unemployment

3.5) Male Unemployment

- **Unemployment**, the condition of one who is capable of working, actively seeking work, but unable to find any work. It is important to note that to be considered unemployed a person must be an active member of the labour force and in search of remunerative work.
- Underemployment is the term used to designate the situation of those who are able to find employment only for shorter than normal periods— part-time workers, seasonal workers, or day or casual workers. The term may also describe the condition of workers whose education or training make them overqualified for their jobs.
- Statistics on unemployment are collected and analyzed by government labour offices in most countries and have come to be considered a chief indicator of economic health. Trends in unemployment and statistical differences among groups in the population are studied for what they may reveal of general economic trends and as bases for possible governmental action.
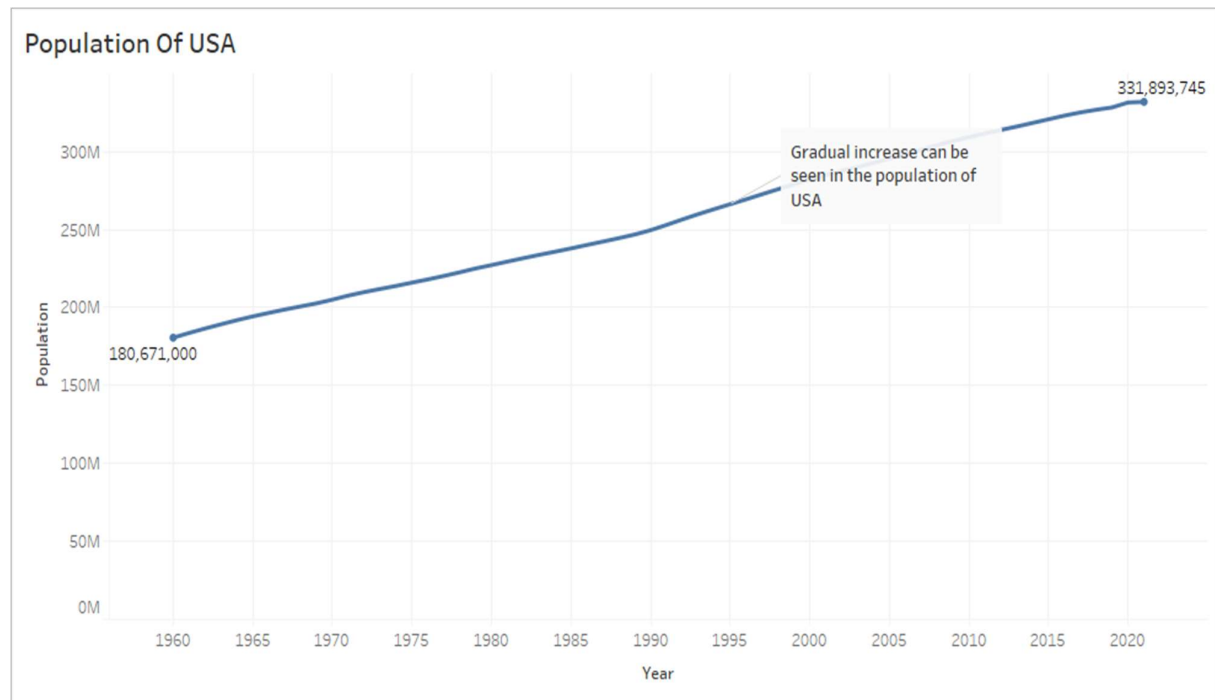
Interpretation:

- The number of workers who lost their job and started receiving UI benefits peaked at 14.4 million in 2009, whereas an average of roughly 8 million laid-off workers started receiving benefits in each fiscal year from 2004 to 2007.
- The highest unemployment can be seen in the year 2009 because of the changes in the unemployment Insurance Benefits.
- The Unemployment rate 9.63% in the country USA for both Males and Females which was all time high from the year 1990 to 2022.
- Again, in the year there was rise in the unemployment rate in the year 2020 because of the Covid-19 pandemic which was 8.05.
- And the individual unemployment rate for male (7.79%) and female (8.34%) in the year 2020 due to the pandemic.
- The least unemployment can be seen in the year 2019 which was 3.67%.

3.6) Population

- A country grows or shrinks in three ways: immigration, deaths, and births. America's declining fertility rate often gets the headline treatment. Journalists are obsessed with the question of why Americans aren't having more babies. And because I'm a journalist, be assured that we'll do the baby thing in a moment. But it's the other two factors— death and immigration—that are overwhelmingly responsible for the collapse in U.S. population growth.

- First, we must talk about COVID. The pandemic has killed nearly 1 million Americans in the past two years, according to the CDC. Tragically and remarkably, most of those deaths happened *after* we announced the authorization of COVID vaccines, which means that they were particularly concentrated in 2021. Last year, deaths exceeded births in a record-high number of U.S. counties. Never before in American history have so many different parts of the country shrunk because of "natural decrease," which is the difference between deaths and births.

- Excess deaths accounted for 50 percent of the difference in population growth from 2019 to 2021. That's a clear sign of the devastating effect of the pandemic. But this statistic also tells us that even if we could have

brought excess COVID deaths down to zero, U.S. population growth would still have crashed to something near an all-time low.

Population Of USA

Gradual increase can be seen in the population of USA

331,893,745

180,671,000

<mark>**Interpretation:**</mark>

- The above graph depicts the increase in the population from the year 1960 to 2021 for the country USA.
- We can see that there is a gradual increase in the population of the country over the period.
- In the year 1960 the population of the country was 180M.
- In the coming years the population increased gradually and now at the present the population of the country USA has crossed 330M.
- Finally, yes, Americans are having fewer babies like basically every other rich country in the world. Since 2011, annual births have declined by 400,000
- The pandemic seems to have accelerated that future.

4). Environment: (Parameter 2)

Indicators

4.1) Co2 Emission

Indicator Name: CO2 emissions (metric tons per capita)

Source Note: Carbon dioxide emissions are those stemming from the burning of fossil fuels and the manufacture of cement. They include carbon dioxide produced during consumption of solid, liquid, and gas fuels and gas flaring.

4.2) Electricity Production

Indicator Name: Electricity production from renewable sources, excluding hydroelectric (% of total)

Source Note: Electricity production from renewable sources, excluding hydroelectric, includes geothermal, solar, tides, wind, biomass, and biofuels.

4.3) Forest Area

Indicator Name: Forest area (% of land area)

Source Note: Forest area is land under natural or planted stands of trees of at least 5 meters in situ, whether productive or not, and excludes tree stands in agricultural production systems (for example, in fruit plantations and agroforestry systems) and trees in urban parks and gardens.

4.4) Sanitation Services

Indicator Name: People using safely managed sanitation services (% of population)
Source Note: The percentage of people using improved sanitation facilities that are not shared with other households and where excreta are safely disposed of in situ or transported and treated offsite. Improved sanitation facilities include flush/pour flush to piped sewer systems, septic tanks or pit

latrines: ventilated improved pit latrines, compositing toilets, or pit latrines with slabs.

5). Data Analysis:

5.1) Co2 Emission:

- Carbon dioxide emissions are the primary driver of global climate change. It's widely recognised that to avoid the worst impacts of climate change, the world needs to urgently reduce emissions. But how this responsibility is shared between regions, countries, and individuals has been an endless point of contention in international discussions.
- This debate arises from the various ways in which emissions are compared: as annual emissions by country; emissions per person; historical contributions; and whether they adjust for traded goods and services. These metrics can tell very different stories.
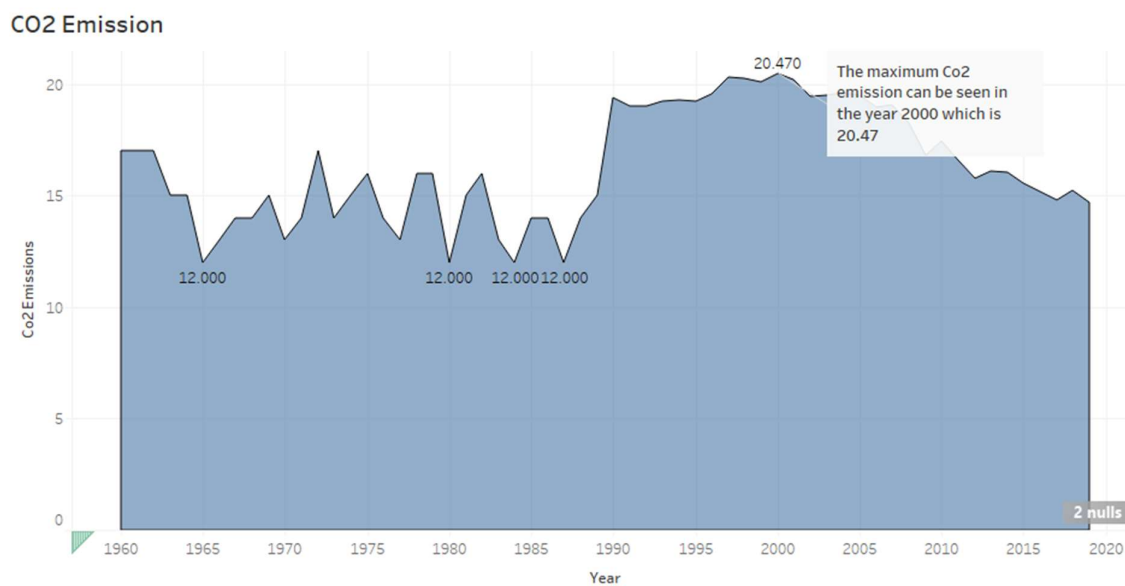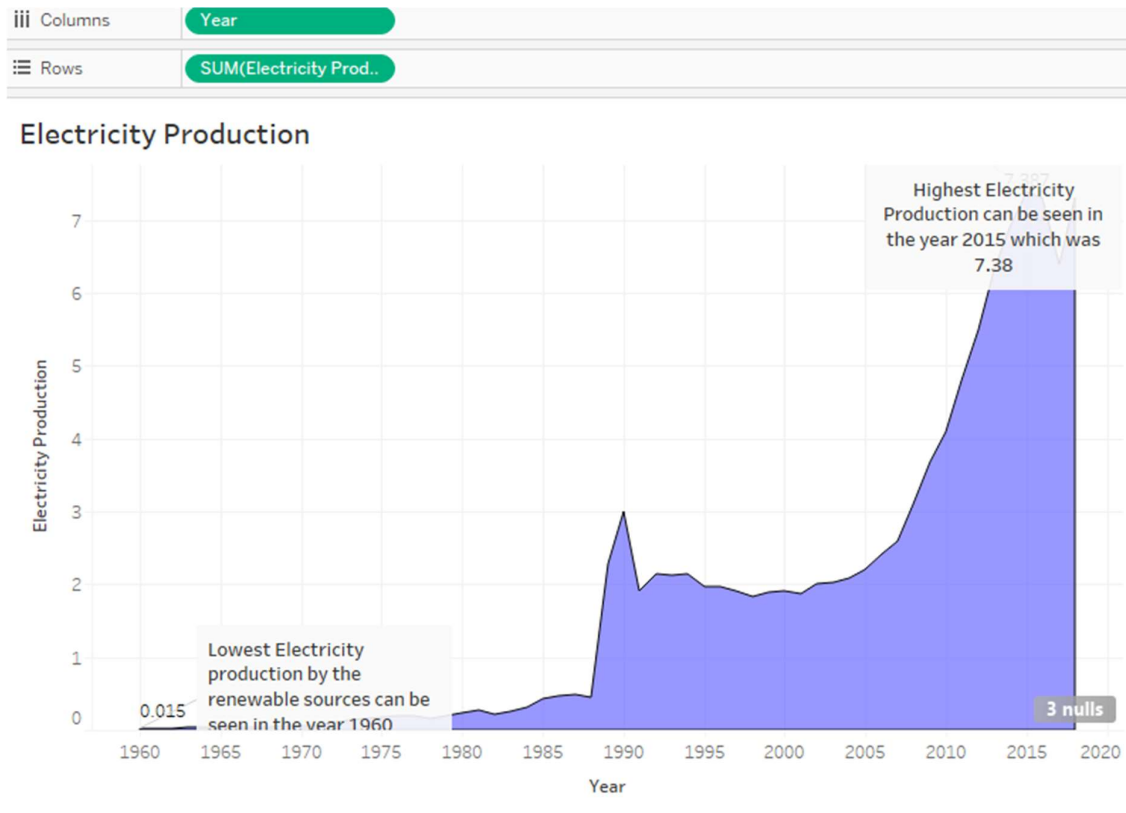

Interpretation:

- The above graph depicts the Co2 emission in the country USA from the year to 1960 to 2021.
- The highest or maximum emission can be seen in the year 2000 which was 20.47

- Co2 emissions effects a lot in the Global warming, so because of which government has started implementing the Electric Vehicles so that the carbon emissions can be decreased.
- So, from the year 2000 we can see that there is a gradual decrease in the co2 emissions as the use of the electric vehicles has increased.

5.2) Electricity Production:

- **Electricity generation** is the process of generating electric power from sources of primary energy. For utilities in the electric power industry, it is the stage prior to its delivery (transmission, distribution, etc.) to end users or its storage (using, for example, the pumped-storage method).

- Electricity is not freely available in nature, so it must be "produced" (that is, transforming other forms of energy to electricity). Production is carried out in power stations (also called "power plants"). Electricity is most often generated at a power plant by electromechanical generators, primarily driven by heat engines fuelled by combustion or nuclear fission but also by other means such as the kinetic energy of flowing water and wind. Other energy sources include solar photovoltaics and geothermal power.

- Phasing out coal-fired power stations and eventually , or capturing their greenhouse gas emissions, is an important part of the energy transformation required to limit climate change. Vastly more solar power and wind power is forecast to be required, with electricity demand increasing strongly with further electrification of transport, homes and industry.

iii Columns	Year
☰ Rows	SUM(Electricity Prod..

Electricity Production

Interpretation:

- The above graph depicts the electricity production by the country USA using different renewable sources except the hydropower.
- According to the graph the highest electricity production can be seen in the year 2015 which was 7.38.
- And the lowest electricity production can be seen in the year 1960 which was 0.015.
- There was total of 7.365% increase in the production of electricity from the year 1960 to the year 2015.

4.3) Forest Area

- The United States has the fourth largest forest estate in the world, including about 8 percent of the world's forests. We have about 304 million hectares of forest land covering about a third of our land area.

- These lands range from boreal forests in Alaska; to deciduous forests in the eastern United States; to pine plantations in the southern United States; to dry coniferous forests in the western United States; to

temperate rainforests on the West Coast; to the tropical rainforests of Puerto Rico and here in Hawaii.

- Fifty-six percent of forest lands are in private ownership. The rest are managed by local, tribal, state, and federal governments. Most states have at least one national forest or national grassland.

- Most forests in the United States are in the eastern half of our country, where 83 percent of the forest land is in private ownership. People are sometimes surprised to hear that the U.S. government has no direct role in regulating private forest land. Individual states govern private forestry through state forestry laws, and state laws vary widely.
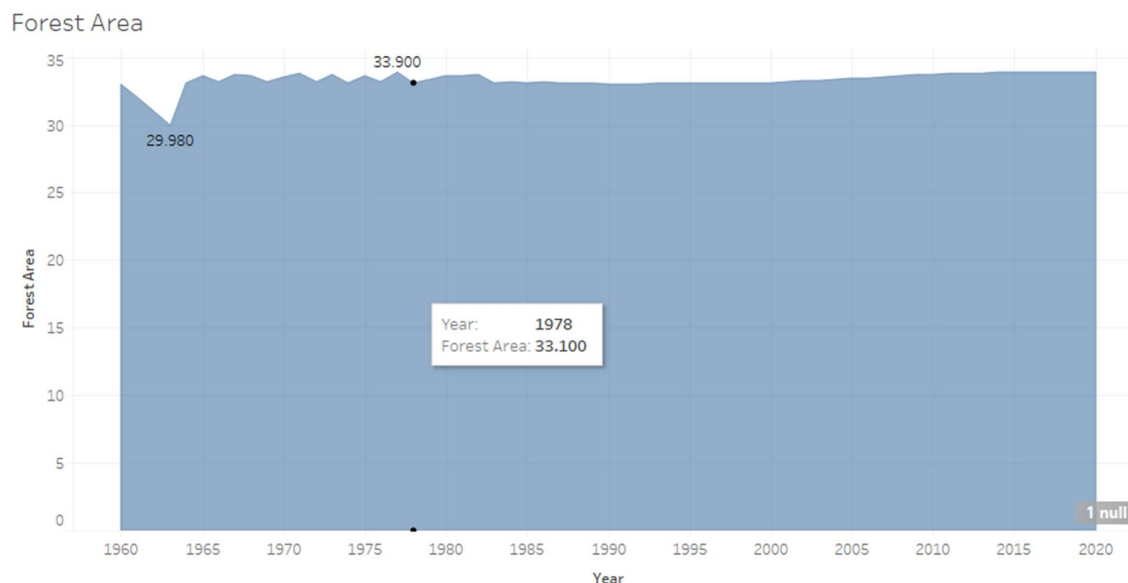
Forest Area

Interpretation:

- The above graph depicts the Forest area in the USA from the year 1960 to 2020.

- The year 1963 has the lowest Forest area which is 29.98 and the year 1977 has the highest Forest area in the country which is 33.9.

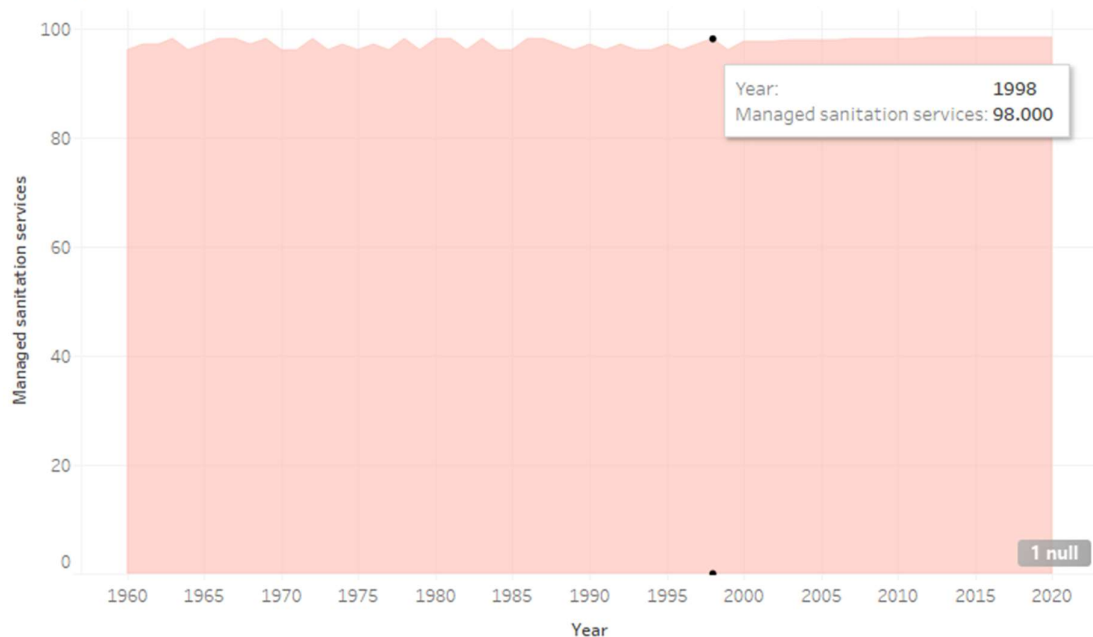## 4.4) Sanitation Services

- **Sanitation Service** means the power to establish, operate and maintain a system for the collection and disposal of garbage, or any similarly

described power to provide for the collection and disposal of garbage possessed by any Consolidated District.
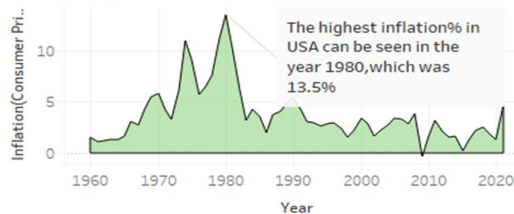
Managed Sanitation Services

==**Interpretation:**==

- The above graph depicts the managed sanitation services from the year 1960 to 2020.
- The sanitation services are altogether high in the country from the 1960.
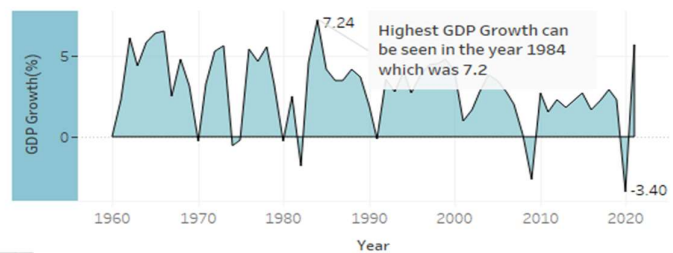- And in the year 2021 it has touched the highest to 99 as shown in the graph.

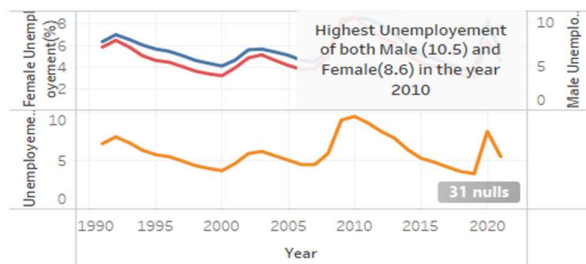## Dashboard1:

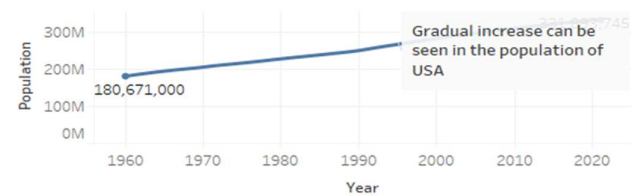### Socio-Economic(Parameter 1)

Inflation(%)

The highest inflation% in USA can be seen in the year 1980,which was 13.5%

GDP Growth

7.24

Highest GDP Growth can be seen in the year 1984 which was 7.2

-3.40

Unemployment

Highest Unemployement of both Male (10.5) and Female(8.6) in the year 2010

31 nulls

Population Of USA

180,671,000

Gradual increase can be seen in the population of USA

Dashboard2:

Environment(Parameter2)

CO2 Emission

The maximum Co2 emission can be seen in the year 2000 which is 20.47

12.000   12.000 12.000000

2 nulls

Electricity Production

Highest Electricity Production can be seen in the year 2015 which was 7.38

0.015

3 nulls

Managed Sanitation Services

1 null

Forest Area

33.900

29.980

1 null