

Assignment On

INDIA'S INFLATION RATE, CPI AND ECONOMY

For the course

SM300 - ENGINEERING ECONOMICS ASSIGNMENT

Submitted By:

BHAJAN KUMAR BARMAN (181IT211)

V SEM B.TECH

Under the guidance of

Dr. Pradyot Ranjan Jena

Dept. of IT, NITK Surathkal

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INDIA'S INFLATION RATE AND ECONOMY

INFLATION

Inflation is generally defined as the increase of prices of goods and services over a certain period of time, as opposed to deflation, which describes a decrease of these prices. Inflation is a significant economic indicator for a country. The inflation rate is the rate at which the general rise in the level of prices, goods and services in an economy occurs and how it affects the cost of living of those living in a particular country. It influences the interest rates paid on savings and mortgage rates but also has a bearing on levels of state pensions and benefits received. A 4 percent increase in the rate of inflation in 2011 for example would mean an individual would need to spend 4 percent more on the goods he was purchasing than he would have done in 2010.

India's inflation rate has been on the rise over the last decade. However, it has been decreasing slightly since 2010. India's economy, however, has been doing quite well, with its GDP increasing steadily for years, and its national debt decreasing. The budget balance in relation to GDP is not looking too good, with the state deficit amounting to more than 9 percent of GDP.

CONSUMER PRICE INDICES(CPI)

Consumer Price Indices (CPI) measure changes over time in the general level of prices of goods and services that households acquire for consumption. CPI is a macroeconomic indicator of inflation and used as a tool by central banks for inflation targeting and monitoring price stability, and as deflators in the national accounts. CPI is also used for indexing dearness allowance to employees for the increase in prices.

The *annual inflation rate* for a given year (say, 1914) is the percent change from the previous year (1913 in this example). Here is the way to calculate the annual inflation rate for 1914:

- Calculate the difference in the CPI from 1913 to 1914: .
- Calculate the ratio of this difference to the CPI in 1913, and multiply by 100 to get a percent: .

So the inflation rate for 1914 was about 1.0%.

ANNUAL INFLATION RATE IN INDIA

The statistic given below shows the inflation rate in India from 1960 to 2019, with projections up until 2021. The inflation rate is calculated using the price increase of a defined product basket. This product basket contains products and services, on which the average consumer spends money throughout the year. They include expenses for groceries, clothes, rent, power, telecommunications, recreational activities and raw materials (e.g. gas, oil), as well as federal fees and taxes. In 2019, the inflation rate in India was around 4.54 percent compared to the previous year.

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.

- India inflation rate for 2019 was 7.66%, a 2.8% increase from 2018.
- India inflation rate for 2018 was 4.86%, a 2.37% increase from 2017.
- India inflation rate for 2017 was 2.49%, a 2.45% decline from 2016.
- India inflation rate for 2016 was 4.94%, a 0.93% decline from 2015.

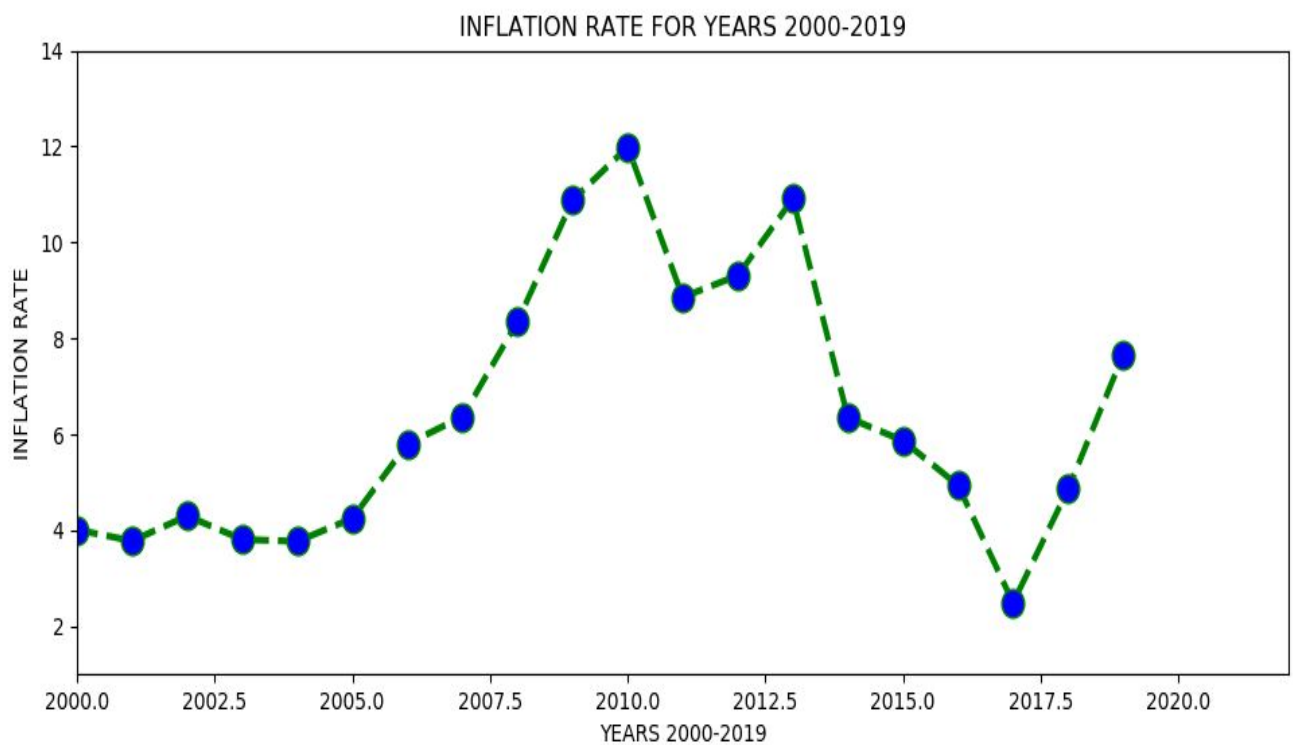
India Inflation Rate 1960-2019		
Year	Inflation Rate (%)	Annual Change
2019	7.66%	2.80%
2018	4.86%	2.37%
2017	2.49%	-2.45%
2016	4.94%	-0.93%
2015	5.87%	-0.48%
2014	6.35%	-4.55%
2013	10.91%	1.60%
2012	9.31%	0.45%
2011	8.86%	-3.13%

2010	11.99%	1.11%
2009	10.88%	2.53%
2008	8.35%	1.98%
2007	6.37%	0.58%
2006	5.80%	1.55%
2005	4.25%	0.48%
2004	3.77%	-0.04%
2003	3.81%	-0.49%
2002	4.30%	0.52%
2001	3.78%	-0.23%
2000	4.01%	-0.66%
1999	4.67%	-8.56%
1998	13.23%	6.07%
1997	7.16%	-1.81%
1996	8.98%	-1.25%
1995	10.22%	-0.02%
1994	10.25%	3.92%
1993	6.33%	-5.46%
1992	11.79%	-2.08%
1991	13.87%	4.90%
1990	8.97%	1.90%
1989	7.07%	-2.31%
1988	9.38%	0.58%

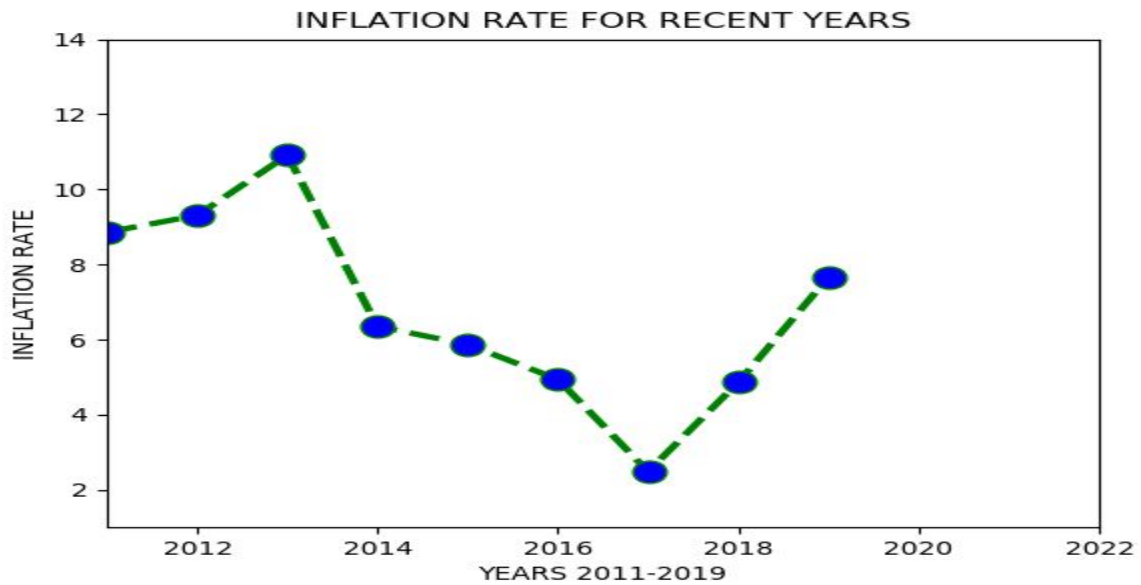
1987	8.80%	0.07%
1986	8.73%	3.17%
1985	5.56%	-2.76%
1984	8.32%	-3.55%
1983	11.87%	3.98%
1982	7.89%	-5.22%
1981	13.11%	1.77%
1980	11.35%	5.07%
1979	6.28%	3.75%
1978	2.52%	-5.78%
1977	8.31%	15.94%
1976	-7.63%	-13.38%
1975	5.75%	-22.85%
1974	28.60%	11.66%
1973	16.94%	10.50%
1972	6.44%	3.36%
1971	3.08%	-2.01%
1970	5.09%	5.68%
1969	-0.58%	-3.82%
1968	3.24%	-9.82%
1967	13.06%	2.26%
1966	10.80%	1.33%
1965	9.47%	-3.88%

1964	13.36%	10.41%
1963	2.95%	-0.69%
1962	3.63%	1.94%
1961	1.70%	-0.08%
1960	1.78%	-0.08%

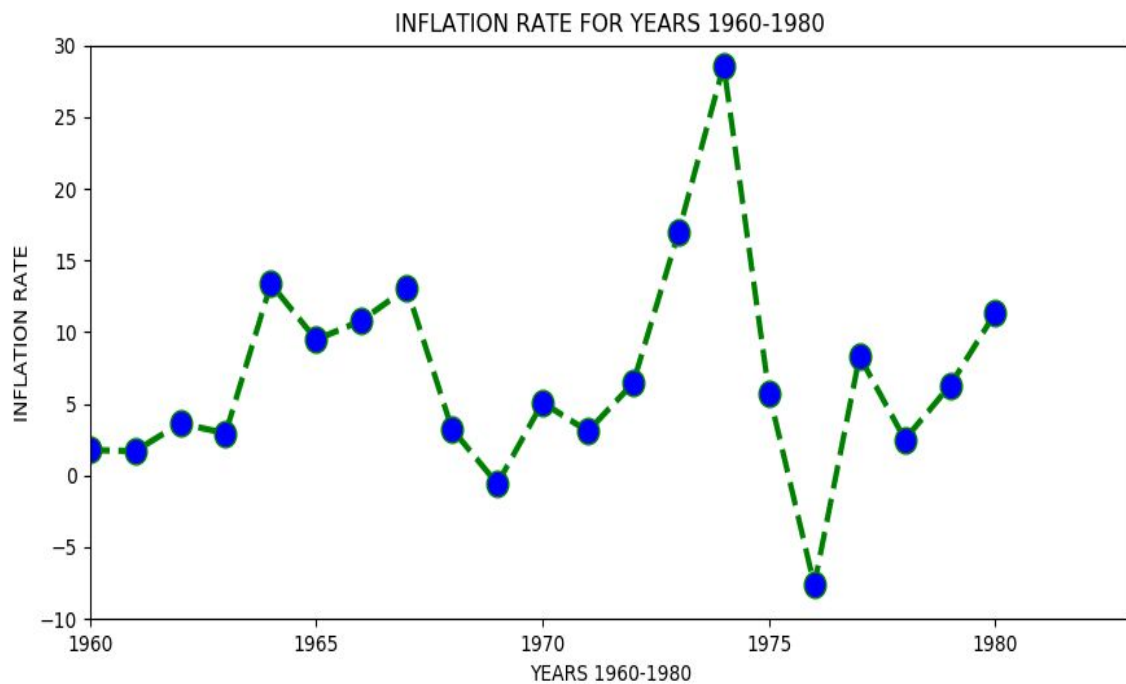
Analysis



It is clear from the graph that the inflation rate increased from 4.01% in 2000 to 11.99% in 2010. Then it decreases to 8.86% in 2011. Again it increases to 10.91% in 2013. After that it decreases to 2.49% in 2017. In recent years, it is increasing and in 2019 it increases to 7.66%.



In recent years, the inflation rate is increasing from 2.49% in 2017 to 7.66% in 2019.



From the above graph, it can be observed that the inflation rate in 1974 was 28.60% which is the peak point in the graph and annual change was 11.66% as inflation rate was 16.94% in 1973.

GDP growth has slowed in recent years, due in part to skyrocketing inflation.

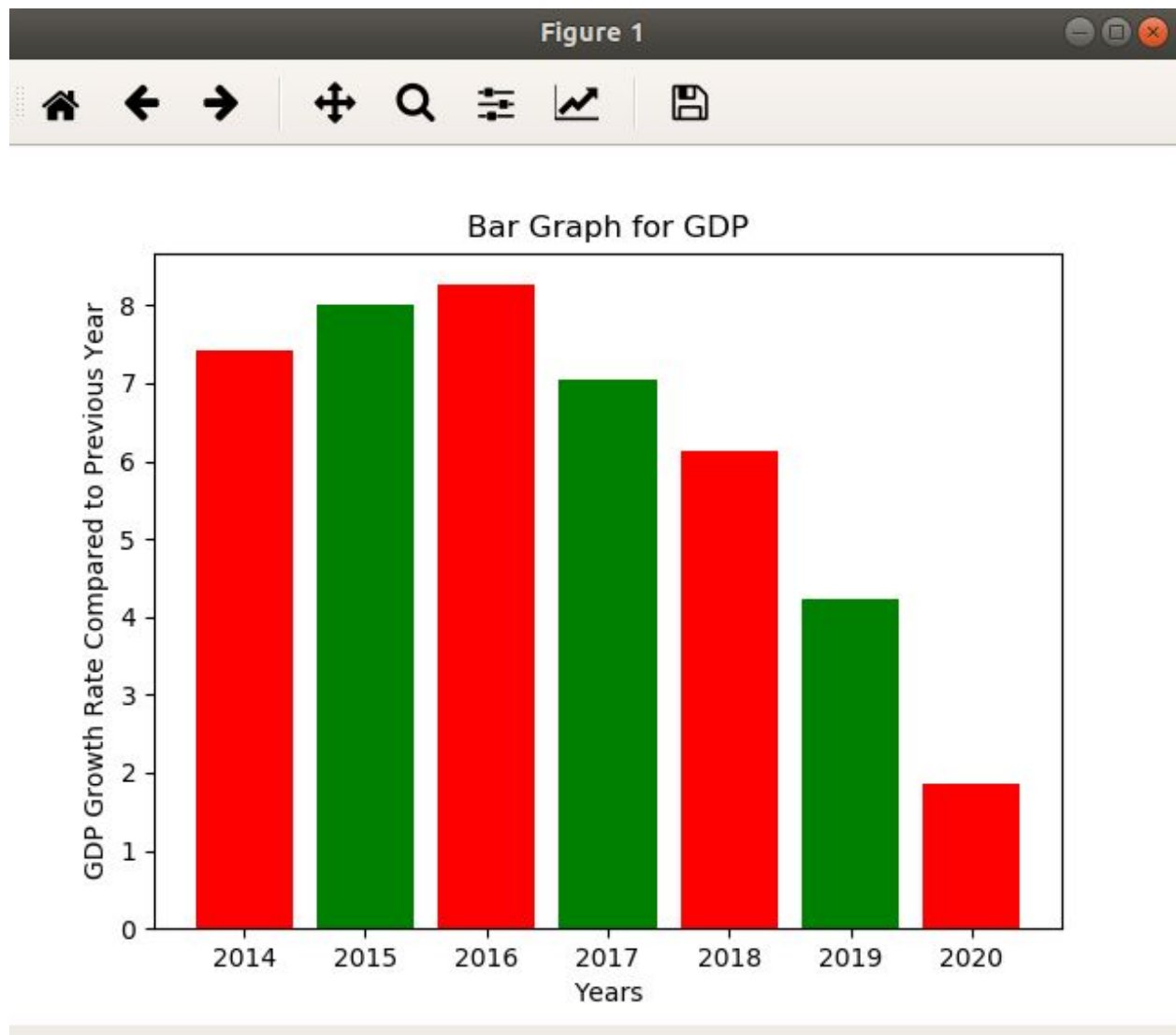
GDP growth rate compared to previous year was 8.26% in 2016.

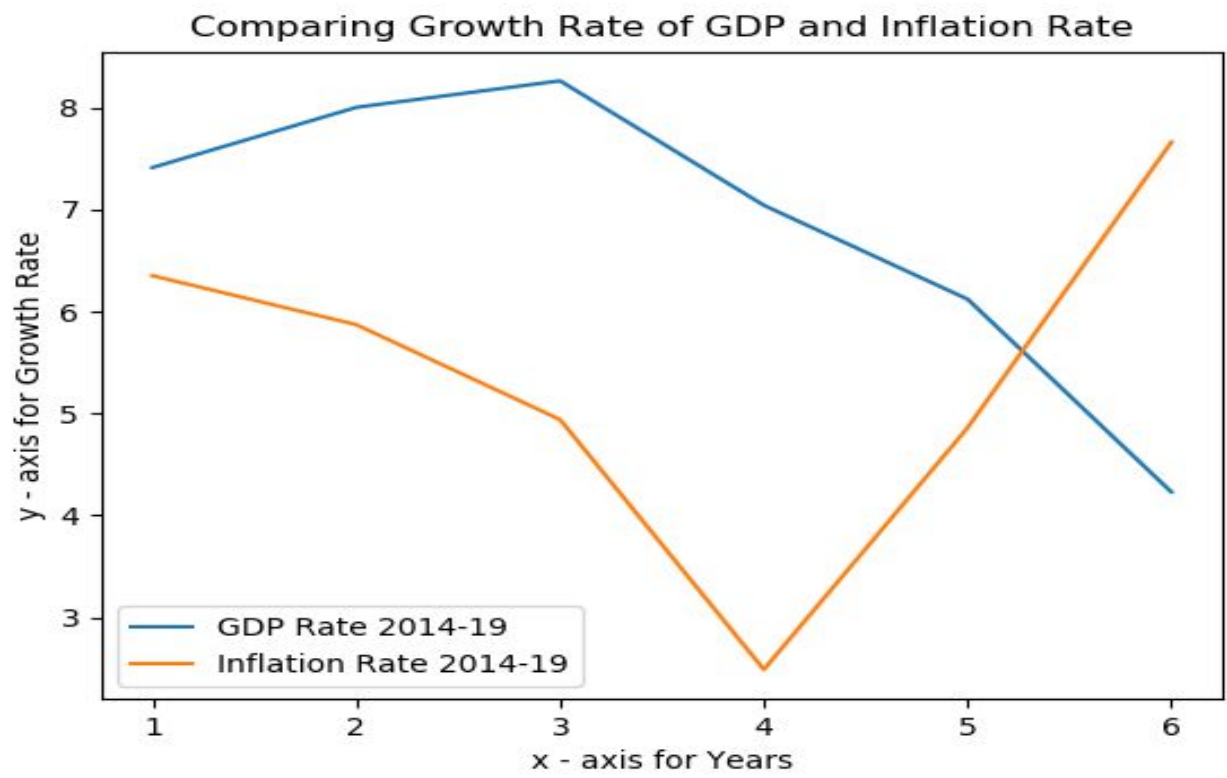
In 2017 the rate changed to 7.04%

In 2018 the GDP rate was 6.12%

In 2019 the rate was 4.23%

In 2020 the rate changed to 1.87%

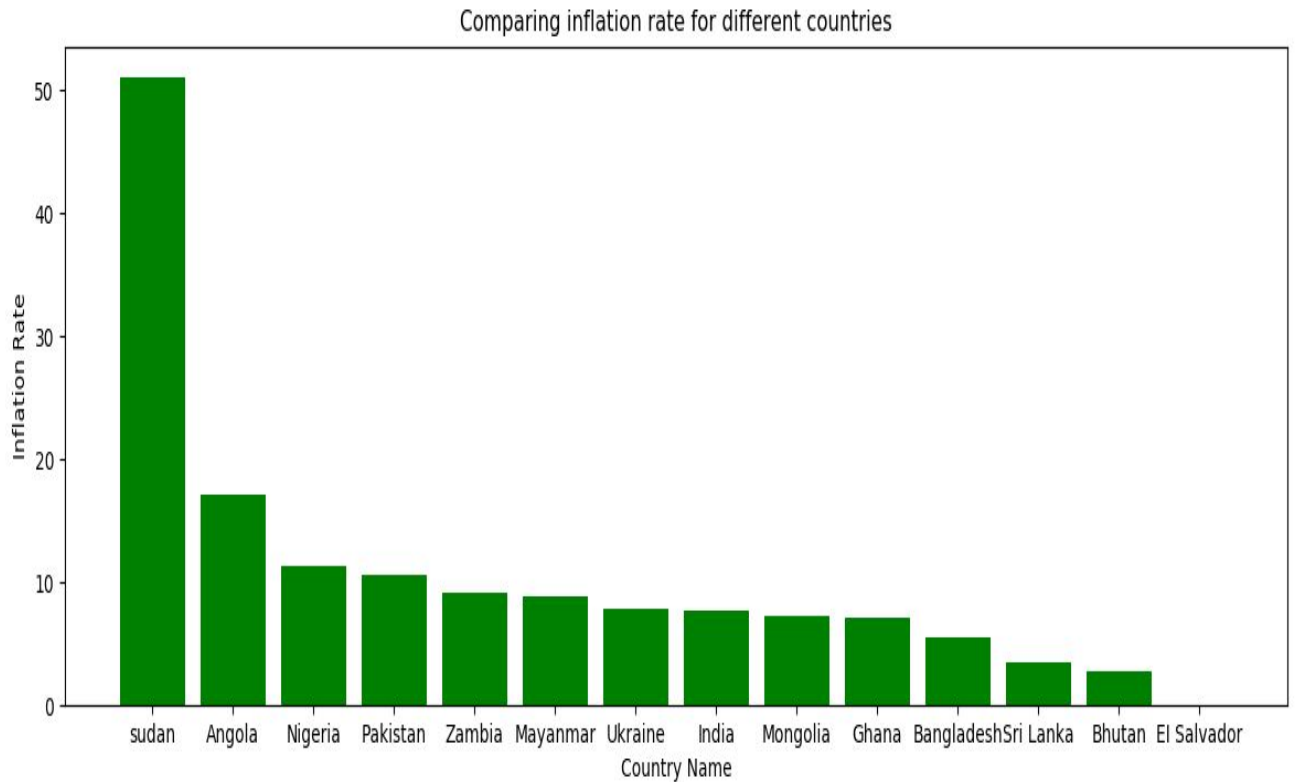




It can be observed that the GDP rate decreases as the inflation rate increases.

COUNTRY RANKING AS PER INFLATION RATE IN YEAR 2019

Country Name	Inflation Rate (%)
Sudan	50.99%
Angola	17.15%
Nigeria	11.40%
Pakistan	10.58%
Zambia	9.15%
Myanmar	8.83%
Ukraine	7.89%
India	7.66%
Mongolia	7.30%
Ghana	7.18%
Tunisia	6.72%
Bangladesh	5.59%
Nicaragua	5.38%
Lesotho	5.19%
Sri Lanka	3.53%
Indonesia	3.03%
Vietnam	2.80%
Bhutan	2.73%
Morocco	0.20%
El Salvador	0.08%



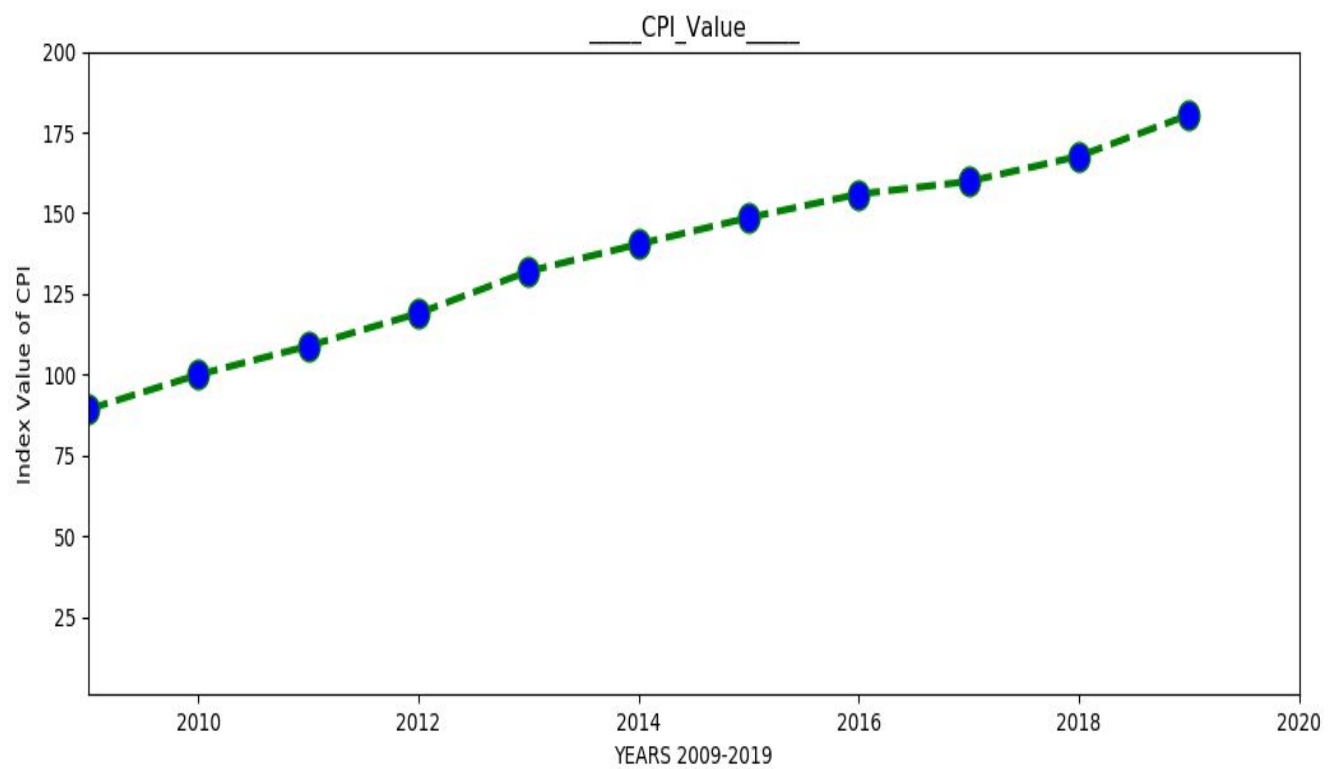
India lies between Ukraine and Mongolia at 8th position with an inflation rate of 7.66% in 2019. India inflation rate for 2019 was 7.66%, a 2.8% increase from 2018. Sudan is in the first position with an inflation rate of 50.99% in 2019. Compared with our neighbouring countries, Pakistan has the highest inflation rate of 10.58% and Bhutan has lowest inflation rate of 2.73% in 2019. Also Bangladesh has an inflation rate of 5.59% and Sri Lanka has an inflation rate of 3.53%.

ANNUAL CONSUMER PRICE INDEX IN INDIA

In 2019, the consumer price index for India was 180.4 index. Consumer price index of India increased from 4.6 index in 1970 to 180.4 index in 2019 growing at an average annual rate of 7.89%.

DATE	VALUE	CHANGE, %
2019	180.4	7.66 %
2018	167.6	4.86 %
2017	159.8	2.49 %
2016	155.9	4.94 %
2015	148.6	5.87 %
2014	140.4	6.35 %
2013	132.0	10.91 %
2012	119.0	9.31 %

2011	108.9	8.86 %
2010	100.0	11.99 %
2009	89.3	10.88 %



It is clear that the CPI values are increasing from 2009 to 2019.

MONTHLY ANALYSIS OF INFLATION RATE AND CPI IN INDIA FOR YEAR 2020

INFLATION ANALYSIS

The statistic shows the inflation rate in India from July 2019 to July 2020. The term inflation means the devaluation of money caused by a permanent increase of the price level for products (consumer goods, investment goods). The Consumer Price Index shows the price development for private expenses and shows the current level of inflation when increasing. In July 2020, the inflation rate in India was at about 5.33 percent compared to the same month of the previous year.



SOURCE: [TRADINGECONOMICS.COM](https://tradingeconomics.com) | MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION (MOSPI)

India Inflation Rate Highest in Near 6 Years

Consumer price inflation in India increased to 7.59% in January of 2020 from 7.35% in December 2019, above expectations of 7.4%. The inflation accelerated for the 6th straight month to the highest since May of 2014. Prices rose faster for fuel and light (3.7% vs 0.7% in December), miscellaneous (4.8% vs 4.1%), clothing and footwear (1.9% vs 1.5%) and pan, tobacco and intoxicants (3.6% vs 3.4%) but eased for housing (4.2% vs 4.3%). Cost of food and beverages increased at a slightly slower rate (11.8% vs 12.2%), namely vegetables (50.2% vs 60.5%) while faster increases were seen for cereals (5.3% vs 4.4%), milk (5.6% vs 4.2%), fruits (5.8% vs 4.6%) and pulses (16.7% vs 15.4%). The food alone rate slowed to 13.6% from 14.1%, which was the highest since November of 2013. On a monthly basis, consumer prices fell 0.1% after surging 1.2% in December, the most since July of 2017.

India Inflation Rate Below Forecasts

Consumer price inflation in India eased to 6.58% in February of 2020 from 7.59% in the prior month, and slightly below market expectations of 6.8%. The inflation rate fell for the first time in 7 months, as food & beverages prices slowed (9.5% vs 11.8% in January), particularly cereals (5.2% vs 5.3%), vegetables (31.6% vs 50.2%), fruits (4.0% vs 5.8%) and pulses (16.6% vs 16.7%); while milk cost rose faster (6.1% vs 5.6%). The food alone rate slowed to 10.8% from 13.6%. Also, miscellaneous prices went up at a softer pace (4.5% vs 4.8%). Meanwhile, housing inflation was steady (at 4.2%) while cost advanced faster for fuel and light (6.4% vs 3.7%); clothing and footwear (2.1% vs 1.9%) and pan, tobacco and intoxicants (4.1% vs 3.6%). On a monthly basis, consumer prices fell 0.7%, following a 0.1% drop in the previous month.

India Inflation Rate Eases to 4-Month Low

India's retail price inflation fell to a four-month low of 5.91 percent year-on-year in March 2020 from 6.58 percent in the previous month, and slightly below market expectations of 5.93 percent. Food & beverages prices rose at a softer pace (7.82 percent vs 9.50 percent in February), particularly due to vegetables (18.63 percent vs 31.6 percent), fruits (3.56 percent vs 4.0 percent) and pulses & products (15.85 percent vs 16.6 percent). Meanwhile, price increases accelerated for cereals & products (5.30 percent vs 5.2 percent) and milk & products (6.47 percent vs 6.1 percent). The food alone rate slowed to 8.76 percent from 10.81 percent. Meanwhile, miscellaneous prices went up at a softer pace (4.43 percent vs 4.5 percent), and inflation was virtually unchanged for housing (at 4.23 percent) and clothing and footwear (at 2.11 percent). Cost advanced faster for fuel and light (6.59 percent vs 6.4 percent) and pan, tobacco and intoxicants (4.71 percent vs 4.1 percent).

India March Inflation Rate Revised Lower

India's retail price inflation was revised lower to 5.84 percent year-on-year in March 2020, from a preliminary estimate of 5.91 percent. That was the lowest rate since last November, as prices rose at a softer pace for food & beverages and miscellaneous, while inflation was virtually unchanged for clothing & footwear. Meanwhile, cost advanced faster for fuel & light and pan, tobacco & intoxicants. India's government did not release headline retail inflation figures for the month of April as the country has been under lockdown amid efforts to contain the spread of the COVID-19 pandemic. The ministry of statistics said data are usually collected from 1,114 urban markets and 1,181 villages through personal visits, which have been suspended since March 19th.

India Inflation Rate Rises More than Expected

Consumer prices in India increased 6.09% year-on-year in June of 2020, well above market forecasts of 5.3%. Biggest increases were seen in cost of pan and tobacco (9.7%), food and beverages (7.29%), miscellaneous (5.7%), housing (3.55%), clothing and footwear (3.53%) and fuel and light (2.69%). The food alone index increased 7.87%, the least in eight months. Within food, the biggest rises were seen for the cost of pulses (16.68%), meat and fish (16.22%) and spices (11.74%) while prices of fruits fell 0.68% and the cost of vegetables rose 1.86% only. Figures for April and May of 2020 were released only with the June ones, as visits to collect the data were suspended from March 19th due to the coronavirus lockdown. India first imposed a coronavirus lockdown in late March and has extended it several times as the number of infections is spiking.

India Inflation Rate Above Forecasts in July

India's retail price inflation climbed to 6.93 percent year-on-year in July 2020 from an upwardly revised 6.23 percent in the previous month and easily beating market expectations of 6.15 percent. The reading remained also above the Reserve Bank of India's medium-term target of 4 percent, as food prices continued to soar (9.62 percent vs 8.72 percent in June) due to disrupted supply chains. Additional upward pressure came from pan, tobacco and intoxicants (12.35 percent), housing (3.25 percent), clothing and footwear (2.91 percent), fuel and light (2.80 percent), and miscellaneous (6.95 percent) mainly boosted by personal care and effects (13.63 percent) and transport and communication (9.95 percent).

India Inflation Rate Lower than Expected at 6.69%

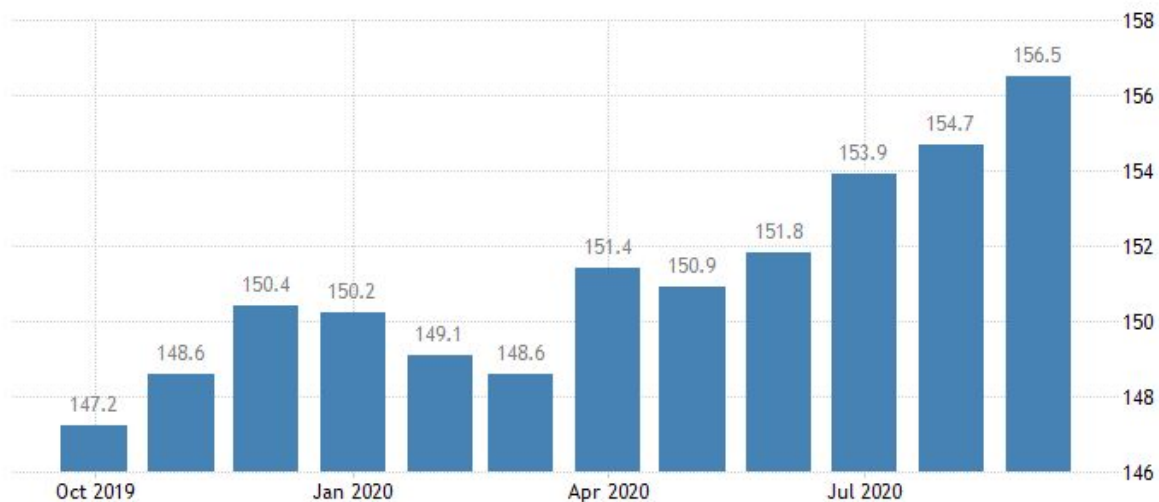
Consumer prices in India increased 6.69 percent year-on-year in August of 2020, following a downwardly revised 6.73 percent rise in the previous month and below market forecasts of 6.85 percent. Still, the inflation remains above the central bank upper band 2 percent-6 percent target range. A slowdown was seen for food (9.05 percent v s 9.27 percent). Prices of vegetables went up 11.41 percent, pulses 14.44 percent, cereals 5.92 percent, meat and fish 16.5 percent and sugar 3.93 percent. Other increases were recorded for fuel and light (3.1 percent), clothing and footwear (2.77 percent), transport (11.1 percent) and education (1.61 percent).

India Inflation Rate Highest in 8 Months

Annual consumer price inflation in India increased to 7.34 percent in September of 2020 from 6.69 percent in August, well above market expectations of 6.88 percent. It is the highest rate since January. The inflation remained above the central bank 2 percent-6 percent target range for the 6th straight month, and it is expected to average 6.8 percent in October 2020-March 2021. Food inflation went up to 10.68 percent from 9.05 percent, the highest since February and ahead of the festival season. Prices of vegetables jumped 20.73 percent, meat and fish 17.6 percent and pulses 14.67 percent. Other increases were recorded for clothing and footwear (3.04 percent vs 2.77 percent), transport (11.5 percent vs 11.1 percent) and education (2.19 percent vs 1.61 percent) while cost of fuel and light slowed slightly (2.87 percent vs 3.1 percent).

CPI Analysis

Consumer Price Index CPI in India increased to 156.50 points in September from 154.70 points in August of 2020



SOURCE: TRADINGECONOMICS.COM | MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION (MOSPI)

India Prices	Last	Previous	Highest	Lowest	Unit	
Inflation Rate	7.34	6.69	12.17	1.54	percent	[+]
Consumer Price Index CPI	156.50	154.70	156.50	86.81	points	[+]
GDP Deflator	138.80	134.80	146.50	100.00	points	[+]

So the highest CPI from year 2011 to 2020 is 156.50 points in September 2020 and lowest is 86.81 points.

Also the highest inflation rate is 12.17% and lowest is 1.54%. Inflation rate in September 2020 was 7.34%.

In 2013, the consumer price index replaced the wholesale price index (WPI) as a main measure of inflation. In India, the most important category in the consumer price index is Food and beverages (45.86 percent of total weight), of which Cereals and products (9.67 percent), Milk and products (6.61 percent), Vegetables (6.04 percent), Prepared meals, snacks, sweets, etc. (5.55 percent), Meat and fish (3.61 percent), and Oils and fats (3.56 percent). Miscellaneous accounts for 28.32 percent, of which Transport and communication (8.59 percent), health (5.89 percent), and education (4.46 percent). Housing accounts for 10.07 percent; Fuel and light for 6.84 percent; Clothing and footwear for 6.53 percent; and Pan, tobacco and intoxicants for 2.38 percent. Consumer price changes in India can be very volatile due to dependence on energy imports, the uncertain impact of monsoon rains on its large farm sector, difficulties transporting food items to market because of its poor roads and infrastructure and high fiscal deficit.

India's CPI inflation stood at 6.09% year-on-year (YoY%), in June 2020. On account of the non-availability of data for several sub-groups in May and April, the statistical office used an imputation methodology recommended in the Business continuity guidelines to calculate the consumer price index. The revised CPI inflation rose to 7.44% YoY in April from 5.9% YoY in March.

Since April 2020, higher prices of food articles have contributed to the elevated inflation. But the food prices as measured by the consumer food price index eased to 7.8% YoY in June compared to 9.3% YoY in May 2020. Among the food categories, the meat and fish segment prices stood at 16.2% YoY, pulses at 16.6% YoY and spices at 11.7% YoY in June 2020. Besides, housing inflation stood at 3.5% YoY marginally lower than 3.6% YoY in May 2020.

Retail inflation at over 6.09% YoY remains just above the RBI's monetary policy committee's (MPC) tolerance band of 4(+/- 2) %. Given that June's inflation print is higher than what it was in March and demand conditions continue to remain weak, the MPC must continue to cut rates. Further rate cuts will also support the sentiments of people and assist in transmission.

