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BIHAR ECONOMIC SURVEY

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1. Economic Survey 2020-21

Economy of Bihar : An Overview

- According to recent estimates, Bihar Gross State Domestic Product (GSDP) grew by 10.5% in 2019-20 as compared to 4.2% in Indian economy. This commendable growth of Bihar's economy was recorded in 2018-19.
- The development process that started in Bihar a little over a decade ago is still going on. In recent years, Bihar has attracted attention for its remarkable progress on the development front throughout the country, even abroad.
- The growth rate of Bihar's real gross state domestic production was 10.5% in 2019-20, which is higher than the growth rate of Indian economy.
- The growth rate of Primary Sector of Bihar was 3.6%, which is slightly less than the rate of 3.9% for the whole of India.
- But for both the Secondary and Tertiary sectors, Bihar's growth rates are significantly higher than overall India.
- It should also be underlined that the state government has managed its finances wisely in the recent period.
- Especially Bihar has strictly followed the provisions Fiscal Responsibility and Budget Management Act.
- However, it is important to note that the current trend of development of the economy of Bihar in 2020-21 due to the Covid-19 pandemic is uncertain.

Socio-economic Returns of the State: -

- The population of a state plays very significant and important role in determining its development outcomes.
- According to the 2011 census, Bihar had a population of 10.41 crore which was 8.6 percent of the total population of India.
- About 90% population of the state lives in rural areas. This has all the implications for development.

- It is important to note that the growth rate of vaccination in Bihar was 0.8% whereas the whole of India is 3.4%.
- Talking about the sex ratio, it was 918 in Bihar and 943 in India, but fortunately Bihar's child sex ratio is 935 higher than the national average (919).

Demographics Residents of India and Bihar: -

Table 1.1 : Demographic Profile and Administrative Structure of Bihar and India (2001 and 2011)

	Bihar		India	
	2001	2011	2001	2011
Demographic Indicator				
Population (million)				
Total	82.9	104.1	1028.7	1210.6
Rural	74.3	92.3	742.5	833.7
Urban	8.7	11.8	286.1	377.1
Sex Ratio (females per '000 males)	919	918	933	943
Child Sex Ratio	942	935	927	919
Density (persons per sq. km.)	880	1106	325	382
Urbanisation (Percentage)	10.5	11.3	27.8	31.2
Decadal Growth (Percentage)	28.6	25.1	21.5	17.6
Administrative Structure				
No. of Districts	37	38	593	640
No. of CD blocks	533	534	5463	5924
No. of Towns (statutory/census)	130	199	5161	7935
No. of Villages	45098	39073	638596	597369

Sources : Census 2001 and 2011

Growth of Bihar's economy: -

- Detailed data of Bihar's gross state domestic product is presented.
- As per the Quick Estimates released by the CSO, Bihar's gross domestic product in 2019-20 was Rs 6,11,804crore at current prices and Rs 4,14,977 crore at constant price in 2011-12.
- That is, the net state domestic product of Bihar was 5,62,710crore at current price in 2019-20 and 3177,276 crore at constant price in 2011-12.
- Based on this, the state's per capita gross state domestic product in 2019-20 was 507352.
- The growth rate was 1.5% in 2019-20. Whereas it was 4.2% India.

Area-wise development rates: -

- The sector-wise growth rate of three major sectors is given along with the overall growth rate of the economy of Bihar.
- Firstly, it is worth to note that the growth rates for agriculture, forestry and fisheries have come down during these years and there is no increase in these in 2019-20.
- The only good aspect of this phenomenon is the growth rate of about 8 percent of the livestock sub-region.
- Within the secondary sector there has been a fluctuation in the rapid growth rates. It was 4.8% in 2017-18.
- Within this area, there were two sectors with high growth rates - electricity, gas, water supply and other utility services (20.3) and Construction (11.4%).
- The tertiary sector has already been said that its growth rate was faster from 6.4% in 2016-17 to 11.2% in 2015-19.

Infrastructure of Bihar economy: -

- The Gross state value added (GSVA) presents the structure of Bihar's economy in terms of the share of each region.
- There has been a steady decline in the share of primary sector which has decreased from 23.4% in 2013-14 to 19.5 in 2019-20.
- There has been a slight change in the share of the secondary sector, which increased to 20.3% in 2019-20 from 19.3% in 2013-14.
- But there is undoubtedly a significant increase in the share of the tertiary sector which has increased from 57.3% in 2013-14 to 60.2% in 2019-20.

District wise disparity:

- Bihar's economy is in regional disparity. One of the main indicators of this disparity is the per capita gross district domestic product of different districts.
- According to the recently given figures, the three most prosperous districts Bihar are Patna, Begusarai and Munger. At the other end, the most impoverished districts are Kishanganj, Araria and Sheohar.
- It is worth mentioning here that all the prosperous districts are from South Bihar and all the poor districts are from North Bihar.

- Consumption petroleum products (petrol, diesel and LPG) can be considered to decide the economic disparity between districts.
- Another indicator of internal disparity in economic development is small per capita savings in various districts.

Consumer Price Index: -

- CSO Regularly publishes the new series of price data with 2012 as the base year.
- This series includes both the Wholesale Price Index (WPI) and the Consumer Price Index (CPI).
- WPI are available only for India, but fortunately the Consumer Price Index is available for all the states along with the state average.
- In Bihar, last year, the Consumer Price Index has shown an increase over the national average for both rural and urban areas.
- Inflation rates for rural areas were 9.4% in Bihar and 7.2% in India, Bihar 12.2% and India 6.7% for urban areas.

Impact of Covid-19 on the economy of Bihar: -

- Since the beginning of Covid-19 in the last days of the year 2019, many institutions and Bihar have tried to forecast the growth rate of the global economy and individual countries, including India. But unfortunately there is no standard methodology for such predictive exercise.

To estimate the growth rate of Bihar's economy, we assumed that the growth rate in 2020-21 (-) 20% in high impact countries (-) 15% in low impact areas (-) 10%.

The resulting overall estimate of growth rate of Bihar economy, for the first quarter of the current financial year, under this reasonable assumption, will be Minus 18.2 percent, which is higher than previous estimate of minus 15 percent.

2. State Finance

This chapter analyzes the fiscal situation of Bihar State Government in 2019. The Gross Fiscal Deficit as percentage of Gross State Domestic Product was 2.0 percent and the revenue account remained in surplus during the year 2019-20. The primary deficit has come down from 3736 crore in 2018-19 to 1249 crore in 2019.

- The total receipts of the state were 1, 53,408 crore and total expenditure 1,43, 613 crore in the year 2019-20.
- The Bihar Fiscal Responsibility and Budget Management Act 2006 resolutions have been followed in the management of state finances.
- Due to economic slowdown less revenue has been received in percentage of GDP.
- In Bihar, the managers of state finance have ensured the deficit so that the level of expenditure is sustainable.
- The demand and supply has declined due to the covid-19 pandemic in 20-2021.

Financial Status Overview:

- The total receipts of the Government of Bihar was 1,53,408crores in FY2019, which is slightly more than 1,52,287 crores in 2018-19.
- Revenue receipts of the state government decreased from 1,31,793crores in 2018-19 to 1,24,233 croresin 2019-20.
- The capital gain of the state government increased from Rs. 20,494 crore in 2018-19 to Rs. 29175 crore in 2019-20.
- The total revenue expenditure was 1,23,533crore and capital expenditure was 20,080 crore in 2019-20.
- Bihar has been a state with a continuous revenue surplus since 2004-05. In 2019, it is also creating a surplus.
- Revenue realization in the percentage of GDP has come down from 24.8% in 2018-19 to 20.9% in 2019.
- The borrowing by the state government has been increased from 3.95 percent in 2018 to 4.7 percent in 2019 as percentage of GDP.

- Gross fiscal deficit of Gross State Domestic Product in FY19 was 2% which is less than 2.6% of 2018-19.
- Expenditure on interest payment has increased from 10,071 crore in 2018-19 to 10,991 crore in 2019-20.
- In the year 2019, compared to last year, the expenditure on social services decreased by 5% and the expenditure on economic services decreased by 4.8%.
- Expenditure on social service - Rs. 55333 crores
- Expenditure on Economic Services – 26,571 crores
- Gross fiscal deficit of the state government decreased from 19,507 crore in 2018-19 to 12,241 crore in FY 2019.
- The surplus of the state government is 0.1% of the GDP.
- Gross fiscal deficit for 2018-19- 2.6%
- Gross fiscal deficit for 2019-20- 2.0 %
- In Bihar, the state government's total borrowing stood at Rs 291745 crore in 2019-20, which is 56% more than the previous year.
The loan taken by the state government from the central government was 2534 crores in 2018-19, which has decreased to 1279 crores in 2019-20.

Receipt and expenditure of the State Government: -**➤ Percentage's :**

Revenue deficit	2019-20	- 0.1%
Revenue deficit	2020-21	2.8%
Gross fiscal deficit	2019-20	2.0%
Gross fiscal deficit	2020-21	3.0%
Primary Loss	2019-20	0.2%
Primary Loss	2020-21	1.1%

➤ Fiscal Performance: -

Revenue deficit ratio with gross fiscal deficit:-This ratio shows the extent to which the revenue deficit contributes to the gross fiscal deficit.

If the ratio is more than 100, then capital assets are created.

Bihar's revenue surplus in the year 2019-20 was equal to 5.7% of the gross fiscal deficit.

- **Ratio of capital outlay with gross fiscal deficit: -**

This ratio refers to the ratio of gross fiscal deficit that may be due to capital outlay. In the year 2019-20, the capital outlay in Bihar was 10.05% of the gross fiscal deficit.
- **Revenue expense ratio with proper disbursement: -**

This means how much of the total expenditure is for administrative or general services. In Bihar, this ratio was 29 percent.
- **Ratio of revenue to revenue expenditure: -**

In Bihar, expenditure on administrative or general services was 33.5% of the total revenue receipts in 2019-20.
- **Ratio of interest payment with revenue expenditure: -**

Interest payment was 8% of the total revenue expenditure.

Key fiscal indicators: - (2019-2020 and 2020-21)
- **Sustainability, Flexibility and Modification of the State Finances: -**
 - A few select indicator figures are given, which remain an analysis of Bihar financial system.
 - **Sustainability:** - These indicators help in understanding whether the means of financing developmental activities in the state are sustainable.
 - **Interest Ratio:** - This ratio is calculated as the ratio of difference between interest payments and interest receipts and the difference between total revenue and interest receipts.
 - In the year 2019-20, this ratio stood at 10 percent, which is slightly higher than 8.2 percent in 2018-19.
 - **Modification:**- Indicators used to evaluate the revision of the state finances.
 - **Primary Deficit:** - It is the difference between the current year's interest payments from borrowings taken earlier.
 - The ratio of primary deficit has been reduced to 10.2% in 2019-20.
 - **Deficit Management:**- The fiscal deficit management of Bihar State has been better. It was at 2 percent in the year 2019-20, which shows a much better position than the rest of the state.

- **Cash Management and Guarantees :-**
 - Minimum daily cash balance of 1.73 crore rupees is to be kept with RBI for state government, failing which it has to resort to Ordinary Advances or Special Ways and Means Advances.
 - In the year 2019-20 the Bihar government has kept the daily minimum balance interest for the whole year.
 - Total cash balance as on 31 March 2020 was 24,067.65crore.
 - **Debt Management:** - The total outstanding liabilities of the State Government has increased by 13%.
 - Total outstanding liability was 30.9% in 2019-20.
 - **Resource Management:** - Financial management is done from tax and taxes received by the Government of Bihar, this includes GST.
 - The state contributes 27.2% of the revenue in direct taxes to its taxes in 2019-20.
 - The share of indirect taxes is 72.8% in 2019-20.
 - Revenue collected by the state government from the commercial tax in 2019-20 is Rs. 22,500 crores.
 - Their share in total revenue was – 18.7%.
 - Share of GST tax for the FY 2019-20 was 18%.
 - **Expenditure Management:-**
- **Expenditure on salary and pension: -**
 - The total expenditure of the state on salary and pension was Rs. 37529 crores in 2019-20.
 - It has increased by 4.3%.
 - Expenditure of 11,949 crore on water supply, sanitation, housing and city development.
 - The expenditure on health and family welfare in the state has increased continuously during the past years.
- **Expenditure on Economic Services:**
 - Total expenditure on Economic Services was 33,684 Crore in 2019-20.
 - Total expenditure on agriculture and allied activities was 20.2%, which is 7056 crores.
- **Covid-19 and State Finances: -**
 - There may be negative GDP growth in the economy for FY 2020-21.
 - Expenditure on social sector is projected to increase due to unforeseen health crisis in current fiscal year 2020-21.

3. Labour, Employment and Migration

- According to the census of India and Census data, the labor ratio in Bihar was lower than the whole of India especially in terms of working age population of women.
- Less productive, less diversified agriculture, smaller industrial base, less profitable small service sector are responsible to adverse effect on the economy of Bihar.
- Given the abundance of human resources in the state, there is a need to create large scale and diversified jobs.
- **Size of manpower: -**
 - One of the main aspects of human development is gender inclusivity in the economic sphere.
 - Women's participation in economic activity has been low in all South Asian countries, and India is no exception. But among the states of India, Bihar has the lowest female manpower participation rate.
Rural Area – 4
Urban Area - 63.3
 - It is significantly lower than the average of the whole of India in the FY 2018-19.
 - Manpower participation rates (status) in Bihar 2018-19
 - The reason for such low female manpower participation rate in Bihar has been the defining complexity of women's work, which has increased the problem of low female count in manpower.
 - Bihar has one of the lowest labor population ratio for both men and women among the major states of the country.
 - Male labor population ratio was 13.9 in rural Bihar, which was much lower in West Bengal with highest proportion in rural areas.
 - Among all states, the highest **rural male population** ratio was recorded.
 - The male labor population ratio in urban area was 12.6% which was much lower than Gujarat, the state with the most urban area male labor population ratio.

- In Bihar, both rural and urban areas, the female labor population ratio was extremely low.
- Female Worker Population Ratio
 - Rural Bihar - 4.0%
 - Urban Bihar - 5.7.

Low levels of social prevalence, education and skills exclude the working-age female population from the economic sphere
- **Labor Population Ratio (WPR – 2018 19)**
- **Dependency Ratio:**
 - ❖ The proportion of non-workers with workers in which all persons between 15 and 59 years of age have been treated as laborers.
 - ❖ Low labor population ratio in Bihar converts to high dependency ratio in both rural and urban areas.
 - ❖ The rural Bihar dependency ratio is at a high of 61.1%, which is 11.6% higher than the average for the whole of India (49.5%).
 - ❖ The dependency ratio in urban Bihar was 52.88% which was 12.31% higher than the average for the whole of India (40.55%).
 - ❖ The dependent population in the economy includes children up to 15 years of age and the elderly.
 - ❖ Bihar has a large population of children due to high fertility rate which leads to high dependency ratio.
- **Based on normal monthly per capita usage expenditure: -**
 - ❖ There are two relation between female labor population ratio and income.
 1. As rural Bihar moves towards a higher category of general monthly per capita consumption expenditure, the female labor population ratio declines significantly.
 - ❖ The female labor population ratio in the lowest category of general monthly per capita consumption expenditure was 5.8% and in the highest category was 1%.
 2. Its reverse pattern is seen in the urban area.

Female population ratio in the lowest category - 2.5%

Highest class female population ratio – 10.7%

Hence, the labor population ratio among women workers has a positive relationship with the normal monthly per capita consumption expenditure in urban Bihar.

➤ **Unemployment Rate:**

- ❖ Unemployment rates are generally low in developing countries.
- ❖ The reason for such low level of visible unemployment is that a large proportion of the working-age population is under-employed in poor and less profitable occupations.

➤ **Unemployment Rates – 2018-19: -**

➤ **Employment Pattern: -**

❖ **In Bihar:**

- ⇒ Self-employed male laborers were 57.6% (India – 31.7%)
- ⇒ Self-Labor, Labor – 52.5% (India – 44%)
- ⇒ Subsidiary of domestic enterprise – 5.1% (India – 7.6%)
- ⇒ Regular / paid male – 9.7% (India – 24.4%)
- ⇒ Regular wages / salaries – 9.7% (India – 24.4%)
- ⇒ Irregular Pay – 32.7 % (India - 24%)

Reason:

- formal sector contraction
- Realization of Social Security
- Work under contract

❖ **Women**

- ⇒ Self-employment - 40 %(entire India – 53.4%)
- ⇒ The proportion of women workers in regular wage / paid jobs in Bihar was almost equal to the average of the whole of India.
- ⇒ In Bihar, both men and women workers are still getting most of the employment in primary sector.
- ⇒ In agriculture, forestry and fisheries sector.

❖ **Construction Worker: -**

- ⇒ The provisions of welfare schemes for laborers in the state include financial assistance, maternity benefit, financial assistance for education, financial assistance for marriage etc. in the event of death of the registered laborer.
- ⇒ Number of registered laborers – 18,521 thousand.
- ⇒ Amount allocated – 1524.4 crores.

❖ Child laborer: -

- ⇒ Financial assistance is provided through the Chief Minister Relief Fund for the rehabilitation of the freed child laborers in the state.
- ⇒ The number of child laborers freed in 2019 was 664.

❖ Minimum Wage Rates: -

- ⇒ Minimum laborers under the six categories are amended from time to time by the Department of Labor Resources.
- ⇒ Modified twice a year –In April and October.
- ⇒ The growth rate of minimum wage rates in 2019-20 was between 4.9% to 5.4%.
- ⇒ Declaration of minimum wage rates is necessary as it acts as a reference point for the prevailing wage rates in the market.

❖ Labor Welfare Measures taken by the State Government: -

- ⇒ To prevent exploitation of laborers in various forms and to improve the standard of living of the workers, the State Government has introduced several schemes and programs.
1. Bonded Labor Rehabilitation Scheme (BLRS) :- The Bonded Labor (Abolition) Act 1976 was enacted in India for the abolition of bonded labor on any form of forced, labor based.
 - ⇒ In May 2016, the Bihar government amended and implemented the Bonded Labor Rehabilitation Act.
 - ⇒ Financial assistance is given in three categories.
 - I. one Lakh rupees for rehabilitation of freed bonded laborers
 - II. 2 lakhs rupees for (orphans, women, etc.), depending on the nature of the bonded laborers.
 - III. For Third Gender and females (freed from sexual harassment and prostitution), there is provision of 3 lakhs.
 2. Bihar Shatabdi Unorganized Sector Workers & Craftsmen Social Main Plan – 2011

❖ Appointment by State and other Institutions:

- I. Bihar Public Service Commission
- II. Bihar Technical Services Commission

- III. Bihar State Electronic Development Corporation (Beltron)
 - ⇒ Beltron's goal is to provide skilled human resources to various departments to handle services including information technology and information technology.
 - ⇒ E-Development
- III. Rural Self-Employment Training Institute (RSETI)
 - ⇒ Employees State Insurance (ESI)
 - ⇒ More than 10 employees apply in employed institutions
 - ⇒ Employees 'State Insurance Scheme is a consolidated measure of social insurance incorporated in the Employees' State Insurance Act.
 - ⇒ It has been formulated to fulfill the work of providing medical care to individuals and as many families related to sickness of employees, maternity employment as defined in the Employees State Insurance Act, 1948.
- ❖ **Skill Development: -**
 - ⇒ Bihar Skill Development Mission has been constituted to increase the capacity to increase the skill level of the youth in the state.
 - ⇒ 16 departments are associated with this mission.
 - ⇒ The state government has laid emphasis on infrastructure development of industrial training institutes in the state.
 - ⇒ Allocation of 136 crores for skill strengthening for industrial underdevelopment has been done.
 - ⇒ The project aims to increase awareness through industrial skills / geographical resources to meet the challenges related to engagement in the Tiny, Small and Medium Enterprises.
- ❖ **Assistance for migrant workers:**
 - ⇒ Bihar State Overseas Planning Bureau
 - ⇒ In 2010, the State Government set up the Bihar State Overseas Planning Bureau to provide logistic and legal assistance to aspiring international migrant workers.
- ⇒ Objective - To organize seminars and workshops.

4. Environment, Climate Change and Disaster Management

In the last few decades, Bihar has seen a huge increase in population and growth in the two digits of the economy. Due to which the need for extraction of natural resources has increased. Forestry and silt production contribute about 1-2 % in Bihar's Gross State Domestic Product and it has been increasing at an annual rate of 6-9 % “between” 2015-16 to 2019-20.

Introduction:

- The United Nations' Sustainable Development Goal (SDG) is conceptualized for 2030 to achieve economic prosperity by promoting inclusive and sustainable development along with sustainability of the environment.
- A state like Bihar has shown a huge increase in population and double-digit growth of the economy in the last few decades, which has increased the need to extract natural resources.
- Bihar's Gross State Domestic Product increased at a rate of 10.5% as compared to the 4.2% average of payables in 2019-20.
- The population density of the state is 1106 persons / class population and the decadal growth rate is 25.5%.
- Also, more than three-fourth of the population earns livelihood from agriculture, animal husbandry, forestry and tourism sector which has an impact on the health of the environment and the functioning of ecosystems.
- The state government is trying to achieve the global goals of 2030 by focusing on bridging the link between economy, environment and human development.

Climate change:

Bihar is a state located in the eastern part of the country, surrounded by the lower hills of the Himalayas, the Gangetic Plain, the World Plateau and the miniature Gondwana Basin. The state has three distinct agro-climatic zones.

Rain:-

- A direct and significant effect of global warming is evident from the changing pattern of rainfall and other forms of rainfall.
- Bihar is highly sensitive to the effects of climate change which are affected by flood, drought, earthquake, storm and cyclone weather events.

- There is a considerable difference in the trend of annual rainfall in Bihar throughout the year.
- The pattern of thunderclap also varies in different climates with different times.
- 17 out of 38 districts of the state received more than the annual rainfall of the state.
- For 2019-20, Kishanganj received the highest rainfall of 1951.8 mm and the lowest was 615 mm in Arwal.

Temperature:

- A sharp change in the Earth's surface temperature is affecting the weather and climate patterns globally and Bihar is no exception to this scenario.
- In recent years, heat wave has increased between March and June. Whereas in winter, the heat is felt from December to February, which causes a disruption in crop production.
- The annual average, minimum and maximum temperatures for the period 2001-02 to 2019-20 are indicated in Bihar.
- The lowest 0.5 ° C temperature was recorded in 2010–11 while the highest was 43.7 ° C in 2008–09.
- Talking about the average temperature, it is 24 degree Celsius (Average of 19 years.) Also, there is a considerable difference between the heat at night and the temperature in the winter months.

Forest Resources: -

- Forest plays a key role in maintaining the environmental stability by providing shelter to wildlife and biodiversity and creating climatic and aquatic cycles.
- These affect humans and different aspects of life.
- Forestry and logging contributed to 1.2% to Bihar's Gross State Domestic Product and it has been increasing at an annual rate of 6.9% between 2015-16 to 2019-20.

Revenue and expenditure of the department: -

- In 2015-16, it increased from 17.52 crores to 2018-19 24.10 crores, however it decreased slightly to 20.3 crores in 2019-20.
- The department's revenue grew at an annual rate of 4.32 % between the years 2015-16 to 2019-20.
- **Forest cover:**
- The plains of West Champaran in Bihar are moist deciduous forests in the Terai region, while the Rohtas districts of Bihar have natural deciduous natural forests.
- As a renewable resource, forests provide a variety of variable services that have an impact on changing climatic conditions.
- For the year 2017 and 2019, there is a distribution stock of the forest cover of the districts.
- In the year 2019, the maximum 1056.7 sq km of forest cover was observed in Kaimur district, was about 31.4% of the total area of the district.
- It was the lowest in Jehanabad.

Carbon Stock: -

- There is growing worldwide thinking to increase the carbon stock to reduce the effects of increasing the transition of the greenhouse gases that cause global warming to the atmosphere.
- The IPEEC suggests that the degradation of forests and the burning of fossil fuels emits the ultimate greenhouse gas.
- Increasing green cover is an important way to maintain surface temperature and its effects in order to maintain the climate system.
- Increasing the carbon stock in this context becomes extremely important as the carbon dioxide (CO₂) present in the atmosphere is especially incorporated into biomass. Forests are important reserves and sources of carbon.
- Bihar had the highest 5.24 million tonnes of carbon stock in 2019. The state government is trying to plant trees in a lot of fields to increase carbon stock.

Wildfire: -

- Ongoing efforts to conserve forest wealth and biodiversity may have to be extinguished by forest fires.
- Climate change has increased the incidence of forest fires which have resulted in deforestation, which is harming the forest ecosystem.
- 7.15% forest cover in Bihar is very much prone to fire.
- In Bihar, 423 cases of forest fires were identified in 2019-20.

Change of use of forest area: -

- To meet the needs of increasing population and urbanization, forest land needs to be used for other purposes.
- Around 26 such projects were taken up in Bihar in 2019-20 for which 432.78 acres of forest land was given for developmental works in the state. This includes road construction, pipeline laying, mining and other infrastructure projects.

Schemes of the Department of Environment, Forest and Climate Change: -

- To realize the potential of a rich natural resource base, the Bihar State Agro-Forestry Policy, 2018 envisages several afforestation programs to enhance the sustainability of the environment.

Greening of urban sites: -

- Projects related to landscaping of urban parks and maintenance of green structures in urban areas are being encouraged by the Department of Environment, Forest and Climate Change.

Afforestation Program:

- The details of financial and material achievements of various afforestation programs have been checked in Bihar in 2019-20.
- In order to promote agro-forestry in the state, the Poplar ETP scheme of agro-forestry with commercial plantation of poplar, which is being prepared in short time on farmers' land, is being implemented in North Bihar to increase the tree cover and to preserve the environment.

Forestry work by the department during the Covid-19 pandemic: -

- The Department of Environment, Forests and Climate Change of Bihar is responsible for enhancing the quality of the natural environment in which people live.
- The quality of air and water has been improved through various measures.
- The air and water quality have been improved through some measures to enhance the quality of the environment.
- The nationwide lockdown to prevent the spread of Covid-19 in the last week of March 2020 had to stop the ongoing work of the nurseries and other works in the future which hampered the progress of the targets set by the state.

Biodiversity and Wildlife: -

- Climate change, forest department, exploitation of natural resources and increasing impacts of burning fossil fuels have affected the biodiversity and habitats of wildlife.
- In fact, biodiversity and wildlife not only contribute to the protection of ecosystem services but also contribute to the welfare of the people by providing food, fuel, and fiber.
- In the efforts of the government with the preservation and conservation of biodiversity and wildlife in the state, details of many birds and sanctuaries in the state are presented.
- Vikramashila Gangetic Dolphin Sanctuary.
- First state bird festival of Bihar- Kalra

Environmental pollution: -

- In the pursuit of high economic growth and human development, many external conditions arise which do not match to ensure a simple natural environment.
- High amount of certain substances in the atmosphere, and pollution of water bodies, has shown that there is considerable pollution of the environment.
- Due to which the nature around humans and ecosystem has declined significantly. Air, water and noise pollution trends in Bihar are discussed in this section.

Water pollution: -

- Bihar has good contribution from both ground water and other water sources. Apart from rain, lake ponds, canals / wells and other water bodies provide essential water for various activities.
- However, due to rapid increase in population, increase in development activities and improper use of water, the quantity and quality of water resources is declining.

Quality of river water: -

- National Water Quality Maintenance is being done by Bihar State Pollution Control Board. Under this, biochemical change, dissolution, pH, conductivity, acids, fecal contaminations are examined.
- **Quality of Ground Water Resources: -**
- Ground water resources in the extensive drought-prone areas of Bihar play a large role in providing water during the dry seasons which help in the sustenance of human life.
- Groundwater levels have declined due to over-exploitation due to ill economic and urban growth.
- Commonly observed water pollutants in Bihar include arsenic, chloride, iron and manganese, which cause great harm after drinking.
- The monitoring of the Ganga river and its tributaries is done on monthly basis by the Bihar State Pollution Control Board.
- In the year 2019-20, a total of 1424 samples of water have been analyzed by the board from different places.

Air pollution: -

- In recent decades, air quality has been affected by a substantial increase in activities related to agriculture, manufacturing, and mining.
- Global warming which has increased the level of air pollution in Bihar in terms of fossil fuels, burning of crops and open waste, bricks, construction, mining and emissions from industries and vehicles.

Schemes of Bihar State Pollution Board for monitoring air pollution.

- In compliance with the order of the National Green Tribunal (NGT) in 2018, the Government of Bihar has brought a plan for prevention and control of air pollution by the Department of Environment, Forest and Climate Change.
- The state government ruled in June 2020 on the use of pet coke and fuel oils to prevent air pollution.
- In order to prevent air pollution in the allegedly untouched cities of Bihar, pollution industries will not be set up in the area set by the Master Plan of Patna and in the new 22 regions in the planning area of Muzaffarpur.
- In order to reduce the emission from Brick Kilns, the Bihar State Pollution Control Board has directed all the bricks Kilns in the state to abandon old technology and adopt relatively cleaner technology.

Schemes of Transport Department: -

- To Increase cleaner technology for public transport system:- Transport Department has procured 10 electric buses and plans to purchase 25 additional electric buses.
- Introduction of cleaner fuels for vehicles (CNG and LPG).
- Prohibition and removal of commercial diesel vehicles older than 15 years.
- On January 31, 2021, the diesel Municipal Corporation, Danapur Municipal Council, Khagaul Municipal Council and Phulwari Sharif Municipal Council area the plying of diesel-powered three-wheelers shall also be restricted from 31st December 2021.
- As per Bihar Cleaner Fuel Policy 2019, a free subsidy of 40,000 rupees will be given for replacement of existing three wheelers and others.

Noise pollution

- The rising level of noise pollution in the cities of Bihar is a matter of great concern. The main sources of noise are construction and industrial activities, road traffic and loudspeakers.
- Control of noise pollution is being done by Bihar State Pollution Control Board at five different places in Patna, so that a plan can be made to control the level of noise pollution in the city.

Disaster Management:

- The United Nations' Sustainable Development Goals do not merely emphasize the need to protect the natural resources of the environment.
- Disaster Risk Reduction Roadmap (2015-2030) contains guidelines for disaster reduction and risk management.
- In the year 2019-20, due to floods there was a lot of damage in the state and there was a loss of Rs 16,750 crores of public property.
- Cold and lightning also caused loss of public money in all the districts in 2019-20.
- Floods caused extensive damage to the production of crops.
- In the year 2019, 459 people have been reported dead due to lightning.
- The state government gives high priority to the efficient management of disasters in the state.

Management of Covid-19 pandemic in Bihar: -

- Following the declaration of the Covid-19 pandemic as an internationally worrisome public health emergency, the state government has undertaken contact tracing (contact detection) investigations, and door-to-door monitoring of infection spread and indexing Quick and strict steps such as lockdown, imposed under the Disaster Management Act 2005 along with other measures.
- Awards for management of Covid-19 for medical staff for strengthening infrastructure and saving lives of people.

Initiatives taken by the Department of Disaster Management: -

- Functions of Disaster Relief Center.
- Functions of Block Quarantine Camps.
- Functions of border disaster relief areas.
- Corona Support.
- Chief Minister Investment Assistance.
- Migrant labor control assistance.

5. Human Development

- Human development means progress in the totality of human life.
- Human development has two sides -
 - I. Creation of human abilities like improvement in health, knowledge and skills.
 - II. The use of their acquired abilities in production purposes and leisure for cultural, social and political work.
- In Bihar, the economy has grown at a steady rate of 8.2% at constant price between 2014-15 to 2019-20. The government has also increased its development expenditure. As a result, there has been a continuous increase in human development in the state, especially in its two important dimensions - education and health sector.
- In the last six years, the per capita development expenditure in the state has been increasing at the rate of 17.9% whereas the national average is only 11.6%.

Growth rate at various expense

Cost

- Education- 38,484 (2019-20) crore.
- Health - 10,315 (2019-20) crore.

Demographic Account (2011-Census)

- **Other information:**
- The population of Bihar is 8.6% of the total population of the country. Bihar is the third largest state in India in terms of population.
- By 2021 the population of the state will be around 12.48 crores.
- District-wise demographic characteristics of Bihar indicate very heterogeneous patterns.

Three districts with best performance in terms of decadal growth rate: -

- I. Arwal
 - II. Darbhanga
 - III. Gopalganj
- Sex ratio is highest in Gopalganj(1021), minimum in Munger (876)
 - Maximum 1882 people per sq km population density has been recorded in Shivhar district. It is followed by Patna (1803).
 - Maximum urbanization recorded in Patna 43.1% and the least 3.5% is in Samastipur and Banka districts.

Fertility rate in empowered action group (EAG) states –

- Bihar, Jharkhand, Uttar Pradesh, Uttarakhand, Rajasthan, Madhya Pradesh, Chhattisgarh and Odisha are included in the most demographically disadvantaged states in the country.
- Therefore, to achieve the goal of population stability by 2041, the main focus should be on these eight empowered working group states and their performance.
- They constitute 45.9% of the total population of the country.
- Bihar's continued decline in total fertility, makes Bihar appear to move towards achieving the goal of replacement-level breeding (2.1).
- It is estimated that the fertility rate may be 1.8 in 2041.
- The fertility rate in the year 2012 ranged from 2.6 in Patna to 4.6 in East Champaran and Shivhar.

Age structure: -

- Being one of the youngest manpower states in the country, Bihar is almost on the verge of achieving demographic dividend.
- The working-age population in Bihar is projected to increase from 43% in 2011 to 58.3 by 2041.
- The share of youth (0-19) in Bihar is estimated to be 49.2% in 2011 and expected to 30% in 2041.

Health-related blueprint:

- Health and well-being are important components of human development and an important concern for the life of every individual, their family and community.
- Like most other parts of the country, majority of people in Bihar also depend on public health facilities.

Health Infrastructure:

- Bihar has three levels of primary, secondary and tertiary care in health care infrastructure.

Primary:

- This infrastructure includes sub-center primary health center and additional primary health center.

Secondary:

- In this, patients are sent from primary health centers to get treatment from specialists. These are the first referral units.
- Under this, at block level community health center, subdivision hospital and district hospital are covered.

Tertiary:

- Medical colleges and their associated hospitals come under tertiary health care.
 - In the year 2019-20, the number of patients arriving per hospital per month was 9517.
 - At present, there are 36 District Hospitals, 67 Referral Hospitals, 54 Subdivision Hospitals, 533 Primary Health Centers, 9949 Sub Centers and 1393 Additional Primary Health Centers.
 - 3 top districts in terms of number of health institutions per lakh population till September 2020:-
 - Jamui
 - Shivhar
 - Sheikhpura
- And the most backward districts-
- Patna
 - Om Sitamarhi
 - Darbhanga

Effect of major diseases on a person: -

- Individual burden of a disease- is one of the most fundamental parameters in the disease. A person is a measure of the burden of diseases in a particular place at a particular time.
- The most important cause of diseases in Bihar in 2019-20 is acute infection of respiratory tract. In which there were 9.0 lakh patients.
- The second important category was fever due to unknown reasons with 8.3 lakh patients.

National Health Mission:

- The National Health Mission, launched in April 2005, now has two sub-missions.
 - National Rural Health Mission
 - National Urban Health Mission
- Their programs include strengthening of health system in rural and urban areas, reproduction, maternal-newborn-child and adolescent health and communicable and non-communicable diseases.

Drinking Water Supply and Sanitation: -

- Clean water and sanitation is one of the goals of the Sustainable Development Goal and is also an important component of the health of the people of Bihar.
- Bihar has improved in drinking water and sanitation facilities in the last five years under the National Family Health Survey-5.

National Rural Drinking Water Program: -

- Under Toilet Construction (Urban Area) Scheme, Lohia Sanitation Scheme was launched, the State Government has included every family and an incentive amount of Rs 12,000 is given.
- In urban areas, incentive amount of Rs 4000 is given by the Central Government under Swachh Bharat Mission (Urban).
- In June 2016, LohiaSwachhAbhiyan was transferred from Public Health Engineering Department (PHED) to Rural Development.
- Since then, JeeVika has also been working on the mission mode for the successful implementation of the plan.
- It ensures a demand-driven model led by the beneficiary through behavioral change.
- A large base of livelihood self-help groups is being used in desired behavior change.

The major achievement in the last seven years has been in the construction of toilets: -

- In 2017-18- Construction of 34.3 lakh toilets.
- In 2018-19- Construction of 61.3 lakh toilets.
- In 2019-20- Construction of 15.3 lakh toilets.

Education and Youth:

- Development is a macroeconomic, social, cultural and political process. The aim of which is to improve the well-being of the people.
- Quality education is a basic human right. But Bihar has been an adverse state in the field of education both before and after independence.
- Since education falls under the concurrent list, the implementation of educational programs can be done by both the state government and the central government.

Literacy Rate:

- In India, 74.04% of population aged 7 years and above were literate in 2011. Comparing the literacy rates of the states with the Empowered Action Group, we find that except in the year 1961, Bihar's literacy rate has always been low.
- Fortunately, the literacy rate of the state has improved considerably in the last decade, which has increased from 47% in 2001 to 61.8% in 2011.
- It shows an increase of 14.8% in a decade.

Elementary and Secondary Education: -

- The state government has given more importance to elementary education in recent years as the primary education sector has been given the high priority for an educationally backward state like Bihar.
- Progress in elementary education has two important components.
 - High Enrollment Ratio.
 - Dropout Rate.
- The number of schools of both primary and upper primary schools in Bihar increased from 21 % in the last three decades, from 66,166 in 1990-91 to 80,018 in 2018-19.
- The number of teachers in elementary education increased from 2,16,674 in 1990-91 to 3,69,105 in 2018-19 which shows an increase of 70%.
- Enrollment at primary level- 141.35 lakh Enrollment at upper primary level- 69.34 lakhs (in 2018-19)
 - Total-210.67 Lakh
 - Scheduled Castes – 39.38 Lakhs
 - Scheduled Tribes – 4.40 Lakhs
- Boys accounted for 50.7%and girls 49.3% in total enrollment in 2018–19.

Dropout rate: -

- The success of high enrollment is meaningful only when the enrolled children continue to study further in schools.
- The problem of quitting studies has been a major problem in Bihar.
- There are various reasons for leaving the studies in various studies, the main ones being:
 - (A) Economic reasons
 - (B) Social and cultural reasons
 - (C) School environment and infrastructure
- Income from wages, cost of opportunity for household work etc. are some economic reasons which prevent parents from sending their childrens to school.
- At the primary level, the dropout rate (2018-19) was 21.35%.
- Dropout rate in upper primary level was 44.8%.
- The dropout rates of girls are lower than boys at all level of education.
- The state government has done many things in the years to reduce the dropout rate.

Education and expenditure: -

- Development of human capital is absolutely essential for the overall development of the economy in Bihar. In recent years, the expenditure of the Department of Education has increased considerably.
- Total expenditure on education has increased by 58.3% between 2014-15 to 2019-20 with an average annual growth rate of 9.2%. And its share in total expenditure has been between 13 to 19 %. The share of education in expenditure on social services has been between 31 and 53%.
- In the total expenditure in the year 2019-20, the expenditure of elementary education was 66.4%, and on secondary and higher education expenditure was 33.6%.

Expenditure through various schemes: -

- Mid-Day Meal Scheme
- Kasturba Gandhi Girls School
- National Higher Education Campaign
- Holistic Education Campaign

Higher education: -

- Higher education plays an important role in building human resources for the emerging economy.
- The demand for higher education in Bihar keeps increasing, despite the scarcity of resources, the state government seems ready to meet this growing demand.
- According to the All India Higher Education Survey, in 2018-19, the state had a population of 1.18 crore youth aged between 18 and 23 years.
- Currently, 879 colleges and 33 universities are functioning in the state. Out of which 17 are state public universities.
- There were a total of 278 state colleges and 564 private colleges in the year 2018.
- 60 Educational Training Institutes, 36 Engineering Colleges.
- 87 colleges and 7 universities in the state are recognized by the National Assessment and Accreditation Council (VI).
- Chandragupta Institute of Management (SIMP) was established in 2008 to increase management of education and research facilities in the state.

Other education related initiatives: -

- Mukhyamantri Balika Protsahan Yojana.
- Financial assistance for the purchase of textbooks to a total of 1.66 crore students in 2019-20 through installment.
- This initiative was taken in distribution of food, dress, bicycle etc.
- Bihar Student Action Plan.
- **Women's Empowerment: -**
- Empowerment of women is necessary for a balanced development of any society. Women have historically been victims of discrimination in all walks of life, from education to health care and household decisions and to employment.
- Empowerment means the right to make and decide choices, the opportunity and resources available, and the ability to influence the direction of social change in order to create a more just and social and economic order.

- The indicator of empowerment is mainly based on three criteria:-
 - (A) Women's participation in domestic decision making.
 - (B) Having a bank account.
 - (C) Having a house or land. Health Survey (2019-20) - 5 figures (15 to 49 years of age) comprises 86.4% of Married women participate in household decisions.
- In case of self-operated bank accounts, this figure is 76.7%.
- The share of women holding land alone or jointly / home has decreased by 3.5%, which reduced from 58.8% to 53.3%.
- For the first time in the Eighth Five-Year Plan, the empowerment of women was included as a clear goal to improve the status of women in the country.
- The state government has also been making several efforts in recent years for the empowerment of women.
 - Gender budget from 2008-09.
 - The expenditure of women development has tripled in five years to Rs 19,952 crore by 2017-18.
 - The share of women in the total budget of the state was 9%.
 - MukhyamantriKanyaUtthanYojana to stop child marriage.
 - LakshmbaiSurakshaYojana, KanyaVivahYojana, Nari Shakti Yojana etc.

Economic empowerment:

Government Schemes (Bihar)

- I. Reserved employment rights of women
 - 35% Reservation in appointment in government services
 - 50% Reservation in Panchayati Raj and Municipal Elections
 - Establishment of Women Police Station.
 - Women's self-help groups formed by Jeevika have also increased the confidence of women.
- II. **A powerful woman, capable woman.**
 - Special Scheme for Women Entrepreneurship under Saat Nishchay-2.
 - Loans with no interest up to a maximum of Rs. 5 lakhs will be given.
 - Encouragement of girls for higher education.
 - 25,000 will be given on completion of intermediate and 50,000 on completion of graduation.
- III. **Micro Insurance**
Enrollment of 20.83 lakh self-help group members (2019-20)

Alternative Banking - 'Bank HamareGaon'

- I. Women Development Corporation (WDC)
 - In order to improve the economic and social status of women in the state, District Offices of Women Development Corporation have been opened in all the 38 districts of the state.
 - A provision of Rs 5 crore has been made for the budget 2020-21.

Social Empowerment: -

- I. Food and Health Security Intervention
- II. Short-Stay home
 - It has been decided by the state government to run orphanages in all the districts of the state for the rehabilitation of socially and economically disadvantaged women.
- III Chief Minister KanyaVivahYojana
 - Financial support of 5000 rupees is given to the girl's family at the time of marriage.
- IV. MukhyamantriNari Shakti Yojana
- V. Help Center-cum-Helpline

Cultural Empowerment: -

- I. Didi Ki Rasoi - This is a community-run and canteen managed by self-help group members operating in 4 districts / Sadar Hospitals in Buxar, Sheikhpura, Purnia and Vaishali.
- II. SarasMela
- III. MeenaManch

Social Scheme for Old and Disabled People:

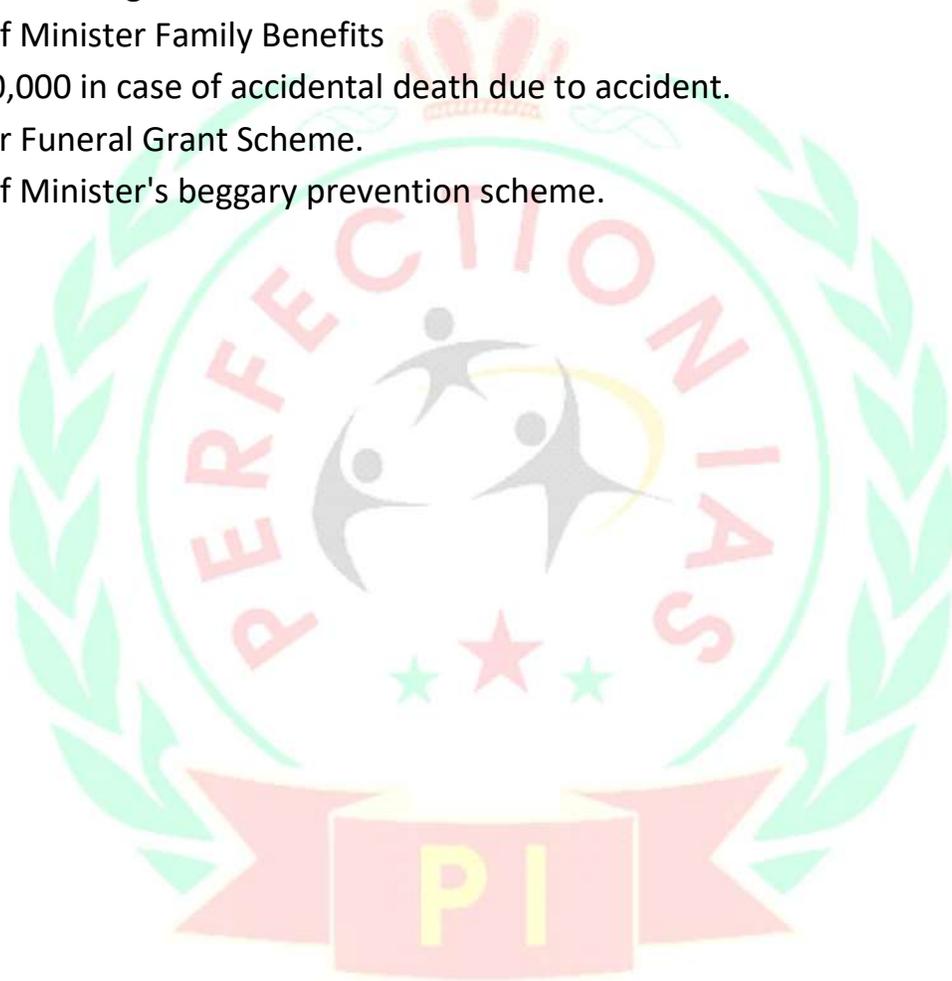
- According to the census, the population of senior citizens (people aged 60 and above) in the state is 77.07 lakh, which accounts of 7.4 percent of total population in state. In Bihar, 23.31 lakh people are disabled, which is 2.2% of the total population.

Schemes:

1. Chief Minister Older Pension Scheme
 - Rs. 400 per month for 60-79 years
 - 500 per month over 80 years



2. National Senior Citizen Action Plan:- The focus is on the four largest states under this scheme.
 - Financial Security
 - Food
 - health care
 - Human interaction / respectful life
3. National Drug Reduction Action Plan
4. Chief Minister Family Benefits
Rs20,000 in case of accidental death due to accident.
5. Kabir Funeral Grant Scheme.
6. Chief Minister's beggary prevention scheme.



6. Energy Sector

- Energy is important for the development of any economy.
- It provides light and fuel to families and electricity to industries, agriculture, commerce and all service sectors.
- Apart from the recognized role in development, it also has a direct and significant contribution in earning revenue, creating employment opportunities and enhancing the quality of life.
- Electricity demand in Bihar has increased rapidly in recent years and it is expected to increase further in the coming years.

Shortcomings in energy sector (Bihar): -

- Limited availability of natural resources of energy.
- Less possibility of hydroelectric generation in the state.
- Coal mine rate conditions.
- Wind velocity is also not enough.
- At the same time, to meet the growing demand for electricity, the installed generation capacity needs to be increased considerably.
- **Availability of electricity: -**
- The per capita consumption of electricity in the state increased from 145 kW-hours in 2012-13 to 332 kW-hours in 2019-20, showing an increase of 129% in 7 years.
- Estimated peak demand (2019-20) = 5900 MW
- Extent of demand (2019-20) = 5891 MW
- Average power availability also increased from 6-8 hours in rural areas to 20-22 hours and in urban areas from 10-12 hours to 23-24 hours.
- Availability of energy (crore units) -3230 (2019-20)
- Energy requirement (crore units) - 3230 (2019-20)
- Total electricity consumption in the year 2015-16 was 1884.5 crore units which increased to 2898.8 crore units in 2019-20. This means an increase of more than 53 % in four years.

Top three districts in terms of electricity consumption in the year 2019-20: -

- Patna (549.5 crore units)
- Gaya (170.7 crore units)
- Muzaffarpur (137 crore units)

The last three districts: -

- Shivhar (104 crore units)
- Arwal (17.8 crore units)
- Sheikhpura (24.1 crore units)
- The three districts which recorded the highest increase in electricity consumption: -
 - Sheikhpura (26.8%)
 - Kishanganj (25 %)
 - Shivhar (20.9 %)

Estimation of power requirement:

- Apart from production activities, families also need electricity to ensure quality of life.
- Under harGharVidyutyaYojana, under the Seven Resolve of the State Government, it has been successful in providing electricity to all 1.06 lakh rural hamlets of all 39,073 villages.
- In the next phase, new agricultural pumpsets and old pumpsets with diesel will be provided with electricity connections. The state government has taken this agenda in mission mode.
- In the coming years, there will be a sharp rise in demand for electricity. By the year 2022-23, all the consumers of Bihar are estimated to require 2950.8 crore units of electricity as compared to 2309.3 crore units in 2019-20. This shows an increase of 28 percent in three years.
- By 2022-23, the demand for power in Bihar is estimated to be around 7054 MW and the annual energy demand is 3802.6 crore units.
- In the year 2018-19, the available power capacity in the state was 4767 MW, which increased from 27.4 percent to 6073 MW in 2019-20. In order to meet the increased power demand, the state government has already made a plan to increase the additional capacity of 4516 MW from various sources in a phased manner by 2022-23.
- By 2022-23, the total available power capacity in Bihar is expected to be 10,589 MW, of which 6812 MW (64.3 percent) will be conventional power and the remaining 3777 MW (35.7 percent) is unconventional.

- 1.14% peak reduction in power availability in the state in 2020-21 will be overcome by 2021-22 through availability of additional generation capacity and 1.20% most of the electricity will be available.

Institutional Structure of Power Sector: -

- Bihar State Electricity Board was originally constituted in April 1958 under Article 5 of the Electricity (Supply) Act-1948 and was given the responsibility of managing power generation, transmission, distribution and other power related activities in the state.
- Distribution Companies (DISCOMs)
- Distribution is a very important dimension of power supply chain as it is the only revenue earning branch.
- Due to this revenue, the state government is able to improve the entire supply-chain by purchasing more power from other. Therefore, there is a need of a major reforms in the power sector for efficient management of the distribution sector.

Distribution system in Bihar is responsible for two distribution companies: -

- North Bihar Power Distribution Company Limited
- South Bihar Power Distribution Company Limited
- As of March 2020, these companies were serving more than 159.3 lakh power consumers in 2018-19 instead of 145.7 lakhs.
- The number of effective domestic consumers has increased from 134.8 lakhs in 2018-19 to 146.0 lakhs in 2019-20.

Status of operations and finance: -

- Due to fast economic growth and population growth, the demand for electricity is continuously increasing in the state.
- Revenue collection has also increased in the last three years with 33 percent in sales of electricity.
- Cost recovery reduced slightly to 84.6. Percent in 2019-20.
- Distribution companies are trying hard to bring down the gross technical and commercial prices to below 13%.

Power Sector Programs: -**Central government's power sector programs: -**

- To increase the scope of power supply in urban and rural areas, the Central Government has been undertaking four important programs.

- DeendayalUpadhyay Gram JyotiYojana.
 - Integrated Power Development Plan.
 - Pradhan MantriSahajBijliHarGharYojana (Saubhagya)
 - Electricity Scheme (Backward Region Grant Fund)

Ujjwal DISCOM AssuranceYojana (UDAY) :-

- The Union Ministry of Power has introduced the UDAY scheme to transform the operations and financial position of the power distribution companies (discoms). The plan encompasses various activities to improve operational and finance related skills, with the ultimate goal of 2019-2020 to-
 - Reduce transmission and distribution Loss to 15 %.
 - Reduce the difference between the average cost of supply and average revenue realized to zero.
 - In this regard, a multilateral agreement was signed between the Government of Bihar, Union Ministry and distribution companies in 2016.

State government programs in the power sector: -

- For strengthening of electrical infrastructure, the State Government had approved a plan for renovation and modernization to replace the old and dilapidated conductors, poles, bracket insulators, etc. of 33,000 volts, 11000 volts and LT lines, target by March 2021.

Transmission:

- Electricity is supplied to various categories of consumers through transmission network. It also involves the work of converting high potential electricity to low voltage. The transmission network acts as a critical link between power generation and distribution.
- Current transmission system is being strengthened with proper planning to meet the demand round-the-clock availability of electricity to all types of consumers.
- The state aims to develop round the clock power supply capacity by 2022-23.
- Availability of power in peak period was 3459 MW in 2015-16 which has increased from 71-5 % in five years to 5932 MW by July 2020.

Production:

- Several schemes are being implemented in the state to meet the current and future demands. There has been a continuous increase in the availability of electricity in the state during the past years.

- By March 2020, power generation capacity increased from 27.4 % to 6073 MW.
- Production capacity has increased from 21.7 % in coal-fired thermal power plants, 50.6% in hydropower and 58.0 % in renewable sectors between March 2019 to March 2020.
- According to ownership, up to March 2020, the maximum share belonged to central sector (87%), 12% is of private sector and 1 % is of the state sector.

Production Units: -

- 1 Barauni Thermal Power Station
 2. KantiBijliUtpadan Nigam Limited
 - 3 Nabinagar Plant
 - 4 Buxar Power Project
- Sutlej Hydropower Corporation is the implementing agency for the construction of 2 units of 660-660 MW Greenfield power project in Chausa.
 - Ultra-Mega Power Project (Banka)
 - Proposal has been prepared to set up a 4000 MW power project.

New Schemes / Projects: - New service connections including agricultural connections through the **Suvidha app**

- MukhyamantriKrishiVidyutSambandhYojna
- Central government's Saubhagya scheme in 2017
- Deendayal Gram JyotiYojana was implemented in the state to strengthen sub-transmission and distribution structure in rural areas and to create infrastructure for agriculture and non-agricultural activities.
- Due to successful implementation of the program, the demand for power connections for agricultural pumpsets has increased.

Residential Solar Rooftop Project

- Grid Connected Rooftop Solar Program
- Allocated 5 MW rooftop solar capacity to Bihar for 2019-20.
- Subsidy is available from the Central and State Governments for the establishment of a grid connected rooftop solar plant.

Bihar Renewable Energy Development Tribunal (BREDA) :-

- To promote the use of renewable energy power projects, the state government has created an agency called Bihar Renewable Energy Development Agency (Breda).
- Currently BREDA is executing projects related to setting up of grid-connected Rooftop solar power plants under JalJeevanHaridaliYojana and other solar power projects.

Bihar State Hydroelectric Corporation Limited: -

- In addition to thermal power, Bihar also produces hydroelectric power from its water resources and is currently being exploited through several hydroelectric projects.
- There are currently 13 small hydroelectric projects in the state with a total installed capacity of 54.3 MW.

Effect of Covid-19 and initiative taken by the Department.

- The lockdown had a serious impact on all the activities of the power sector.
- Power sector has worked with minimum required manpower.
- Distribution companies also have the most reduction in activities like meter reading, spot billing, bill payment, receiving payment at centers.
- Electricity demand in the state also declined significantly in March and April as compared to earlier.
- Adequate infrastructure is the base for development.
- Adequate infrastructure reduces production costs and facilitates the integration of rural and urban economies, leading to all-round development.
- Infrastructure construction in the developed sector is relatively easy and less expensive as the private sector also undertakes some enterprises.
- In a backward area like Bihar, the construction of infrastructure falls completely on the shoulders of the state government.
- In recent years, the Bihar government has been trying to build adequate infrastructure in Bihar with its own resources. In this effort, the central government has also supported through the National Highway Roads, Pradhan Mantri Gram SadakYojana etc.

Construction:-

- The contribution of construction sector increased from 5.2% in 1980- 81 to 6.2% in 1990-91.
- But after the economic reforms of 1991-92, the contribution of the construction sector to the gross state domestic product has decreased considerably in Bihar. (Up to 3.4 %)
- After heavy investment in infrastructure from 2004-05, there was a significant improvement in the period 2005-10.
- By 2009-10 it reached to 11.9%. Since then there has been a slight decrease in the contribution of the construction sector, although the improvement and maintenance of quality remained at a high priority of the state government.
- Trends in the transport and communication sectors also present a similar story. The recent achievements were made possible due to the resolve of the State Government towards economic and social development.

Transport Sector and Economic Development: -

- The transport sector contributes 7.3 percent in total to the gross state domestic product of Bihar and has been growing at an annual rate of 10.9 percent during 2010-20.
- Investment more than doubled to Rs 29690 crore.
- Currently, road transport is a major area in the state which ensures road connectivity even in remote rural areas.
- During the year 2011-12 to 2019-20, there is almost three times increase in road transport more than six times increase in air transport.
- These results have been possible only due to continuous and abundant investment by the state government in the infrastructure sector for construction and maintenance.

Public Investment in Road Transport: -

- Under SaatNischay of Good Governance Program (2020-25), the State Government has started theSulabhsamparktayojna.

It has two components: -

- 1) Rural Road Connection - which will provide connectivity with important places like block, police station, subdivision, etc. It will also connect with markets, hospitals, national highways, state highways etc.
- 2) Bypasses and flyovers in urban areas that facilitate road transport in densely populated urban areas.
 - Road networks contribute heavily to economic development. Therefore, the creation of adequate road network for smooth transportation of people, materials and services in the state has always been a high priority of the state government.
 - Public investment on roads and bridges has reached Rs 7603 crore in the year 2020-21.
 - In the year 2020-21, the expenditure on roads and bridges is 3.6% in the total budget and 5% in the developmental expenditure.

Note :-By the time of 2005-06, the revenue expenditure used to be much higher than the capital expenditure, but since then the capital expenditure has outstripped the revenue expenditure.

Road Safety: -

- According to WHO, accidents are the eighth largest cause of death.
- As a result, not only individuals and families, but also the entire nation suffers huge economic losses.
- 4.5 lakh accidents have been reported in India in 2019. And more than 1.5 lakh deaths have occurred.
- India has about 11 % share of accidental deaths in the world.
- Bihar ranks **15th** in the country in terms of road accident and 10,007 accidents have been reported in 2019.
- Work done by the state government to reduce road accidents:-
 - 1) Road Security Policy-2015
 - 2) Formation of Bihar State Road-Safety Council
 - 3) Focus on Four's
 - Education
 - Enforcement Engineering
 - Emergency care

Road network: -

- Road network provides society with access to services like production centers, markets, health, education etc.
- Two schemes under saatNischay- 2 are:-
 - Rural Road Connection
 - urban road connectivity

National Highway Network: -

- National highways are important for providing road network to important cities, national capital, state capital, ports etc.
- The construction and maintenance of national highways rests solely with the National Highways Authority of India.
- The expenditure on the development of national highways has increased by 23 times in 2019-20 to 1798 crores, this is Bihar's share in the expenditure all over India.
- In 2019-20, Bihar has received Rs 68 crore from the Central Government as National Permit Fee.
- The length of highways in Bihar has increased gradually during the past years. From 3537 km in 2005 to 5358 km in 2019.
- Bihar has a total of 58 national highways with a total length of 5475 km in September 2020. In the last 13 years 30 more national highways have been associated with the state.
- The National Highway 31 has the highest length of 404 km in Bihar, while National Highway-72 has the lowest length of 4.5 km.

PM Package:

- A total of 75 projects were launched under the Prime Minister's Package. Of these, 12 projects have been completed and remaining 39 projects are in progress.
- The combined expenditure for construction of 3023 km of roads under all these projects was estimated around Rs 50,711 crore.

Bharatmala Project:

- The scheme is being implemented in the country in a mission mode for the construction and reversal of 34,800 km of national highways over a period of five years from 2017-18 to 2021-22 at an expenditure of Rs.5,35,000 crore.

- The project is dedicated to the development of economic routes, internal routes and feeder routes, construction of national connectivity port linkages and greenfield highways.
- In Bihar, a total of 751 km of roads have been sanctioned under 9 projects under it.

National Highways Projects: -

- Under National Highways Project, National Highways are to be constructed under 9 projects ranging from Rs. 6637 crore to 673 km in length under National Highways Project.

State Highways Network: -

- State highways provide connectivity for transportation of passengers and goods in different districts and connect them with the state capital, inter-state border, important cities, national highways etc.
- The total length of the state highway network was **3713** km in September 2020.
- The connectivity of the state highways network makes road movement between districts more comfortable. Between 2015 and 2020, about 550 km of state highways were converted into national highways.
- In terms of total length of state highways, the three top districts are Patna (219 km), Gaya (210 km) Darbhanga (209 km).

Bihar State Highways Project: -

- The state government initiated the project to strengthen the state highway network in the state. Financial support was provided by the Asian Development (ADB) Bank for this.
- A 6-lane bridge with a length of 9.8 km and a contact path of 10 km length is being constructed on the Ganges River in collaboration with ADB. The expenditure of which is Rs 4988.4 crores.

Backward Region Grant Fund: -

- The state government has started two projects under this fund.
- Rail-cum-road bridge connecting Sonapur to Patna (Digha) (at a cost of Rs. 2921 crore)
- Elevated route from All India Medical Sciences (AIIMS) to Digha in 11.90 km (Expenditure of Rs. 1289.25 crores)

- Public-Private Partnership (PPP)
- There is a plan to construct a Greenfield bridge over the Ganges River to connect the Bakhtiyarpur flood bypass of National Highway-31 to Tajpur on NH-28.
- The project involves road construction of 45.74 km length including 5.5 km long bridge.

Main District Road Network: -

- Main district paths are important roads within the districts that connect the less developed areas with the district headquarters, state highways, national highways, railroads and cities. This is the lowest level of the path classification system.
- Traffic is collected from rural roads. The State Government tries to connect the agricultural sector with the interior region by providing front and back rivers through proper roads.
- The total length of main district paths in the state has increased to 14,886 km by September 2020.
- The length of main district paths is continuously increasing, but not all districts benefit equally from it.
- Financial projects of the main district roads are being done under State Plan, Grant of Rural Infrastructure Development Fund, Central Road Fund, Left Wing Extremism Affected Area Road Link Project Fund, Indo-Nepal Border Road Development etc. .

Rural Road Network: -

- Rural road connectivity is important for improving lifestyle in rural areas. These villages contribute significantly to the socio-economic development rural habitations.
- Due to improvement in the rural road network, new opportunities of work are available for the rural population outside their vicinity. The development of the past markets accelerates and makes possible diversification of livelihood for the rural people.
- Public investment under Rural Road Network in 2020-21 is around Rs 10,073 crore.

- Pradhan Mantri Gram SadakYojana
- State Plan
- Other State Plan Schemes
- **Top three districts in terms of rural road network**
- **Madhubani (6360 km)**
 - **Muzaffarpur (5797 km)**
 - **East Champaran (5795 km)**
- These three districts have a combined share of 15% in the total rural road network formed in the last 15 years.

Road Transport: -

- The number of vehicles is an indirect indicator of the prosperity of a region and its people.
- The Ministry of Housing and Town has awarded the Commendable Initiative Award to the Department of Transport, Government of Bihar for innovation in Municipal Transport during Covid-19.
- By March 2020, the total number of registered vehicles in the state had reached 13.50 lakhs.
- Maximum increase of 10.58 lakhs was recorded in two wheelers followed by 65.7 thousand auto rickshaws, 54.9 thousand cars, 3.5 thousand tractors and 29.4 thousand trucks.
- The road network in the state has expanded considerably in the last 15 years.
- Out of total expenditure on economic services, expenditure on investment in rural roads has increased to 46.7 %. (2020-21).
- It has about 6.6 % of the total expenditure in the total budget and about 4.8% in the total budget.
- Due to investment on rural roads, the road network has expanded considerably to reach every village and hamlet in the state.
- The total length of roads has increased from 835 km in 2005-06 to 9683 km in 2021.
- Pradhan Mantri Gram SadakYojana has contributed more than 50 % in expenditure on rural road network.

- Integrated action plan districts for as extremism affected districts in the state.
- As part of the Integrated action Plan districts, perennial road connectivity is provided to all village-tolas with population of 250 or more under the scheme in extremism affected districts in the state and 500 or more in other 27 districts.

Main Schemes: -

- GrameenTola Contact Determination Scheme
- Chief Minister Gram SamparkYojana
- There is a difference between the districts in terms of number of vehicles.
- **Patna** is at the top in terms of ownership of commercial vehicles.
- Three districts in total registered vehicles
 - Patna
 - Muzaffarpur and
 - Purnia
- In terms of buses, **Supaul** leads the way with 903 buses.

Bihar State Road Transport Corporation: -

- The Bihar State Road Transport Corporation, established in 1959 to serve the people in the state, is one of the oldest public enterprises in the state. Through this, the state government is trying hard to provide safe, clean and comfortable services to the passengers.
- Currently, 664 buses are running in rural and urban areas under the corporation.
- Through a mutual agreement the Corporation has also provided two buses for Bodhgaya-Patna-Kathmandu and four buses for Patna-Janakpur (Nepal).

Railway Network: -

- The Union Ministry of Railways had established new zone of East Central Railway in 1996, which is functional since 2002. In order to improve rail connectivity and services in Bihar, the ministry has focused on modernization and development of railway infrastructure.
- Two Greenfield rail locomotives are the pride for Bihar.
 - Marhaura
 - And Madhepura
 - Diesel locomotives and electric locomotives are manufactured here.



- Bihar's share in the total railways of the country is around 5.5%.
- From the year 2014 to September 2020, the Railways have built 300 km of new lines in Bihar.
- Rail-cum-road bridges have been constructed at Patna and Munger to improve rail connectivity between North and South Bihar separated due to Ganga river.
- The state government is constantly making efforts to provide facilities to the people returning from other states and countries during the period of lockdown.
- Special labor trains were run in May 2020. Around 20 lakh PravasiBihari have returned from various parts of the country through 1285 special workers trains running during the lockdown period.

Civil Aviation:

- Airlines serve to transport passengers and goods from one place to another. It also helps in bringing economic reforms through tourism and trade.
- Air transport in Bihar has increased sevenfold to Rs 200 crore in 2019-20.
- Between 2011-12 to 2019-20, there has been a tremendous increase of 27.4 %in this area.
- Due to increased economic activities after the year 2005, there was an annual increase of 16.4% in the movement of aircraft between 2004-05 to 2009-10.

Building Construction: -

- Priority has been given to the construction and maintenance of administrative buildings from the Secretariat to the Panchayat level.
- Apart from administrative infrastructure, social and cultural infrastructures, community buildings, museums, auditoriums and warehouses, KisanBhavan etc. utilities have also been constructed by the department for health and education.
- The expenditure was Rs 4543 crore in 2020-21.
- Through various efforts of the State Government, the share of capital expenditure on construction has reached 84.2 % in 2020-21.
- Investment in building construction also contributes to economic growth through its multiplicative effect of providing direct and indirect employment.

Projects for Building Construction: -

- Construction work of Engineering Colleges has been done in Patna, Supaul, Jamui and Banka districts with an expenditure of Rs. 317.95 crores under Saat Nischay-1.
- State Polytechnic buildings have been constructed in Araria and Siwan with an expenditure of Rs 72.70 crores.
- Construction of women industrial training institutes at Kishanganj and Vaishali.
- Project construction of Development Management Institute building at Bihta with an expenditure of Rs. 200 crores.
- A new court building has been constructed at Patna with an expenditure of Rs. 186.40 crores.
- Construction of planetarium at Darbhanga, Forest College at Munger, Bapu Tower at Gardanibagh, in addition to maintenance of VisvesvarayaBhawan, Irrigation Building and VikasBhawan in Patna.
- Bapu Tower in Patna (84-49 Crore)
- Planetarium at Darbhanga (164 crores)
- Administrative Training Institute at Gaya (139-00 Crore)
- APJ Abdul Kalam Science City in Patna.

Telephone Network: -

- Telecom and Internet are emerging sectors and their contribution to the growth of the economy is increasing gradually.
- Phone density - The telephone density in Bihar was 53 in the year 2020.
- Rural Telephone Density- (42 per 100 from bottom to second place among all states).
- Urban Telephone Density-117
- For India, rural, urban, overall, telephone density is 59,142, and 87 respectively. (2020)

Postal Network: -

- Indian postal system is one of the oldest postal systems in the world. It is the largest postal network in the world with 1.57 lakh post offices across the country.

- This huge postal network started in 1727 when the first post office was opened in Kolkata.
- Presence of postal network in rural areas is the key to communication connectivity and other services.
- The postal network in the state accounts for about 95 % of the total network.
- As of March 2019, there were a total of 9084 post offices in Bihar. Bihar has 5.8 of all India total post-boxes.
- There are a total of 2.99 crore accounts in various post office banks of Bihar. In which there is an outstanding balance of Rs 31,144 crore under various schemes. The accounts of Bihar account for 8.2 % of the whole country. While Bihar has only 4.5% share of the total outstanding balance in the country.
- The Central Government has made use of the extensive network of Department of Posts and has also successfully entered into other areas of service such as currency remittance banking and insurance.

Information Technology Infrastructure: -

- The State Government has made many innovations in recent years and has received the 'Digital India Award -2020' for its achievements.
- Information and Communication Technology is growing at an annual rate of 7-8 % between the years 2011-12 to 2019-20.
- At. Contribution of communication sector in Gross Value State Added was 3% in 2019-20.
- Work from home, distance education, e-banking and e-governance during the pandemic became possible only due to the widespread presence of information and communication technology infrastructure in the state.
- The total internet subscribers in Bihar is 6.2 % while the share of rural subscribers is 10%, which is the highest among major states of the country after Uttar Pradesh.
- The growth rate of rural internet subscribers in the state is more than that of urban subscribers.
- Bihar has the fastest growth rate in terms of internet subscription.

E-Governance: -

- Information technology is a basic requirement for e-governance.
- Information and communication technology helps in speeding up government processes, making faster decisions, increasing transparency and enforcing accountability.
- It increases the reach of the government both geographically and socially.
- Information to promote e-governance
- Next Gen BSWAN
- Sec LAN 2.0
- State Data Center (ACB)
- Knowledge City
- Many schemes like Aadhaar Infrastructure integration, etc. have been implemented.
- The Department of Information Technology has taken the following initiatives to provide various platforms and services for e-governance.
- Next Gen Wiswan 2.0
- For the storage / transfer of data, voice and video based connectivity, uninterrupted connectivity has been provided from the State Headquarters to the block level.
- Block Headquarters are being equipped with 8 MBPS and District Headquarters with 34 MBPS Speed.
- This makes data and monitoring available at the same time for e-governance programs and other activities.
- The state government also plans to link police stations with video conferencing and other utilities. In the year 2020-21, Rs 50 crore has been allocated for the implementation of this project.

State Data Center 2.0 (SDC): -

- It will have high-level cyber security through advanced technology.
- Initiative to deliver various services through the electronic platform.
- Allocated 351.17 crores.
- Sec LAN 2.0- Seclan (Secretariat Local Area Network) is being successfully operated by Beltron which will be upgraded as Sec LAN 2.0 for the next five years.

Wi-Fi in Educational Institutions:

- Wi-Fi has been made available in 321 institutes and 20.00 crores is allocated for 2020-21.
- Resolve to provide easy access to internet facility to teachers, schools and staff of educational institutions for administrative and educational work.

E-Governance State Plan: -

- Many projects are being implemented by the Central Government and the State Government for development in the field of Governance, Economy, Maternity and Order, Climate and Disaster Management and Fiscal Governance. Almost all the cash transfers for these programs are through direct benefit transfer.
- IT City - Department of Information Technology planned development of IT Tower, IT Park and IT City, Location- Bihta and Rajgir.

Covid-19 Initiative in Infrastructure Sector: -

- The state government has been facing many challenges in various sectors of the economy including the infrastructure sector for almost a year due to the Covid-19 pandemic.

Construction sector is an important sector in terms of employment potential.**Initiatives taken in this regard: -**

- Skill listing of workers returning from other states
 - regional distribution
 - Financial Assistance
- 1556 trains were run by the Railways to support the return of migrants.
- Each of the more than 20 lakh workers returning from other states were also given financial assistance of 1000 by the state government through the Corona Assistance App under the Chief Minister's Special Assistance Scheme.

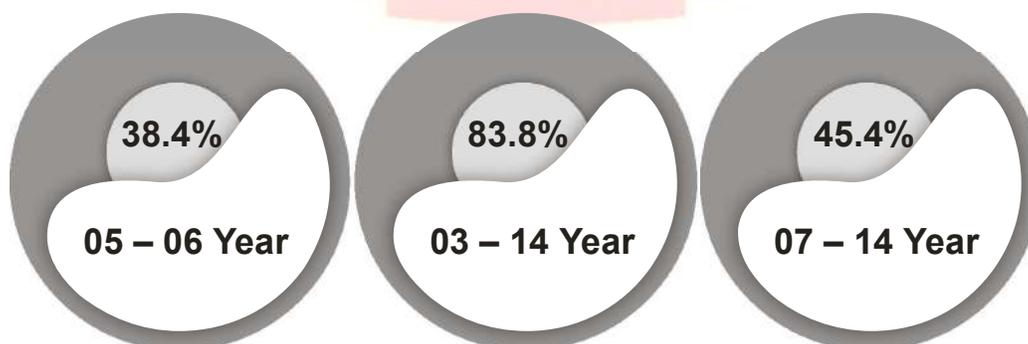
7. Child Development

- Children are the future of a country and the state also needs to pay utmost attention to their development.
- Bihar is a young state. According to the 2011 census, children constitute about 48% of the state population.
- Children are considered as a national asset. What is invested for them today determines the pace, progress, environment and prospects of the state in the future.
- Four priority areas have been identified for the development of children:-
- (1) Survival (2) Health and Nutrition (3) Educational Development (4) Protection and Participation.

Demographic Status:

- India is the second most populous country in the world with 39% of the population in the age group of 0 to 18 years according to the 2011 census.
- There are 47.21 crore children in the age group of 0 to 18 years in the country. Of these 34.26 crore (72.8%) live in rural area and 12.85 crore (27.2%) live in urban area.
- 48% of the population consists of children in the age group of 0-18 years in Bihar.
- Bihar accounts for about 11% of the total children in the country.
- Talking about the gender-wise composition of the child population:-
- Girls make up 47% of the total population of children, which is slightly less than the 48% share of women in the total population of the state.

Distribution:-



Child Sex Ratio (CSR):

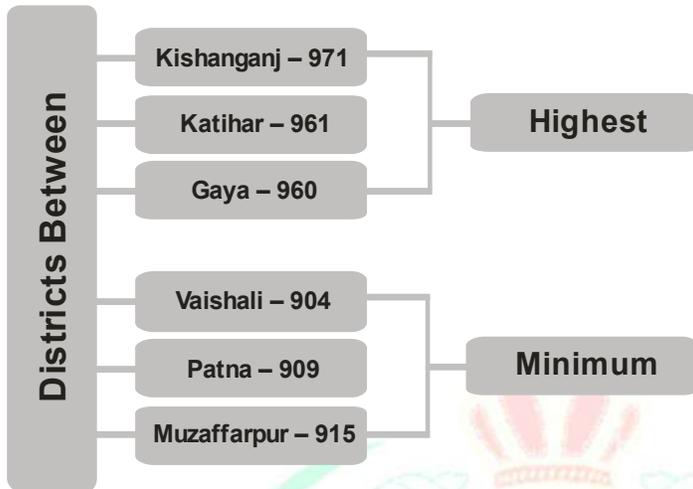
- The sex structure of a population is a basic demographic characteristic.
- Sex ratio is defined as the number of females per 1000 males in the population and is an important social indicator to measure the extent of parity between males and females in a society.
- Bihar has a sex ratio of 897. Among CSR of 8 empowered action group states (EAG), Bihar ranks fifth among states.

Adolescent population in Bihar:

- The adolescent defines adolescence as an age group from 10 years to 19 years. It is the phase of transition from complete social, economic and emotional dependence to relative independence.
- According to the 2011 census, the adolescent population in Bihar was 2.34 crores, which was 22.5% of the total population. Therefore, one out of every five people in Bihar is a teenager.
- In terms of absolute number of adolescents, Tirhut division with 46.9 lakhs is at the top and the Bhagalpur division with 11.2 lakhs population is at the bottom.

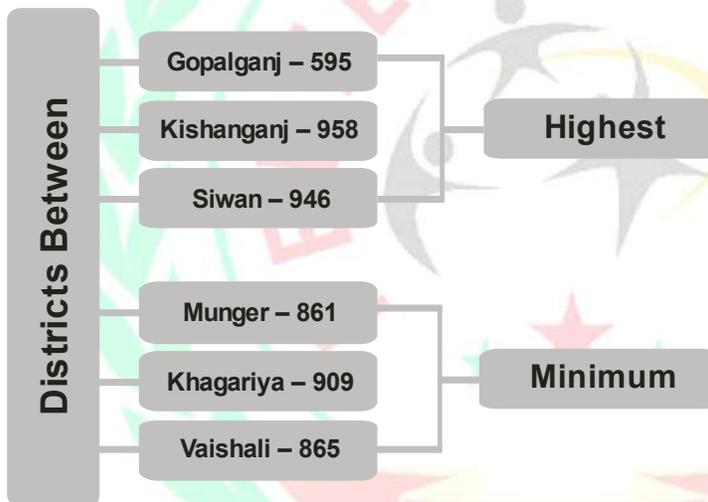
Allotment for children: -

- Children budgeting is not just an accounting practice. Its main objective is to ensure adequate expenditure against children so that their needs and vulnerabilities can be addressed in a holistic way.
- The Union Government for the first time conducted a Children Budget Analysis in 2003, analyzing the Union Budget from the children's point of view by the Center for Child Rights.
- Bihar is sixth in terms of rural child sex ratio and fourth in terms of urban child sex ratio.
- **0-6 year group (2011 census)**
 - Overall – 935
 - Scheduled Castes – 962
 - Scheduled Tribes – 969



➤ **0-18 Year Group - 897 (2011 Census)**

- Scheduled Caste – 899
- ST – 929



- Three states along with the central government - Assam, Kerala and Bihar also prepare the child budget. Karnataka and Maharashtra have also started this exercise from 2020.
- The process of budget formulation for children in Bihar started in 2013-14. Allotment for children is mainly related to education, health plans, and special schemes for girls and child protection.
- Overall allocation for children has increased at an annual rate of 23.6% from 6329.66 crore in 2013-14 to 19474.72 crore in 2018-19.
- During the same period, per capita expenditure also almost tripled from 1225 rupees to 3910 rupees.

- The average share of expenditure on child development in the total state budget during these six years was about 11.3%. Similarly, the average share of expenditure as a percentage of gross state domestic product was around 3.4 percent.

Survival, health and nutrition status: -

- Investing in children's health is not only an imperative human right, it is also one of the safest ways to make sound economic decisions and determine our direction towards a better future for the state.
- Article 39 (f) of the constitution provides the states to facilitate the opportunity and facilities to develop children in a healthy and free manner.
- Children's health is the foundation for increasing any future developmental capabilities and is clearly related to the availability of nutritious food.
- There are three indicators for hunger-related malnutrition in children under five years of age.
 - Stunting (height to age)
 - Wasting (Weight to height)
 - Underweight (weight to age)

Stunting is the weak development of children due to poor nutrition, frequent and inappropriate psychological environment. Stunting has a lifelong impact on human capital, poverty, and capacity.

- Data from the National Family Health Survey-5 (2019-20) shows that the level of stunting has improved in Bihar, which has come down from 48.3% in 2015-16 to 42.9% in 2019-20.
- The credit of these achievements could be given to the positive steps taken by the state government in the field of health.
- According to the National Family Health Survey-5, Bihar has the highest Stunting in Sitamarhi (54.2%) and Sheikhpura (53.6%) districts and the lowest in Gopalganj (34.2%) and Sheohar (34.4%) districts.

Wasting (weight according to height):-

- Wasting is a strong health index for children up to 5 years of age. This is mainly due to acute food shortage or disease.

- According to the National Family Health Survey-5 (2019-2020), 22.9 per cent of children under the age of 5 in the state are wasted, indicating their acute under-nutrition.
- Bihar has shown a rise of 2.1% in Wasting from 2015-16 to 2019-20, which increased from 20.8% to 22.9%. Among the districts, Arwal (36.8%) and Jehanabad (36.6%) are the worst performing districts. On the other hand, West Champaran (13.2%) and Sitamarhi (16.2%) are the best performing districts.

Underweight (weight by age) :-

- According to National Family Health Survey-5, the percentage of underweight children below 5 years of age in Bihar has come down from 43.9% to 41% between 2015-16 and 2019-20.
- Among the districts, the proportion of underweight children in Arwal was highest at 52.9% followed by Jehanabad at 51.7%.
- On the other hand, West Champaran (30.3%) and Gopalganj (29.2%) had the lowest proportion of underweight children.

Child Development Program:-

- The welfare of children is essential for the development of a state as they contribute to future human resources.
- A significant portion of the population in Bihar (191.3 lakh) is between 0 and 6 years of age, which according to the 2011 census, constitutes 18.3% of the total population of the state.

Children related programs: -

- Integrated Child Development Scheme (ICDS)
- It is an expression of the country's commitment to children and infant's mothers.
- This program was started on 20th October 1975 to provide care, early motivation and long-term improvement in education, health and nutrition of young children in the age group of 0 to 6 years.
- A package of six services is provided under the Anganwadi Services scheme under the Integrated Child Development Scheme.

- Nutritional Supplements
 - Informal pre-school education upto 6 years
 - Immunization
 - health checkup
 - Referral Services
 - Nutrition and Health Education for Mothers,
- The main beneficiaries of this scheme are children from 6 months to 6 years of age. Along with them, pregnant women, lactating women, children up to 6 months to 6 years and adolescents girls up to the age of 14 years who are not going to school are also benefited from this scheme.
- The Integrated Child Development Scheme operates through 544 project offices in all 38 districts of the state. A total of 1,14,718 Anganwadi centers are currently approved.
- The provision of budget for Integrated Child Development Services is increasing gradually, which has increased by 22% from Rs 1409.70 crore in 2015-16 to Rs 1723.98 crore in 2020-21.

Supplementary Nutrition Program (SNP):

- In order to improve the nutritional status of women and children, the Integrated Child Development Scheme of Bihar has implemented a supplementary nutritional program under the Anganwadi Centers as per the National Food Security Act 2013.
- Under this scheme, children in the age group of 6 months upto 3 years and pregnant women and lactating women have to meet the nutritional standards by giving Take Home Ration, and nutritious 'hot cooked meal'.

National Nutrition Mission (NNM) :

- In addition to the existing schemes targeted to reduce the level of malnutrition in women and children, the Central Government launched the National Nutrition Mission in 2017 to improve nutrition levels in children, pregnant women and infant mothers.
- The mission has been implemented for three years from 2017-18 to 2019-20.
- The mission aims at reducing stunting by 2%, anemia of young children, women and adolescent girls by 3%, undernutrition and 2% and low birth weight by 2 percent annually.

Poshan Mah: -

- Under the National Nutrition Mission, September 2018 was celebrated as Poshan Mah. Nutrition Month campaign continued in 2019 and 2020 as well.

Goal:

- Decreasing malnutrition and anemia in children and women.
- Increasing optimal breastfeeding and complementary feeding
- Promoting hygiene habits and sanitation
- Improve dietary habits
- To regularize the development and girl education of children in the age group of 6 months upto 6 years.

Pradhan Mantri Matri Vandana Yojna (PMMVY)

- Maternal under-nutrition is the major challenge in Bihar. Marriage at an early age, child at an early age and repeated deliveries adversely affect the nutritional status of mothers.
- To overcome this problem, Indira Gandhi Maternity Cooperation Scheme was first launched in two districts of Bihar (Saharsa and Vaishali) on a pilot basis in 2010 as completely funded scheme by the Center.
- The name of this scheme was changed to Matri Vandana Yojana. Which started on 1st January 2017.
 - Expense ratio:- 60: 40 (Center: State)
 - Maternity benefit of Rs 5000 in three installments
 - (I) 1000 rupees (being pregnant within three months of monthly delivery)
 - (II) 2000 rupees (on completion of six months)
 - (III) Rs 2000 (given after delivery and after completion of the first cycle of vaccination of the child)

At least 19 years of age and for the first two deliveries.

There is a budgetary provision of 7671.39 lakhs for 2020-21.

Education and Development Status: -

- School education is the foundation of the future of children. SDG-4 guarantees completion of primary and secondary education by all boys and girls.

- According to National Education Policy 2020, Indian education system will have schooling of 5 + 3 + 3 + 4 years from now.

Literacy rates:

- Literacy is one of the most important indicators of social development.
- Literacy in Bihar was 61.8% in 2011.
- The female literacy rate in the state is still just 51.5% which is far behind the male literacy rate (71.2%).
- Comparison of different age groups shows that the literacy rate was highest in the age group of 10–14 years.
- The overall literacy rate of children of different age groups in the year 2011 was as follows - 73.2% for 7 to 9 years, 83.3% for 10 to 14 years and 79.1% for 7 to 18 years.
- **Pre-school education program: -**
- Pre-school education is imparted to children in the age group of 3 to 6 years in Anganwadi centers.
- Cooked food is provided at a regular Anganwadi center.
- Hot cooked food is prepared by the Union Ministry of Women and Child Development as per the requirements of calories, proteins and micronutrients mentioned in the Food Safety Act 2013.
- By March 2020, 82.78 lakh children were enrolled under this program.

Status of Child protection:

- The Integrated Child Protection Scheme (ICPS) , The objective of this scheme is to provide legal and service related security network to children in difficult situations. Right now the scheme is being implemented through the Directorate of Social Welfare. There is a provision of Rs 35 crore for this scheme in the year 2020-21.

Parvarish :-

- Parvarish is an ambitious project of the state government under which a provision of Rs 900 per month for the age group of 0 to 6 years and Rs 1000 for children in the age group of 6 to 18 years is provided for the Parvarish. A provision of Rs 22 crore has been made for the scheme for the FY 2020-21.

Children's home: -

- There are currently 33 children's homes in various districts of the state for the support and rehabilitation of the distressed, abandoned and orphaned children.

Bihar Child Marriage Prohibition Rules-2020

- Marriage of a girl before 18 years of age and a boy before 21 years of age is considered as 'child marriage'.
- According to the report of National Family Health Survey-5, the percentage of child marriages of girls in Bihar has decreased from 12.2% to 11%.

Children's Parliament: -

- It provides a platform for children / learners to discuss all issues related to school, society, health, cleanliness and education.

➤ COVID-19: INITIATIVES BY THE STATE GOVERNMENT:-

- (I) Integrated Child Development Scheme Initiative.
- (II) Doordarshan Bihar, a digital initiative TV channel by Bihar Education Project, provided 5-hour slots.
Bihar's education department broadcasts e-content through DD Bihar from April for classes 9 and 10, from May for classes 6 to 8 and 11-12 and from June classes 1-2 and 3-4, has started.
- (III) Digital Education Portal
- (IV) Vidyavahini Bihar App
Vidyavahini Bihar App has been started by the Department of Education on which text books from class 1 to 12 have been uploaded and student can download these text books.

8. Agriculture and Allied Sector

- The agriculture sector in Bihar occupies a central place in the overall economy of the state for three reasons: - One, around 74% of people in Bihar depend on agriculture. Second, the rich natural resources of the plains of the Ganga provide opportunities for agricultural development and the third vast majority of poor remain malnourished. Agriculture and allied sector contributed 18.7 percent to the state's GDP in the year 2019-20.
 - The gross cropped area of the state was 74.06 lakh hectares in 2018-19, with a cropping intensity of 144 percent.
 - Bihar registered a substantial record in production of foodgrains 163.80 million tonnes in 2019-20.
- The transformation of agriculture is an important component of 2030 agenda of sustainable development goals that marks the global call to end hunger and poverty.
- Bihar is a predominantly rural economy with 88.7 percent of population living in rural areas as per 2011 census.
- Bihar's urbanization rate is 11.3%.

Agricultural sector share in gross state domestic product: -

Area	2018–19 Last	2019–20 Accelerated	Percentage
Agriculture and Fisheries	20.0	18.7	4.5%
Crop	11.2	9.7	1.6
Cattle	5.8	5.9	9.1
Forestry and Wood Production	1.6	1 / 52	6.9
Fisheries and Aqua Agriculture	1.6	1.54	6.6

- At the level of regional contribution, the average contribution of agriculture and allied sector in the state's gross domestic product is around 20 percent.
 - According to last five years figures, the livestock has seen the highest growth of 9.1% among the sub-regions.
 - After that, forestry and logging made 6.9% and 6.6% in fishing and aquaculture.

- The crop sector accounted for the highest contributor to total GSDP of 9.7% in the year 2019–20, while the lowest was from fishing and aquaculture (1.5%).
 - The share of crop sub-sector in agricultural GSDP has been the largest at 52% in 2019-20.
- **Land Resources: -**
- Apart from labor and capital, land is an important component in the factors of production.
 - Bihar enjoys the fertile soil and land resources present in the Gangetic plains, suitable for cultivation of crops, fruits and vegetables.
 - In a coastless state like Bihar, where 8% of the country's population resides and the population density is 1106 persons per sq km against of the national average of 182, the agriculture sector has to face huge challenges.
- **Land Use Pattern: -**
- About 56% of the land has been used for crops in the last three years in the state.
 - The net sown area in the state was 51.67 lakh hectares in 2018-19, which is 55.2% of that geographical area.
 - In the year 2018-19, the area with diverse tree plantations amounted to 2.48 lakh hectares, which is 2.7% of the total area of the state.
 - The forest area in the state accounted for 6.22 lakh hectares, which is 6.6 percent of the total geographical area of the state.
 - The land not available for agriculture was 21.50 lakh hectares in 2018–19, which is about 23% of the total area of the state.
 - Around 11.9% of the total geographical area of the state is under fallow land.
 - However, in recent years, due to urbanization and increasing population, there has been an increase in the demand of the housing, due to which the use for agricultural purposes has decreased and the net sowing area has decreased, which has reduced the land available for agricultural purposes.
 - The maximum sowing area was 2.84 lakh hectare in East Champaran and the lowest was 0.23 lakh hectare in Sheohar.
 - The highest crop intensity was 1.91 in Sheohar.

- Crop intensity has been found to be higher than the state average of 1.43 in the total of 19 districts in the year 2018-19.
- Similarly, the total uncultivable agricultural land was highest in Gaya(3.24 lakh hectares) in Gaya followed by Jamui and West Champaran.
- The share of fallow land to the total area was less than 1% in Rohtas and Buxar districts, while in Gaya and Araria had more than 25% of fallow land.

➤ **Cultivation in Bihar:**

- The total area used for agricultural work in Bihar has increased from 63.9 lakh hectare in 2010–11 to 64.6 lakh hectare in 2015–16.
- Due to increasing pressure on the land-resources by population, economic activities and urbanization in Bihar, there has been fragmentation of land holdings in Bihar. In agriculture census, the average size of plots in Bihar has remained constant at 0.39 Hectare.

➤ **Trends in production of crop and horticulture sector: -**

- Bihar has three agro-climatic zones-
 1. North Eastern
 2. Northwest
 3. Southern Region
- Rice, wheat and maize are the main crops in food grains.
- Mainly as a subsistence based economy, 87.4 percent of the gross cropped area is taken up by cereals.
- The share of area under pulses stood at 6.7 percent in 2019-20 with a declining trend.
- In Bihar, crops have diversified in recent years due to availability and mechanization of ground water resources.

➤ **Crop Pattern in Bihar:**

Crop	2018–19	Crop
Food	94.0	94.1
Grain	87.1	87.4
Pulse	6.9	6.7
Oil Seeds	1.4	1.7
Fiber Crop	1.2	0.9
Sugercane	3.3	3.3
Total Area	100.0	100.0

➤ **Production and Productivity Trends: -**

- The productivity of both food grains and non-food crops in Bihar has improved significantly in recent years.
- Due to conducive climate, water resources, technological improvements, input support, and mechanization, have led to increasing yield of both food and non-food crops.
- Total foodgrain production have increased to 163.80 lakh tonnes in 2019–20 from 145.08 in 2015-16.
- Total cereal production has increased to 160.45 lakh tonnes in 2019–20.
- There has been an increase in the production of wheat and maize. Maize production in 2019–20 was 34.95 lakh tonnes.
- The productivity of rice is 2245 kg per hectare in 2019-20.
- The productivity of all oilseeds has increased, except sunflower in oilseed production.

➤ **Main crop: -**

1 **Rice:** - Rice is the main Kharif crop of Bihar.

- In terms of production, the leading districts in 2019–20 are, Rohtas (9.2 lakh tonnes), Aurangabad (5.5 lakh tonnes), Kaimur (4.2 lakh tonnes) which together accounted for 27.2% of total rice production in the state. The highest productivity of rice was reported from Rohtas (4111 kg per hectare). The lowest productivity of rice is reported from Madhubani (1141 kg per hectare).
- Productivity has increased in recent years due to adoption of SRI method and use of climate-tolerant strains of paddy.

2. **Wheat:** - Wheat is one the important crop grown in the Rabi season.

- Begusarai has the highest production of wheat in 2019–20. (3742 kg per hectare).
- The lowest 1725 kg per hectare) has been recorded in Gaya district.
- Three Leading Districts in 2019–20
Rohtas
Muzaffarpur
Sitamarhi
The total contribution is 18.1%.

3. **Maize:** - Major Maize Growing Districts -
 - Katihar
 - Purnia
 - Khagaria
 - The highest productivity of maize 9684 kg per hectare was recorded in Supaul in 2019-20 and the lowest in Buxar (1554 Kg per hectare).
 4. **Pulses:** - The most productive district - East Champaran (1183 kg per hectare)
 - Least 426 kg per hectare - in Araria.
 - Top three districts in pulses production in 2019–20 are:-
 - Patna (0.31 lakh tonnes)
 - Supaul (0.25 lakh tonnes)
 - Madhubani (0.21 lakh tonnes)
 5. **Sugarcane:**-In the year 2019–20, West Champaran was on top in the production.
 - East Champaran (19.55 lakh tonnes)
 - Gopalganj (15.54 lakh tonnes)
 - Muzaffarpur (6.22 lakh tonnes)
 - The highest yield of 91.51 tonnes per hectare is reported from Kishanganj and lowest in Sitamarhi at 40.15 tonnes per hectare.
- Horticulture:** Overall, fruits and vegetables account for about 6% of the crop area of the state, but they account for more than 35% of the total value of agricultural products.
- Total:-**
- The state has increased the production of fruits in 2019-20 as compared to 2017-18.
 - Mango had the highest 35.9% share in the total production of all fruits for the last three years followed by 33.5% share of banana.
 - 2019–20 has seen the largest increase in the area of muskmelon cultivation.
 - Banana has the highest productivity (43.3 tonne/ Hectare).
 - Lowest muskmelon (5.5 Tonne/Hectare).

- To promote the cultivation of different types of bananas, a tissue culture laboratory has been established under Bihar Agricultural University in Sabour.
- Productivity and districts:- of Mango, Litchi, Banana and Guava in 2019-20 are as follows:-

Mango:- In production - Darbhanga, East Champaran, Muzaffarpur (24.6% of total production).

Bananas: -Highest production in Katihar (2.29 LT), Vaishali (1.53 LT), Muzaffarpur (1.39 LT) (32.6% of the total production).

Litchi: - Muzaffarpur was the leading district in the production of litchi in 2019-20, which alone accounted for 48% of the production.

Guava:- The top Guava producing districts are- Nalanda, Muzaffarur and Rohtas.

Vegetables: - Alluvial soil and abundant water resources of Bihar are very suitable for low cost vegetable cultivation.

- Total vegetable production stood at 160.46LT in the year 2019–20.
- The overall acreage under vegetables stood at 8.01 lakh tonnes in 2019–20.
- The contribution of potato in total vegetable production is 77.10 lakh tonnes, of brinjal 13.21 lakh tonnes, of cabbage 7.22 lakh tonnes.
- Potato production was the highest in the last three years with 26.6% increase in the production of vegetables.
- The highest productivity was of 26.7 lakh tonnes per hectare of potato and the lowest at 5.9 tonnes per hectare of peas.
- Patna, Nalanda and Vaishali were the major potato growing districts in the year 2019–20, which together accounted for 23.9% of the total potato production in the state.
- A remarkable achievement has been achieved in the production of horticultural crops in Bihar, but there is considerable difference between the various districts in terms of horticultural development.

- The state government is investing in input subsidies, infrastructure development, marketing and other kinds of institutional supports to streamline the productivity of vegetables.
 - National Horticulture Mission is currently being implemented in 23 districts. In the remaining 15 districts, the Chief Minister's Horticulture Mission is being implemented.
- **Initiatives of Agriculture Department:-**
- Saat Nischay -2 :- Hark khet ko Pani
 - For the self-reliant Bihar, the state government is promising to provide water to every farm in the state.
 - In the first phase, the existing in-situ survey will be conducted to estimate the number of irrigation systems.
- **Joint Technological Survey:** - Under Har Khet Ko Pani scheme a joint technical survey is going on to identify the unirrigated areas and potential water bodies and irrigation schemes to develop irrigation systems.
- **Climate Resilient Agriculture Program:** -Keeping in mind climate resilient agriculture, the state government launched a pilot scheme for climate resilient agriculture in eight districts of the state - Nalanda, Nawada, Gaya, Bhagalpur, Banka, Munger, Khagaria and Madhubani during 2019-20.
- **Public sector enterprises in agriculture:** -
- Bihar Rajya Beez Nigam Limited
 - Bihar Agricultural Management and Extension Training Institute
- Area of Animal Husbandry, Fisheries and Milk Production: -**
- Livestock production is an important component of Bihar's economy in terms of food security and livelihood opportunities available to small and marginal farmers.
 - The state government is giving priority to exploit the potential of livestock and related sectors in the state through the Livestock Master Plan for the period from 2018–19 to 2022–23.
 - In the year 2019–20, livestock contributed 6% in the GSDP and 32% in agriculture GDP of the state.

- According to the Animal Census of the year 2019, the number of cattle and bulls in the state was 1.54 crores which is around 42.1 crores of the total livestock population.
 - Fisheries play an important role in increasing the per capita income of the poor people of the state, especially those in rural areas.
 - Fisheries sector accounted around 8% of the state's primary sector gross state domestic production in 2019-20.
 - The milk production sector has been historically important rural enterprise for Bihar, which has the potential to increase the income of small and marginal farmers.
 - Milk production in the state has gone up to 104.83LT in 2019-20.
 - The production of milk is highest in the villages.
- **Schemes of the Department of Animal and Fisheries Resources: -**
- **Fish Production through Biofloc Fish Farming:-**Its main objective is to make the farmers aware of the new technology of fisheries.
 - Chief Minister Integrated Wetland Development Scheme.
 - Pradhan Mantri Matsya Sampada Yojana.
- **Agricultural inputs: -**
- Bihar's agriculture is highly dependent on the monsoon and most of the farmers are small and marginal farmers who require support for purchase of inputs such as seeds, fertilizers, irrigation, crop protection materials, and farm machinery to achieve higher production and productivity in farming.
- **Seed:-**
- Productivity of different crops depends on timely availability of seeds. With limited land availability for agricultural expansion in the state, adoption of high quality certified seeds can be beneficial in resisting the effects of climate shocks besides combating pest attacks.
- **Fertilizer: -**
- Agricultural production is highly dependent on proper management of the use of chemical fertilizers.

- The total consumption of fertilizers has increased to 36.24 lakh tonnes in 2019–20.
 - Among all types of fertilizers, the highest consumption was observed in urea, was 62.63% followed by DAP at 19.68% in 2019–20.
 - The maximum fertilizer consumption is reported in Bihar from Purnia district.
 - The least consumption is reported from Sheohar.
- **Power -**
- In the context of mechanization of agricultural work, energy is required to run machinery and equipments at different stages of agricultural operations such as planting, ploughing, harvesting and irrigation.
- **Agricultural credit: -**
- In the year 2019–20, the total agricultural credit in the state was 39,044 crore of which about 50% came from commercial banks, followed RRBs (34.91%).
- **Kisan Credit Card (KCC): -**
- 3.01 lakh farmers of the state have benefited from the scheme in the year 2019–20.
- **Covid - 19 and Agricultural sector in Bihar: -**
- Due to the onset of the Covid-19 pandemic and the nationwide lockdown, a large number of laborers started returning to their home districts of Bihar. Due to disruptions in the supply chain of perishables such as milk and fruits. The State Government took several initiatives to provide employment to the returning laborers and support to poor.

9. Industry Sector

In order to reverse the historical backlog in industrialization, the State Government of Bihar has taken several policy measures and established dedicated institutions. The Annual Industrial Survey (ASI) shows that the total output and valuation of working factories in Bihar has increased over the years through structural reforms. However, the lockdown implemented due to COVID-19 has had a severe impact on operations in the manufacturing sector, resulting in loss of both production and employment.

- Among the large states of India, the industrial development in Bihar is very limited. However, Bihar has been an important supplier of raw materials to the developed regions of the country.
- The secondary sector consists of mining and quarrying, manufacturing, EGWUS (electricity, gas, water supply and other utility services) and construction. Among these construction has been the main driver of development in Bihar.
- The data for the years 2018-19 and 2019-20 shows that the secondary sector is on a high growth trajectory.
- The contribution of the industrial sector of Bihar to the Gross State Value Added in Indian states has been around 20 percent since 2018-19.

Status of Industry:-

- The Annual Industrial Survey has been the only source of industrial statistics in India. According to this, Bihar has shown impressive growth between 2007-08 to 2017-18. The growth rate of agriculture based factories in particular has been 11.7 per cent during this period, which was 1.3 per cent at all India level.
- The increase in agro-based factories shows that the actual processing of a large part of agricultural production now takes place in the state itself.
- Bihar has a small industrial base among the major states of the country. Bihar accounts for only 0.7 percent of the country's Gross ValueOutput (GVO).
- The number of working factories in Bihar is 2887.
- The occurrence of low inclusion rate in Bihar puts pressure on the difficult situation of unemployment. At the same time, the relatively low level of compensation in Bihar also shows that the standard of living of the workers here is lower as compared to other states.

Informal Enterprises in Bihar:-

- In a developmental economy, the informal sector creates value to cater to local consumption needs.
- This sector employs a large part of the labor force.
- Especially in an economy where the formal and large manufacturing and services sector fail to absorb large unemployed workforce.
- The number of unincorporated non-agricultural enterprises (UNAE) was estimated at 6.34 crores at all India level, whereas Bihar housed 5.4% of such enterprises.
- The number of capable enterprises in the manufacturing sector was high and they were considered more productive than in the whole of India.
- Gross net worth per independent enterprise in Bihar was about 1.6 times higher than the all-India average.
- The value owned and hired assets per establishments engaged in manufacturing in Bihar was merely 30% and 31% respectively of the national average. Furthermore, the level of outstanding debt per factory engaged in manufacturing in Bihar was only 4.7 percent of all India level.
- A look at the growth status of the enterprises suggest that 36.2 percent of the enterprises in Bihar have registered an expansion in the last three years, which was 7.6 percent points higher than all India level.
- More importantly, fewer enterprises in Bihar have experienced contraction in the last three years, which was 3.3 percentage points lower than national average.

Agro Based Industries:-

- According to the data of Bihar Industrial Area Development Authority, Bihar has become a major state in terms of food processing industries in recent years.
- A total of Rs 349.39 crore has been invested in the food processing industry in Bihar between the year 2019-20 and 2020-21.

Sugar Industry:-

- Sugarcane has a prominent place in the cash crops grown in Bihar. There are currently 10 sugar mills in Bihar, which are located in the north-western state of the state, where sugarcane is produced the most.

- In the crushing season of 2019-20, 674.05 lakh quintals of sugarcane were crushed to produce 72.29 lakh quintals of sugar.
- Sugarcane cultivation has been promoted through a long-term program of the State Government – Mukhyamantri Ganna Vikas Yojana to increase the production and productivity of sugarcane.

Dairy industry:-

- Family income in rural India, especially rural Bihar, is largely dependent on income from animal husbandry resources.
- The formation and sustained performance of milk production cooperatives in different parts of the country has historically stabilized and increased the income of rural households from their livestock sources.
- In Bihar, Bihar State Milk Co-operative Federation Limited (COMFED) has been providing stability to the income of rural families through milk production.
- For milk production in Bihar, COMFED has installed plant with a capacity of 5.0 lakh liters of milk in Samastipur and a cattle feed plant of 30 metric tonnes per day capacity at Bihiya in Bhojpur district.
- The daily milk collection has been decreased due to emergence of Covid-19 but the production and sales of other like lassi and ghee products have increased significantly. For example, between 2018-19 and 2019-20, the production of ghee and lassi has increased by 29 percent and the production of curd has also increased by 34 percent.

Non-Agro-Based Industries:-**Handloom and Powerloom:-**

- The UNAEs data suggest that almost 30% of the unincorporated enterprises in Bihar were engaged in the manufacturing of textiles and wearing apparels.
- These enterprises serve two important purposes - one, they provide employment to a large number of rural and urban people and secondly they preserve the legacy of cultural history of the state.
- The handloom industry in Bihar produces wide range of fabrics to meet the needs of different markets in the country and abroad.
- In this regard, the state government has been training about 204 apprentices in weaving, dyeing and designing every year since 2013-14.
- In 2019-20, the state government trained only 119 in the target of 204.

- The reason for such decline in the number of trainees in the year 2019-20 is the lockdown due to the Covid-19 Pandemic.

Sericulture Production:-

- Between 2018-19 and 2019-20 the plantation for sericulture has almost been stalled.
- In these two years, silk production from Mulberry has decreased significantly but production from Tasar has increased significantly.

Steps taken by the Government to promote Khadi Industries:-

- Prime Minister's Employment Generation Program
- Initiatives under Bihar Industrial Investment Promotion Policy, 2016
- Bihar Industrial Area Development Authority and other institutions.
- **Udyog Mitra** - It will facilitate provision of information for promoting industrialization in the state.
- Bihar Start-up Policy 2017

Mining and Quarrying:-

- Due to the separation of Jharkhand from Bihar, the contribution of major minerals in the state's economy has decreased significantly.
- But the increasing importance of minor minerals, especially sand and brick has contributed substantially to the revenue collection of the state government.
- In 2019-20, the target of the state government had aimed to get Rs 1600.00 crore revenue from minerals but the actual collection was 1616.26 crore which was much more than the targeted revenue collection.
- Revenue collection in 2019-20 was 59.50 crore (3.8%) more than 2018-19.

Tourism:-

- The major tourist destinations in Bihar can be classified as follows.
 1. Buddhist Circuit
 2. Jain Circuit
 3. Ramayana Circuit
 4. Shiva Shakti Circuit
 5. Sufi Circuit
 6. Sikh Circuit
 7. Gandhi Circuit
 8. Eco Circuit



- In India, Bihar was ranked 14th in the country in attracting domestic tourists and 9th in receiving foreign tourists in 2018.
- The growth rate of domestic tourists between 2018 and 2019 was 1.1 percent, while the number of foreign tourist has remain unchanged.
- Many important schemes have been approved by the state government for the tourism department between 2019-20 and 2020-21. For this, the department was provided with Rs 100.62 crores were made available to the department in 2019-20 and Rs 145.27 crores in 2020-21.

Covid-19 and Enterprise Sector:-

- Among all sectors of the economy, the enterprises sector is probably the most affected by the COVID-19 pandemic. The entire manufacturing sector had to be shut down due to the lockdown, leading to loss of both production and employment.

The following efforts were made by the government to start this:-

- Special incentives to attract investment and to hire workers returning to Bihar due to the COVID-19 situation.
- Joint Ventures with State Public Enterprises, 2020
- Special Land Allocation and Amnesty Policy, 2020

10. Urban Development

Urbanization is the result of economic development. Urban areas are considered as engines of growth as they are the harbingers of economic prosperity and herald overall socio-economic development.

The challenge of urban development in Bihar has two components.

- (i) To provide adequate urban services in existing small and large cities
- (ii) Increasing the pace of urbanization

The rate of urbanization in Bihar is still very low.

The economy of Bihar has been predominantly agrarian, so the absence of strong non-farm areas has resulted in a large number of rural settlements with large populations and high population densities.

In this context, the state government has taken a big step in December 2020 and has paved the way for the creation of more than 100 new municipal bodies and reversal of existing municipal bodies.

Formation of Municipal Bodies.

- According to the Bihar Municipal Act 2007, there are currently 13 Nagar, 49 Nagar Parishad and 81 Notified Area Council or Nagar Panchayat Samiti functioning in Bihar.
- Under the new provisions, for a large rural area to be classified as an urban area, the share of non-farm labor should be at least 50% of the total population of that area.
- Due to the new provisions, the total urban population of Bihar in 2011 is 1.39 crore instead of 1.13 crore. This will increase the urbanization rate from 11.3% to 15.2%.

Urbanization and Local Pattern of Urban Development:

- Bihar is definitely the least urbanized state in the country. Bihar accounts for 8.6% of the total population of the country, but the state accounts for only 3.1% of the total urban population of the country.
- While urbanization across the country increased by 3.4% from 27.8% to 31.2% between 2001 and 2011, it grew only 0.8% in Bihar from 10.5% to 11.3%.

- Urbanization in Bihar has been slow over a long period of time and the pattern remains unbalanced.
 - South Bihar has much more urbanization than North Bihar and urbanization is strongly concentrated in big cities.
 - **Comparison of Census data:**
 - (i) The share of Category I cities with population more than one lakh was 59.3% in 2001, which declined slightly to 57.5% in 2011.
 - (ii) Category 2 cities with a population between 50,000 and 1 lakh and Category 3 cities with a population between 20,000 and 50,000 had a combined share of 37.2% of the urban population in 2001.
- There is a huge difference in the level of urbanization between the districts of Bihar.
- Patna has the highest percentage of urbanization (43.1%). After that 15 districts in which urbanization is more than 13% are:-
- Nalanda (15.9%)
 - Begusarai (19.2%)
 - Munger (27.8%)
 - Sheikhpura (17.1%)
 - Bhagalpur (19.8%)
 - There are at least 7 districts (Kaimur, Sheohar, Madhubani, Samastipur, Banka, Supaul and Madhepura) in which urbanization is less than 5%.
- There is no specific relationship between urbanization and per capita income in the districts of Bihar.
 - This shows that people come to the city not only because of economic reasons but also because of other reasons like health, education, infrastructure facilities etc.

Expenditure on Urban Development:

- In recent years, the state government is paying more attention to urban development to improve basic services.
- The State Government's budget allocation for urban development was Rs.1784 crore in 2013-14 which increased by 129% in five years to Rs.4089.00 crore in 2018.19. Similarly, the budget of the Housing Department also increased from just 1064 crores in 2013-14 to 7075.00 crores in 2018.19.

Urban Development Program (State Plan):

- The state government has been making a lot of efforts to provide better living conditions in urban areas and to achieve this goal, it is implementing many programs.
- **Chief Minister's Saat Nishchay Yojana:**
- Saat Nishchay Yojana aims at improving the lives of people through education, skill development, electricity connections, piped water supply and roads and drains.
- Out of these seven decisions, three are related to urban areas:
 - Sauchalya Nirman, Ghar ka samman
 - Har Ghar Nal Ka Jal
 - Every house has a pucca lane and drains.

Chief Minister Urban Drinking Water Nishchay Yojana:

- In order to provide clean and safe drinking water to all households in urban areas by the year 2020-21, the state government aims to remove all the hand pumps under this scheme 'Har Ghar Nal Ka Jal', on which the urban population is currently meeting their water needs, is dependent. About 15.854 lakh families will be benefited from this program

Chief Minister Urban Nali-Gali Pakkaran Nischay Yojana

- The state government has started the 'Ghar Tak Pucca Gali-Naliyan' scheme to connect every house with concrete roads as well as drainage system.
- **Goal:-** Connecting every house in the urban area with a permanent drain and road.
- In order to meet the requirement of funds, 20% of the funds recommended by the State Finance Commission have been kept reserved for this scheme and the rest will be met from the state plan funds.

Samrat Ashoka Convention Centre:

- This is a newly constructed establishment in Patna. It upgrades the infrastructure base of Bihar.
- There are three special buildings in the Emperor Ashoka Convention Center. (a) Bapu Auditorium with a seating capacity of 5000 people, (b) a new auditorium with a seating capacity of 800 people named Gyan Bhawan (c) Sabhayta Dwar, a structure depicting the art style of Mauryan art, built on 12 acres of land in central Patna. The state government has spent Rs 490 crore for the construction of this structure.

Deendayal Antyodaya Yojana:- National Urban Livelihood Mission

- The mission aims to provide shelter with essential services to the homeless urban people in a phased manner.
- Simultaneously, the mission also seeks to address the livelihood concerns of urban street vendors by providing them with appropriate placement, institutional credit, social security and skills to assess emerging opportunities in the market.

Skill Training & Employment by Deployment:

- The main objective of this program is to train urban BPL youth and girls and provide them opportunities for paid employment or self-employment.
- This program is being implemented by Bihar Skill Development Mission.

Financial Inclusion and Self-Employment Program (FICEP):-

- Under this component of the National Urban Livelihoods Mission, urban poor individuals or groups will be trained according to their skills, instincts and local conditions.

Urban Development Program (financed jointly by the Central and State Governments):

- Apart from its programs, the state government is also implementing many development programs in collaboration with the central government to improve the living conditions in urban areas.

Components of program are:-**(i) Namami Gange Program (NGP)**

- It is an Integrated Conservation Mission approved in June 2014 as a flagship program with a budget of Rs 20,000 crore.
- The objectives of this program are to effectively reduce pollution of the national river Ganga and to conserve and rejuvenate it.

The main components of this program are:

- (a) Water treatment capacity building. (This project is being implemented by the state government)
- (b) River Ghat Development
- (c) Cleaning of river surface.

The program is being managed by the National Mission for Clean Ganga.

A total of 20 cities have been identified on the banks of river Ganga for the implementation of Namami Ganga programme. The focus is on providing financial assistance to those desirous of starting profitable self-employed ventures or micro-enterprises.

Swachh Bharat Mission:

- It is a flagship project launched by the Central Government in 2014 to improve the standards of cleanliness in the country.
A target has been set to construct 4.30 lakh toilets in urban areas in Bihar.
By March 2020, 4.04 lakh toilets have been constructed.
For individual toilets, the state government gives a subsidy of Rs 8000 to each family in addition to the central assistance of Rs 4000.
So far, all 142 urban centers and 3367 wards out of total 3367 have been declared open defecation free.

Pradhan Mantri Awas Yojana:-Housing for All:

- This scheme was started in June 2015. The duration of this mission is till March 2022. The main objective of this scheme is to provide pucca houses to the homeless families of low income groups.
- For the empowerment of women from economically weaker sections and low income groups, a mandatory provision has been made in the Pradhan Mantri Awas Yojana to make the woman head of the family the owner or co-owner of the house provided under this scheme.

Atal Rejuvenation and Transformation Mission (AMRUT):

- AMRUT Mission was started in June 2015.
- Its focus is on providing basic services in all urban areas. Provisions are made for water supply, tap water drainage, rainwater drainage, footpaths, public transport facilities and development of parks and open spaces.

Smart City Mission.

- Under this scheme, four cities have been selected in Bihar which are Patna, Bhagalpur, Biharsharif and Muzaffarpur.
- Special purpose channels have been established for these three cities.

Patna Metro Rail:

- The Patna Metro Rail Project with a total expenditure of Rs 13,365.77 crore was approved in February 2014.
- The total length of the project is 31.39 km. It has two corridors.
 - (i) East-West Corridor (Danapur to Mithapur)
 - (ii) North-South Corridor (Patna Railway Station to Prathaj)

The responsibility of construction of Patna Metro Rail Project has been given to Delhi Metro Rail Corporation.

Finance of Municipalities.

- Revenue grants form a major part of the total revenue income of municipal bodies.
- The share of revenue grants was 10,285.29 lakh (54.4%) out of their total income of Rs 18,921.76 lakh in the year 2019.20.
- Self-earned income of local bodies has grown at a modest rate in recent years.
- The municipal bodies of Bihar, like other parts of the country, are highly dependent on external aid.
- The share of self-earned income in their total revenue income is less than 16%.
- As a result, the establishment expenses of the urban local bodies are not met even with their self-earned income.

Impact of Covid-19 on Urban Economy:

- The spread of Covid-19 and the subsequent lockdown brought many problems to the urban population, with the urban poor most affected.
- **Some of the special initiatives are as follows:**
 - (a) Ration card survey of 5,13,242 households was carried out through which 14,42,395 members were benefitted and they got access to the Public Distribution System.
 - (b) Surveyed 5,13,242 families were also entered on the Aapda Sahyog portal through which they got assistance of Rs 1000 per person during the lockdown due to Covid-19 pandemic.
 - (c) About 600 SHGs were motivated and engaged to produce 2.50 lakh masks and more than 30,000 liters of sanitizers.

11. Enterprises Sector

➤ Introduction

- With limited resource endowment, the increasing number of informal enterprises contributed substantially to capital formation and employment creation in the state
- Among the major states in India, industrial development is very limited in Bihar. However, Bihar has been an important supplier of raw material to the industrially developed regions of the country. In the last one-and-a-half decade, the State Government has taken various initiatives to encourage entrepreneurs to set up production units in the state. In this regard, the State Government has adopted a number of policy measures to create a conducive industrial environment. Towards this, the State Government has also established dedicated institutions to promote industrialization.
- The contribution of the industrial sector to GSVA has been fairly consistent over time across all the major states in India. In case of Bihar, this contribution has been around 20 percent, compared to the all-India average of about 31 percent. This clearly indicates that the industrial sector is not the driver of economic growth in the state
- The growth rate of operating agro-based factories has been as high as 11.7 percent, during this period, which was 9.3 percentage points higher than at the all-India level. In case of operating non-agro-based factories, the growth rate was 4.9 percent in Bihar, compared to 4.1 percent at the all-India level. The growth of the number of agro-based factories suggests that a large proportion of agricultural production of Bihar is now actually processed within the state. This phenomenon, through forward and backward linkages, certainly impacts the employment and income of Bihar's working population. Except decrease of working capital in Bihar between 2007-08 and 2017-17, all other aspects of factory production achieved impressive growth during the same period. Moreover, the growth achieved in Bihar was significantly higher than that achieved at the all-India level. Ratio of net value added per factory in Bihar has increased by 20.4 percent vis-à-vis 6.6 percent at the all-India level between 2016-17

and 2017-18. With such an impressive growth trajectory, the operational factories in Bihar would gradually achieve structural parity with the all-India levels

- The key indicators of employment per factory and annual wages, salaries and bonus received by the workers. For both these indicators, Bihar ranked the lowest among the major states. In Bihar, on average, 42.3 workers received employment in an operational factory, while an operational factory in Odisha could absorb 104.7 workers. Furthermore, the annual wages, salaries and bonus per worker was just Rs 136.8 thousand in Bihar, vis-à-vis Rs 331.1 thousand in Odisha. The incidence of low labor absorption rate put pressure on the difficult unemployment situation in Bihar.

State-wise Person Engaged in Industrial Sector (2017-18)

State	No. of Factories in Operation	Percentage Share in Total	Employment per factory
Andhra Pradesh	13308	3.8	44.9
Bihar	2881	0.8	42.3
Chhattisgarh	2976	1.2	62.4
Gujrat	20577	11.7	88.8
Haryana	7136	5.5	120.3
Jharkhand	2366	1.2	81.3
Karnataka	10787	6.8	98.8
Kerala	6848	2.0	45.3

- A quick look at the growth status of the enterprises suggests that 36.2 percent of enterprises in Bihar have registered an expansion in the last three years, which was 7.6 percentage points higher than the all-India level. More importantly, fewer enterprises in Bihar have experienced contraction in the last three years, vis-à-vis all-India average. In Bihar 7.7 percent enterprises experienced a contraction in the last three years, which was 3.3 percentage points lower than the national average. It certainly manifests the resilience of the unincorporated enterprises in Bihar and, at the same time, their aspiration to grow. The state has become a major centre for food processing industries in recent years. In the years 2019-20 and 2020-21, a total of Rs 349.39 crore has been invested in the food processing industry in Bihar
- Among major cash crops cultivated in Bihar, sugarcane features most prominently. In Bihar, 10 sugar mills that are currently in operation are primarily situated in the north-western Bihar, the region where sugarcane cultivation predominates. The large-scale production of ethanol can be blended with fossil fuel to reduce the consumption of fossil fuel. The increase in use of ethanol might help the economy and environment in multiple ways. For instance, the increase in use of ethanol might help in reducing carbon dioxide emissions to address the issue of air pollution. The sugar recovery rate improved from 10.37 percent in 2018-19 to 10.72 percent in 2019-20. In the last few years, the overall sugar recovery rate has been improving consistently.
- To improve production and productivity of sugarcane, the cultivation of sugarcane has been encouraged through a long-term programme of the State Government – Mukhya Mantri Ganna Vikas Yojana. Under this programme, the State Government had plans – first, to provide incentive to the Sugar Mills/sugarcane farmers to purchase breeder seeds; second, to subsidise farmers for purchasing certified/verified seeds; third, to promote certified seed production; and finally, to organize training programmes for the farmers and organize workshops to impart knowledge regarding best practices.

Handloom Concentrated Districts in Bihar

District	Products
Bhagalpur	Silk, Cotton, Furnishing cloth, Staple chadar, Exportable silk and Linen cloth.
Banka	Tasar Silk, Exportable Silk cloth and Cotton towel
Gaya	Cotton Long cloth, Bed sheed, Towel
Nalanda	Ornamental Curtain, Bed Cover, Interior decoration material and ornamented cloth
Nawada	Tasar Silk, Dress material, Linen
Madhubani	Fine Cotton long cloth, Dhoti, Shirting
Aurangabad, Rohtas	Woolen Blanket, Woolen Carpet and sari
Kaimur	Woolen Carpet, Banarasi sari
Patna, Siwan	Cotton cloth and Furnishing cloth
Purnea, Katihar	Jute bages, Jute-blended material, Interior decorative material

Source : Department of Industries, Handloom, GoB

➤ Prime Minister's Employment Generation Programme (PMEGP) :-

- Over the years, the performance of PMEGP in Bihar has improved considerably. The three implementing agencies of PMEGP are – Khadi and Village Industries Commission (KVIC), KVI Board in Bihar and District Industries Centres (DIC) at the district level. The financial target has also increased by 36 percent between 2018-19 and 2019-20. Unlike previous years, the realization of both physical and financial targets fell short of expectation across the implementing agencies in 2019-20. A plausible reason for the shortfall is sudden lockdown due to the outbreak of Covid-19.

- The State Government has planned to take various measures to promote and showcase the products of khadi and village industries in 2020-21. The following are some examples of such promotional measures:
- To promote khadi, the State Government is planning to construct Khadi show room in Gaya, Muzaffarpur and Purnea districts.
- To honour khadi spinners and weavers, Samman Nidhi Yojana will be initiated a handloom haat at Bihar State Finance Corporation Headquarters at Fraser Road, Patna has been constructed to showcase and sale the products of handloom and handicraft.

Initiatives under Bihar Industrial Investment Promotion Policy, 2016 :-

- Under the Bihar Industrial Investment Promotion Policy, 2016, the State Government has received a large number of project proposals for investment. between 2016 and December 2020, the State Government has received 1603 proposals, worth Rs 19,348.87 crore. Till December 2020, 262 units have already started functioning and the total investment in these units is worth Rs 1886.42 crore. In these production units, 7100 people have received employment. The State Government has also provided a grant to the applicant industries under the Industrial policy 2016; between 2017-18 and December 2020, a sum of Rs 170.87 crore was released as a grant to the industrial units
- Over the years, the investment climate in Bihar has certainly improved and it is manifested in the increasing interest of the investors to invest and set up production units in the state. Three most important areas of investment has been – food processing, and plastic and rubber. These three areas received almost 58 percent of the total investment in Bihar. Apart from these three areas, a large-scale cement factory came up in Bihar, worth of Rs 490.42 crore.

Status of Industrial units in Bihar, as on December 2020

Area	Operational units Number
Food processing	128
Plastic and rubber	29
Tourism	10
Health Care	14
Textile	1
Renewable energy	2
Small machine manufacturing	2
IT and IT-enabled services	11
Technical education	0
Cement	1
Sugar mill (extension)	0
Private industrial park	0
Others	64
Total	262

Source : Department of Industries, GoB

- To attract big business houses in Bihar, the State Government has set up an office of Investment Commissioner in Mumbai, and its promotional initiatives have attracted capital investment of Rs 914 crore till January 2020.
- Udyog Mitra
Udyog Mitra plays the role of a consultant to facilitate the industrialization process in the state, with services like provision of information and explore

remedies for problems arising at various stages of operation of the industrial units. The usefulness of Udyog Mitra has encouraged the State Government to increase its allocation over the years. The data suggest that the financial allocation of Udyog Mitra has increased from Rs 110.3 lakh in 2015-16 to Rs 153.0 lakh in 2019-20, registering an increase of 38 percent.

- **Bihar Start-up Policy 2017**
To encourage young entrepreneurs to start their own ventures, Bihar Start-up Policy 2017 was notified with an initial corpus of Rs 500 crore. The Bihar Start-up Fund Trust has certified 90 start-ups and 60 of them have received financial help of Rs 155.41 lakh as the first instalment. Furthermore, 40 start-ups have received Rs 276.00 lakh as the second instalment.
- **Mining and Quarrying –** Due to separation of Jharkhand from Bihar, the contribution of major minerals in the state's economy has diminished significantly. However, the increasing importance of extraction of minor miners, especially sand and bricks has contributed significantly in revenue collection of the State Government. Moreover, the substantial increase in sand mining, brick making, and stone crushing have forward linkages in the construction sector, as these inputs are of absolute necessity to the fast expanding construction sector. More significantly, the construction sector, along with sand mining and brick kilns, are the major employment providers in the state.
- The State Government has been able to accurately measure the revenue potential of the Mines and Geology Department by setting realistic targets and, in the recent years, the Department has achieved the targeted revenue collection.
- For better regulation of extraction of sand from the river bodies and maintaining environmental safeguards, the State Government has repealed the Sand Policy, 2013 and introduced Bihar Sand Mining Policy, 2019. The major objectives of the Bihar Sand Mining Policy, 2019 are three folds – (i) to ensure that sand mining is done in an environmentally sustainable manner.
(ii) to ensure availability of adequate amount of quality sand for construction at a reasonable price and (iii) to increase the number of settles to ensure generation of employment.

Bihar Budget 2021-22

- ⇒ The budget not only presents the annual statement of the current and upcoming financial years, but it also presents an outline of the economic agenda of the government.
- ⇒ The Finance Minister of Bihar, Shri Tarkishore Prasad presented the state budget for the financial year 2021-21 on February 22, 2021. 2020-21 was not a standard year in terms of financial performance of the economy and the government due to Covid-19 pandemic.
- ⇒ This budget is balanced and has been made keeping in mind the interest of all sections. The growth rate in the state's economy has been in double digits since 2005. This budget is going to give more momentum.
- ⇒ The size of the total budget for the year 2021-22 is Rs 2,18,302.70 crore, in which Rs 1,00,518.86 crore is under the development plan and Rs 1,17,783.84 crore under the head of establishment and committed expenditure.
- ⇒ **Under Committed Expenditure:-**
 - (i) Salary - 59,499.23 crore
 - (ii) Pension - 21,817.15 crore
 - (iii) interest payment - 14,517.41 crore
 - (iv) Public Debt Repayment - 9,094.43 crore

Receipts:-

Revenue Receipts +Capital Receipts = Rs 2,18,502.70 crore

- Revenue Receipts - Rs 1,86,267.29 crore
- Revenue received from Central Government - Rs 1,45,711.81 crore
- State's own revenue - Rs 40,555.47 crore
- **Various sources of tax revenue of the state**
- Commercial Tax - Rs 27,050 crore
- Stamp and Registration Fee - Rs 5,000 crore
- Transport tax - Rs 2500 crore
- Land Revenue - Rs 500 crore
- **Capital receipts** - Rs.32,235.41 crore
- Borrowing - Rs 31,805.21 crore
- Loan Repayment - Rs 430.20 crore

Expenses:-**Total Expenditure:**

Revenue Expenditure + Capital Expenditure - Rs 2, 81,302.70 crore

(u) Revenue Expenditure - Rs 1,77,071.39 crore

- Salary - Rs 59,499.25 crore
- Pension - Rs 21,817.15 crore
- Interest payment - Rs 14,517.41 crore
- Subsidy - Rs 4,091.81 crore

(ii) Capital Expenditure - Rs.41,231.31 crore

- Capital outlay - Rs 30,788.02 crore
- Public Debt - Rs 9,094.43 crore
- Debt - Rs 1,348 crore

❖ Covid- 19 Effects:-

- ⇒ Free food was provided to more than 30 lakh persons.
- ⇒ On an average, Rs 5,300 per person was spent in the Quarantine Centers.
- ⇒ 1000 rupees per cardholder was transferred to the poor people facing financial difficulties (1600 crores spent) through DBT.
- ⇒ 1000 rupees were given to the persons stranded outside the state due to the lockdown.
- ⇒ Many laborers were brought to the state by special trains.

Key Points:-

- (i) The total expenditure BE for the financial year 2021-22 is Rs 2,18,302.70 crore which is Rs 6,541.21 crore more than the budget estimate for the financial year 2020-21.
- (ii) Under the program of good governance, 2020-25, under the Saat Nischay-2 of Atmanirbhar Bihar, a total budget provision of Rs 4,671 crore has been made under various departments in the financial year 2021-22.
- (iii) The total revenue expenditure in the financial year 2021-22 is estimated at Rs 1,77,071.39 crore which is higher by Rs 12,320.20 crore from 2020-21.
- (iv) The total capital expenditure in 2021-22 is Rs 41,231.31 crore, which is Rs 5,778.99 crore more than the estimates of 2020-21 by Rs 47,010.30 crore.

- (v) Total revenue receipts are Rs 1,86,267.29 crore which is an increase of Rs 2,343.30 crore over 2020-21.
- (vi) The share of central taxes is estimated to be Rs.91,180.60 crore in 2021-22.
Revenue Savings - Rs.7,195.90 crore which is 1.21% of GSDP.
Fiscal Deficit - Rs 22,510.78 crore which is 2-97% of the GSDP.
Public Debt Surplus - Rs 2,01,466.71 crore which is 26.61% of the GSDP estimate.

Major Department wise Annual Scheme:-

- (i) Education Department – 21939.03 crore – 21.94%
 - (ii) Rural Development Department – 16782.66 crore – 16.78%
 - (iii) Social Welfare Department – 8190.85 crore – 8.19%
 - (iv) Rural Affairs Department - 7313 crore – 7.31%
 - (v) Health Department - 6927 crore – 6.93%
 - (vi) Road Construction Department - 4410 crore – 4.41%
 - (vii) Urban Development and Housing Department - 39521 crore – 3.95%
 - (viii) Water Resources Department – 3007.50 crore – 3.01%
 - (ix) Agriculture Department – 2549.10 crore – 2.53%
 - (x) Public Health Department – 2492.10 crore – 2.49%
 - (xi) Other Departments – 2245.98 crore – 22.46%
- Sum - 100000 Crore

- ⇒ The financial condition of the state is better which is being demonstrated by the following fiscal achievements-
- (i) The fiscal deficit in the year 2019-20 was 1.98% of the GSDP of Rs.6,17,153 crore, subject to the prescribed ceiling of 3%.
 - (ii) Public debt stood at Rs. 1,48,180.26 crore in the year 2019-20, which is 24.01% of GSDP, while the total liability under public debt and other liabilities as on March 31, 2020, is Rs. 1,90,891.95 crore. .
 - (iii) In the year 2019-20, the interest payment was 8.85% of the total revenue receipt, which should remain as high as 10% in the light of the recommendation of the 14th Finance Commission.
 - (v) The State Government has maintained economy revenue surplus continuously for the last several years. The revenue surplus in the year 2019-20 has been Rs.698.87 crore, which is in the light of Bihar Fiscal Responsibility and Budget Management Act 2006 from the year 2008-09 to maintain revenue surplus.

Receipt from Central Government:-

- (1) Centrally Sponsored Scheme – 42026.28 crore
 - (2) 15th Finance Commission – 8850.0 crore
 - State Disaster Relief Fund - 1416 crores
 - Grants to local bodies - 7434 crores
 - (3) Revenue from GST - compensation of 3500 crore loss.
 - (4) Central Sector Scheme – 154.92 crore
- Total – 54531.2124 Cr

❖ Various features of Bihar budget:-

- (1) Achievements of Saat Nischay Yojana for Developed Bihar.
 - (i) Aarthik Hal, Yuvaon ko Bal.
 - ⇒ Under Bihar Student Credit Card, 1,15,166 applications have been approved.
 - ⇒ Rs 1,495 crore spent
 - ⇒ Under the Chief Minister's Nishchay Self Help Allowance Scheme, 4,79,980 applicants were benefitted and an expenditure of 630 crores has been spent.
 - (ii) Arakshit Rozgar, Mahilaon ka Adhikar
Declaration of 35% horizontal reservation
 - (iii) Har Ghar Bijli Yojana
The state government has provided electrical connectivity to all the houses in the rural areas of Bihar.
 - (iv) Har Ghar Nal Ka Jal
The Panchayati Raj Department has reserved 86.36 lakh houses.
 - (v) Ghar Tak Pakki Gali
Under this scheme, connectivity has been provided to 4532 habitations by completing the construction of 3884.23 km road.
 - (vi) Sauchalya Nirman- Ghar ka samman
All 534 blocks, 101 sub-divisions and all 38 districts have been declared ODF.
 - (vii) Avsar Badhe, Aage Padhe
Opened in 36 sub-divisions against the prescribed 54 NOU institution.

❖ **Seven Nisachay-2 scheme of self-reliant Bihar under good governance:-**

- (i) Progress of Youth Power, Bihar
- (ii) Empowered woman, able woman
- (iii) Irrigation water to every field
- (iv) Clean Village - Prosperous Village
- (v) Clean City - Developed City
- (vi) Easy connectivity
- (vi) Additional health facilities for all
- (1) Yuva Shakti - Bihar Pragati
 - ⇒ Plan to enhance quality in institutions
 - ⇒ Mega-Skill Center in every district
 - ⇒ Tool Room (in each division)
 - ⇒ New Department for Skill and Entrepreneurship
 - ⇒ Establishment of Center of Excellence in Polytechnic Institutes.
 - ⇒ Grants for Entrepreneurship Development
- (2) Strong women, able women
 - ⇒ Special Scheme for Women Entrepreneurship
 - ⇒ The government will provide grant and interest free capital to women to set up their own industry.
 - ⇒ In industries, grant of 50% of the project cost up to a maximum of Rs 5 lakh and a budget free loan up to a maximum of Rs 5 lakh will be given.
 - ⇒ Incentive to women for higher education
 - ⇒ The regional administration has made the participation of women according to the reservation
 - ⇒ 12th pass unmarried woman - Rs 25,000
 - ⇒ Graduate Pass Female - Rs.50,000
- (3) Irrigation water to every field
- (4) Clean Village - Prosperous Village
 - ⇒ Solar street lights in all villages
 - ⇒ Solid and Liquid Waste Management
 - ⇒ Development of Animal and Fish Resources
 - ⇒ Maintenance of previous plans



- (5) Clean Cities - Developed Cities
 - ⇒ Solid and Liquid Waste Management
 - ⇒ Multi-storey housing for the urban poor
 - ⇒ Shelter for the elderly
- (6) Easy connectivity
 - ⇒ Connectivity of rural roads
 - ⇒ Construction of bypass or flyover in urban areas as per requirement
- (7) Additional health facility for all
 - ⇒ Infrastructure for better animal health management
 - ⇒ Better need of health facilities for people from village to village
 - ⇒ Bal Hriday Yojna



Department Wise Budget

(1) Agriculture Department:-

- ⇒ For the all-round development of the agriculture sector, the third agricultural road map is being implemented from 2017 to 2022, in which Rs 1.54 lakh crore has been allocated.
- ⇒ For the development of horticulture sector in the state, in the year 2020-21 under National Horticulture Mission and Chief Minister Horticulture Mission, Makhana development, development of drumstick area, betel cultivation in shade net, orchard upliftment program scheme has been started.
- ⇒ For training farmers in modern agricultural techniques -
kisan chaupal
Kisan Mela
Kisan Pathshala etc. programs have been initiated.

The total budget of the Agriculture Department is proposed to be Rs 3335.47 crore.

(2) Department of Animal and Fisheries Resources:-

- ⇒ A new Semen station has been set up at Purnea at a cost of Rs.84.2748 crore in collaboration with National Dairy Development Board for breed improvement program of cattle.
- ⇒ College of Veterinary and Animal Science is being established in Kishanganj under Bihar Animal Science University, Patna.
- ⇒ Total budget - Rs 1561.72 crore (32.47%)

Water Resources Department:-

- ⇒ Under the Jal-Jeevan-Hariyali Abhiyan, Ganga Jal Udravat Yojana (148.77 km) pipeline is being laid with the aim of providing drinking water in the cities of Rajgir, Gaya, Bodh Gaya and Nawada.
- ⇒ The Government of India has invested on the Kosi-Mechi-Lik scheme, an ambitious plan for water transfer from the Bikosi basin to the Mahananda basin.
- ⇒ Budget - Rs 4074.38 crore.

Panchayati Raj Department:-

- ⇒ Under the program of good governance 2020-25, solar lights are proposed to be installed in all villages under the 'Clean Village-Prosperous Village' initiative, under the Seven Nishchay-2 program of 'Self-reliant Bihar'.
- ⇒ Budget - Rs 9544.93 crore

Department of Environment, Forest, Climate Change:-

- ⇒ Conservation and promotion of environment, forest and climate are essential for sustainable development.
- ⇒ Gogabil in Manihari of Katihar district has been declared as the first community reserve area of the state.
- ⇒ The second zoo of the state will be started in the year 2021 at Raniganj Vrajvatika in Araria district.
- ⇒ Waterfall near Tutla Bhavani temple in Rohtas district, development of infrastructure facilities at Karkatgarh in Kaimur district as well as construction of nature safari in Rajgir.
- ⇒ The Bihar State Wetland Authority is being formed in the year 2020 under the Government of India's Wet Lands Rules-2017.
- ⇒ Budget - Rs 737.75 crore

Education Department:-

- ⇒ In order to encourage women to pursue higher education, monetary assistance has been increased from Rs.10,000 to Rs.25,000 to unmarried women, who have passed Intermediate and from Rs.25,000 to Rs.50,000 for those who have passed graduation.
- ⇒ The emphasis has also been on quality education in the National Education Policy 2020 and in Saat Nischay-2 for self-sufficient Bihar.
- ⇒ Necessary action will be taken to achieve 50% Gross Enrollment Ratio for higher education by the year **2035**.
- ⇒ The Government of India has starting the National Language Translation Mission in the budget of 2021-22. With this, everything related to governance and policy will be made available on the Internet in major languages of India.
- ⇒ Budget - Rs 38035.93 crore

Health Department:-

- ⇒ Rs 5540.07 crore has been approved for the plan to make Patna Medical College Hospital, a world class hospital in three phases.
- ⇒ Cancer Hospital – Muzaffarpur
- ⇒ Establishment of Bihar Universities of Health Sciences
- ⇒ Ayush Hospital - Patna City
- ⇒ Budget – 13264.87 crore

Rural Affairs Department:-

- ⇒ 9000 km road will be constructed in the year 2021-22.
- ⇒ Budget - Rs 9424.13 crore

Planning & Development Department:-

- ⇒ According to the data ranking of July-August 2020 under NITI Aayog's Aspirational District Program, Aurangabad district of Bihar stood third in the whole country.
- ⇒ Budget - Rs 2198.40 crore.

Energy Department:-

- ⇒ The Central Government has given a plan to construct a super grid of 765 kv and its transmission line at a cost of Rs 4,300 crore in Katihar district of Bihar. With this, 800 watts of electricity will also be supplied to Bangladesh.
- ⇒ For the first time in the country, the installation of smart meters with pre-paid system has been started in Bihar.
- ⇒ So far, a total of 1,06,773 smart pre-paid meters have been installed in the state.

Road Construction Department:-

- ⇒ Construction of two new bridges on the Ganges River in the year 2021.
- ⇒ Between Buxar to Ghazipur
- ⇒ Between Munger to Khagaria
- ⇒ Under the Jal-Jeevan-Hariyali campaign, a large-scale plantation is being done along the roads of the state in collaboration with the Department of Environment, Forest and Climate Change.
- ⇒ Budget – 5803.60 Crore

Building Construction Department:-

- (1) International Cricket Stadium-cum-Play Academy at Rajgir at a cost of Rs.633 crore.
- (2) Buddha Samyak Darshan Museum at Vaishali at a cost of Rs 301 crore.
- (3) A. P. J. Abdul Kalam Science City of Patna,
- (4) Planetarium in Darbhanga
- (5) Babu Tower in Patna
- (6) Forestry College in Munger
Budget - Rs 5321.41 crore
 - ⇒ Solar power project is to be set up at Kajra (Lakhisarai) and Pirpainti (Bhagalpur).
 - ⇒ Budget - 8560 crores

Department of Science and Technology:-

- ⇒ Construction of Regional Science Center at Gaya.
- ⇒ Construction of Planetarium-cum-Science Museum at Darbhanga with the objective of awakening interest in astronomical science.
- ⇒ Total budget - Rs 422.50 crore.

Tourism Department:-

- ⇒ The natural, mythological, cultural wealth of Bihar is not only multifaceted but also has a rich global heritage.
- ⇒ This year the number of domestic tourists in the state was 5511407 and the number of foreign tourists was 308067.
- ⇒ Budget - Rs 277.52 crore.

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