DATA REPORT

NATIONAL SECURITY INDEX

THE ECONOMICS SOCIETY

SHRI RAM COLLEGE OF COMMERCE

INDEX

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INTRODUCTION

An action committed or omitted, which constitutes an offense and is punishable by law, is a crime. Crime is a highly complex phenomenon that changes across cultures and across time. Several types of crime exist such as crimes against persons, crimes against property, organized crime, occupational crimes, and political crimes. **Crime, while condemned, has an undeniable presence in society**.

In a recent report by the World of Statistics, **India ranked 77th on the World's Most Criminal Countries list**. Article 21 of the Indian Constitution provides for the Right to Life and the Right to Personal Liberty as fundamental rights.

Crime hampers the socio-economic and political development of society. It lowers the quality of living and increases the cost of living in communities. Crime against individuals, institutions, and communities disrupts order and social norms. The concern with crime is well justified given its pernicious effects on economic activity.

The causes of crime lie in social processes and structures. However, **correlations can be made about the interplay of social, economic, demographic, local, and institutional factors**. For this study, we have analyzed the socio-economic, criminal, and infrastructural factors affecting the propensity of crime committed state-wise. A thorough trend analysis has been conducted to arrive at a crime rate index and ranking for Indian states.

METHODOLOGY

The following strategy was used to arrive at the final index -:

1) Various indicators were identified that impacted the security of a particular region. **These indicators were then segregated into factors (Economic, Social, Infrastructure, and Criminality) based on their nature**.

2) Now to ensure that the raw data collected from various sources is free from any bias, **normalisation was done on the data set using the unitary method**.

3) To bridge the gaps between the datasets of 2001, 2011 and 2021, the forecasting technique was followed in MS Excel, which **bridged the gap with a confidence interval of 95%.**

3) This raw data was then used to construct indexes of each particular indicator, ranking each state based on the nature of the Indicators. To construct these small indexes, **Principal Component Analysis or PCA approach was followed**.

4) Upon the usage of PCA, **varimax rotation** was followed to ensure the reliability of the data.

5) These small indexes were then combined to arrive at a single **National Security Index using PCA analysis**. PCA analysis was done to ensure that in the final index, all the indicators have an equal role or value to play.

PARAMETERS

Social Indicators

Criminal behaviour is a social phenomenon that is affected by several societal factors. For the purpose of our research, we have chosen the following four social indicators to analyze the demographic composition of states and correlate them with criminal tendencies:

1. **Literacy Rate**
2. **Sex Ratio**
3. **Population Density**
4. **Birth Rate**

The following assumptions have been made:

The **literacy rate** is an important variable that may help in determining the crime rate of a state. It is assumed that more the literacy rate of a state, the less the crime would be. As the literacy rate of the state increases, awareness rises and there are fewer unemployed people therefore they will not opt for illegal ways to get money.

There have been previous studies on **uneven sex ratio** and rising violence. Murder rates in India are often correlated with the gender ratio. One plausible explanation is that low female-male ratios and high murder rates are joint symptoms of a patriarchal environment. This study also suggests that gender relations, in general, have a crucial bearing on criminal violence.

The **population density and birth rate** have also been considered. The assumption is that there exists a positive relation between these indicators and crime, ie, as the population increases, crime also increases.

Economic Indicators

According to economic theory, crime decreases as economic growth and opportunity improve. That's because the incentive to engage in illegal activity decreases as legal avenues of earning income become more fruitful. Therefore with the rise in the economic welfare of communities, the crime rate decreases.

For this study, we have chosen the following parameters:

1. **Unemployment rate**
2. **Population living below the poverty line**
3. **Per capita net state domestic product.**

Unemployment

It is one of the leading causes of indulging in criminal behaviour. Lack of a steady source of income leads to a positive correlation between unemployment and crime rate.

Population below Poverty Line

The percentage of the state's population living below the poverty line (as per Tendulkar estimates) was also considered.

Net State Domestic Product

The per capita net state domestic product of the state denotes the cost of living which directly impacts the incentive to commit crime.

Infrastructure Indicators

As per our research, it is noticed that the modernisation of the police workforce along with large-scale recruitments and training, an improvement in infrastructure and efficient coordination have led to the continuous improvement in the law and order situation and have strengthened the sense of security among all the sections of the society.

For this purpose, four parameters have been taken under this indicator namely **population per police station, police personnel per lakh people, police stations per sq km, and transport facility.**

Poor infrastructure can create an environment that is conducive to criminal activities.

Population per police station reveals the number of people that comes under its jurisdiction whereas the police personnel per lakh people indicates the number of police workforce available per population. This is necessary to check whether the police infrastructure is well equipped to cater to the needs of the population across various states considering the fact that India's ratio of police to population is very low.

Police stations per sq km reveal the level of accessibility in a given area and ensure better coverage of law enforcement services.

Police transport facilities refer to the vehicles and types of equipment that police officers use for transportation to respond to emergencies, patrol areas and transport individuals in custody. Having a sufficient number of these facilities is important for ensuring the safety of both the police officers and the public.

Criminality Indicators

Criminality indicators provide insights into the prevalence of criminal activity within a particular jurisdiction or population. These indicators are often used by **law enforcement and criminal justice professionals** to determine the different types of crimes committed or track the trends in crimes over the years.

In our research, a high crime index with respect to criminality indicators using PCA is considered to have high crimes committed in that state/UT and vice versa.

STATISTICAL TESTS

In order to ensure that our findings are statistically correct and relevant, we performed the following test

Normalization of data

Data normalization is a technique used in data mining to transform the values of a data set into a common scale. This is because many machine learning algorithms are sensitive to the scale of the input features and can produce better results when the data is normalized.

There are various techniques for normalizing the data but max-min normalization is being used in this index.

Min-Max normalization is one of the most common ways to normalize the data. For every feature, the minimum value gets transformed to zero and the maximum value gets transformed to 1 and every other value gets transformed into a decimal between zero and one.

For Example
If the minimum value of the feature is 20 and the maximum value is 40, then the value 30 would be transformed to about 0.5 since it is halfway between 20 and 40.

$$\frac{\text{MAX VALUE - VALUE}}{\text{MAX VALUE - MIN VALUE}} = \frac{40 - 30}{40 - 20} = \frac{10}{20} = 0.5$$

It guarantees all the features will have the exact same scale but does not handle outliers well.

Principal Component Analysis (PCA)

PCA is a statistical method that analyzes large datasets containing a high number of dimensions/features per observation, increasing the interpretability of data while preserving the maximum amount of information, and enabling the visualization of multidimensional data.

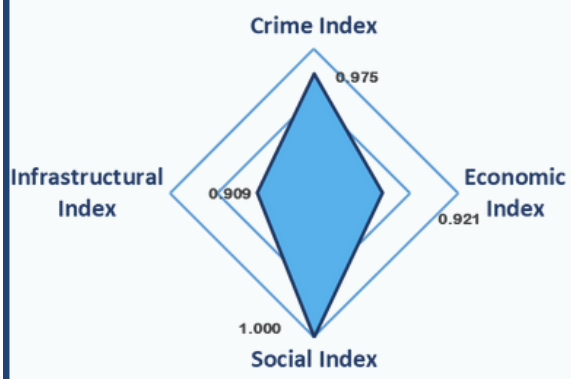
This is accomplished by linearly transforming the data into a new coordinate system where (most of) the variation in the data can be described with fewer dimensions than the initial data. Many studies use the first two principal components in order to plot the data in two dimensions and to visually identify **clusters of closely related data points.**

STATE PROFILES

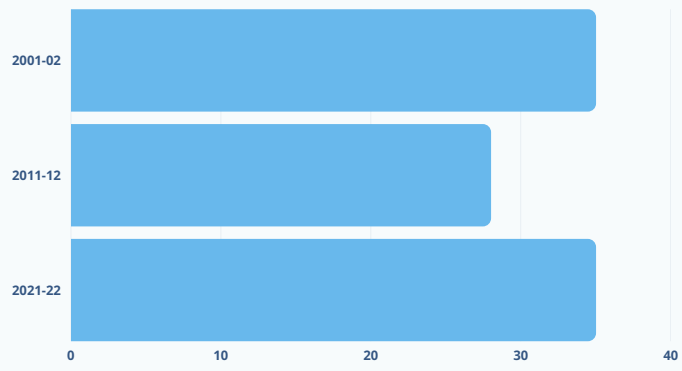
GOA

State Rank : 1 Index Score : 1.000

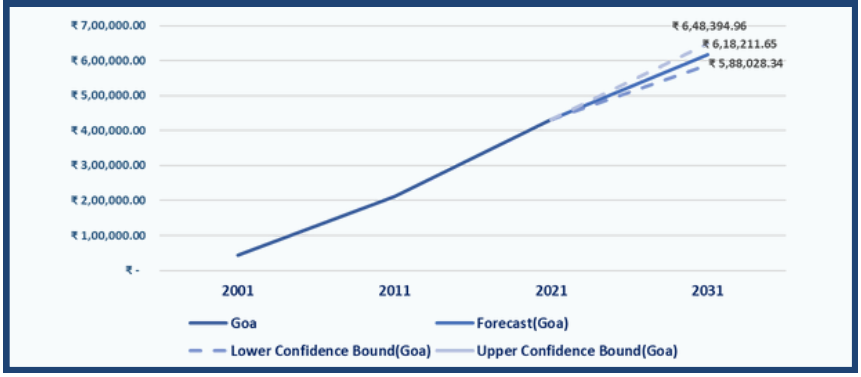
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

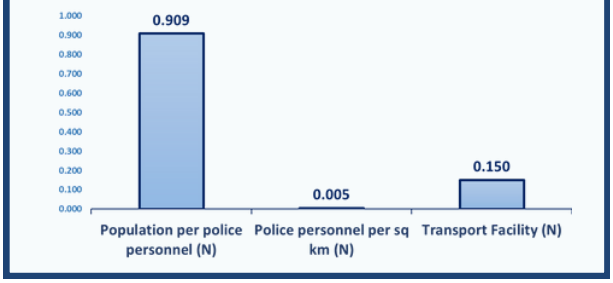


ECONOMIC INDICATORS (PER CAPITA INCOME)

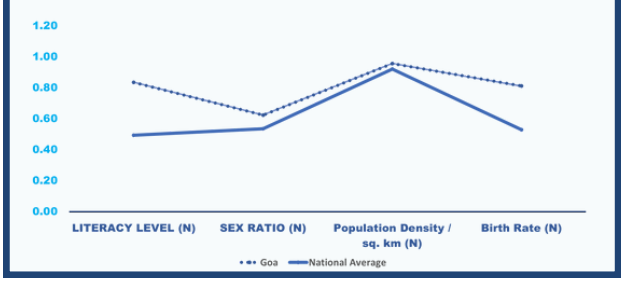


Indicator	Ranking
Social	1/36
Economic	4/36
Criminality	16/36
Infrastructure	11/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

Goa's performance has dropped significantly and then improved slightly over the three decades studied here. However, it is still performing better than the national average in all the indicators, especially the social and infrastructural indicators.

Despite high number of police personnel dispatched per sq km., crime remains a problem in the state.

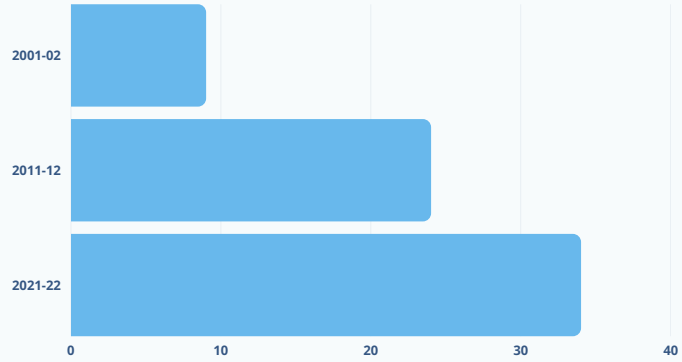
SIKKIM

State Rank : 2

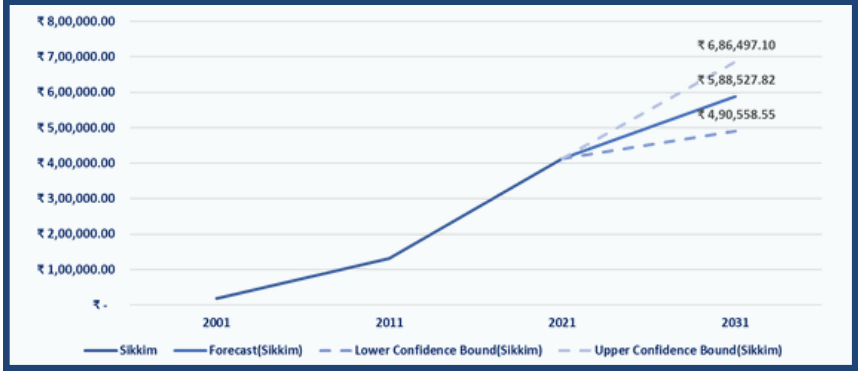
Index Score : 0.953

INDICATORS-WISE PERFORMANCE

RANKS OVER THE YEARS

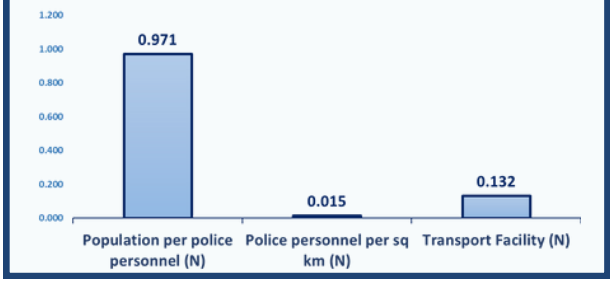


ECONOMIC INDICATORS (PER CAPITA INCOME)

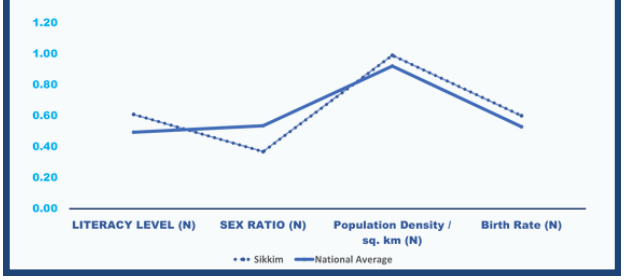


Indicator	Ranking
Social	18/36
Economic	5/36
Criminality	1/36
Infrastructure	5/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

Sikkim has been working constantly to improve all aspects over the years, making it the safest state in the country.

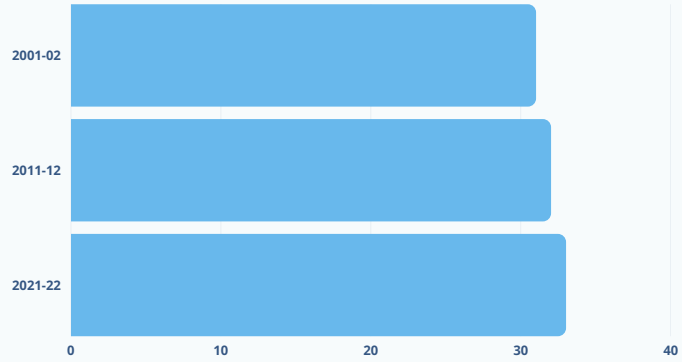
Improved socio-economic factors. tightening police infrastructure and the lowest crime rate in the country have all contributed to Sikkim's improved performance over the years.

LAKSHADWEEP

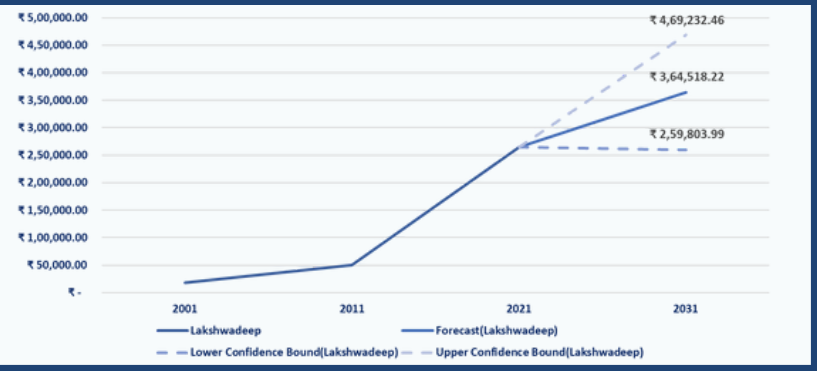
State Rank : 3 Index Score : 0.941

INDICATORS-WISE PERFORMANCE

RANKS OVER THE YEARS

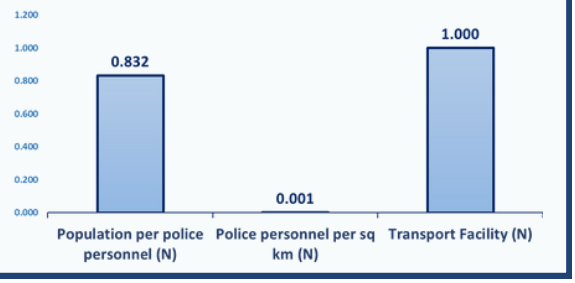


ECONOMIC INDICATORS (PER CAPITA INCOME)

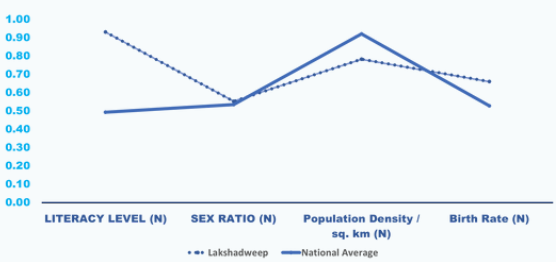


Indicator	Ranking
Social	13/36
Economic	3/36
Criminality	2/36
Infrastructure	13/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

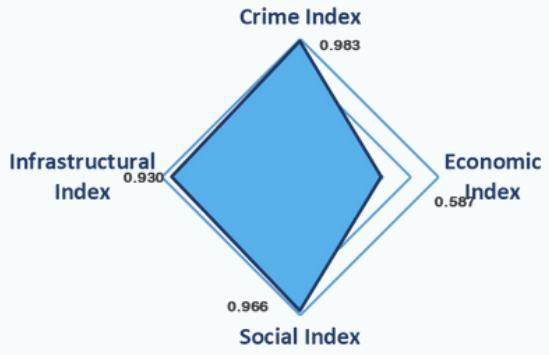
From the graphs, we can infer that Lakshadweep has had a fluctuating performance over the years. However, it has performed excellently in security and economic indicators.

Over the years, it has improved its infrastructure as well. The social indicators also remain somewhat above the national average. It still needs improvement on the infrastructure end.

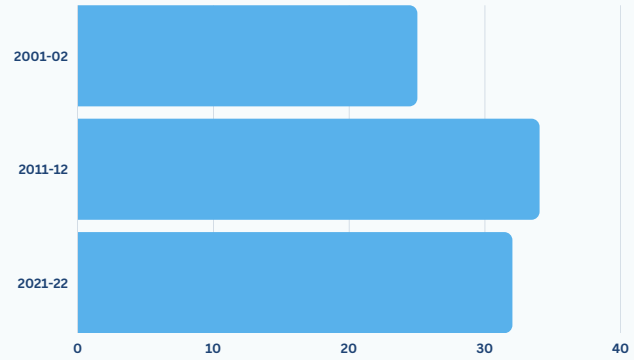
TRIPURA

State Rank : 4 Index Score : 0.902

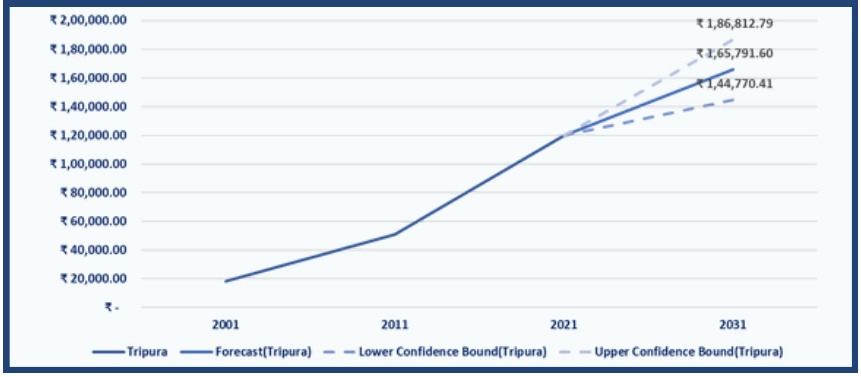
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

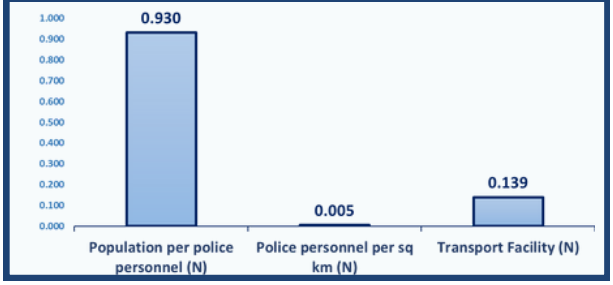


ECONOMIC INDICATORS (PER CAPITA INCOME)

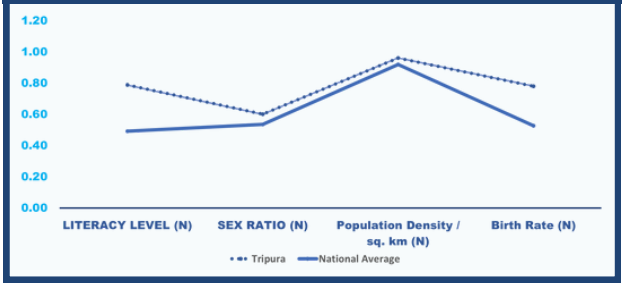


Indicator	Ranking
Social	3/36
Economic	21/36
Criminality	12/36
Infrastructure	9/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

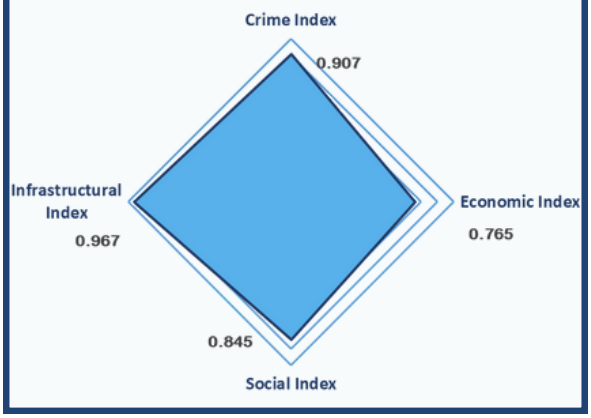
From the infrastructure indicator, though the number of police per sq km is less it has done well in maintaining law and order(Ranked 12th)

From the spider web, it has fared well in all the indicators except the economic indicator which has to be looked upon

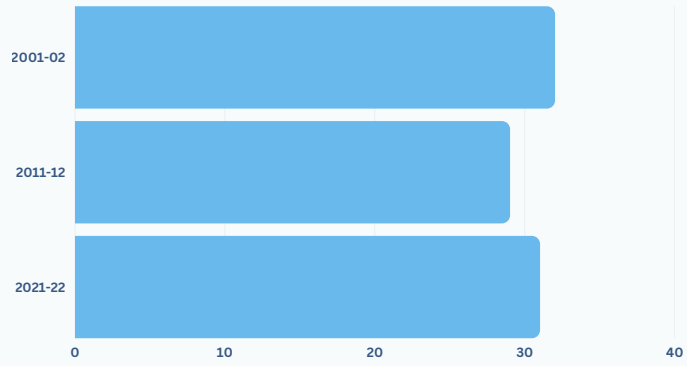
MIZORAM

State Rank : 5 Index Score : 0.895

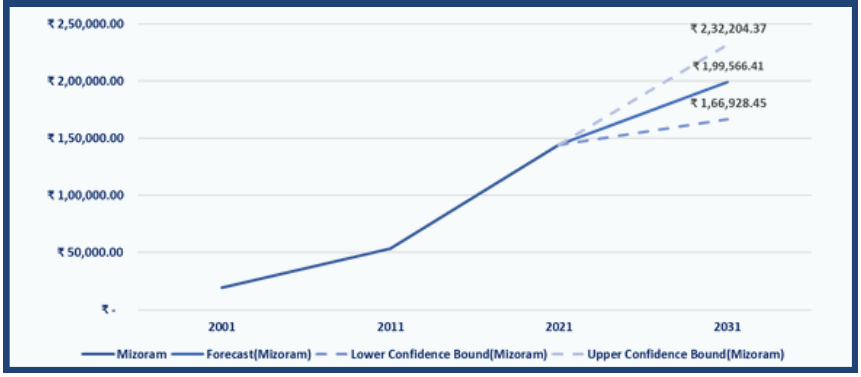
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

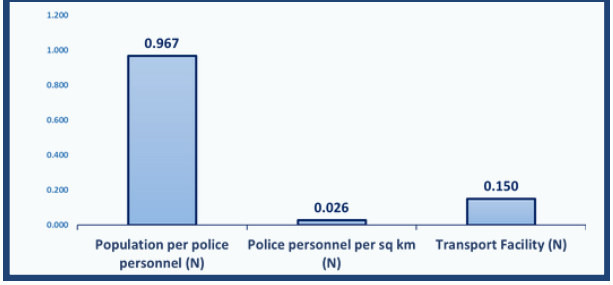


ECONOMIC INDICATORS (PER CAPITA INCOME)

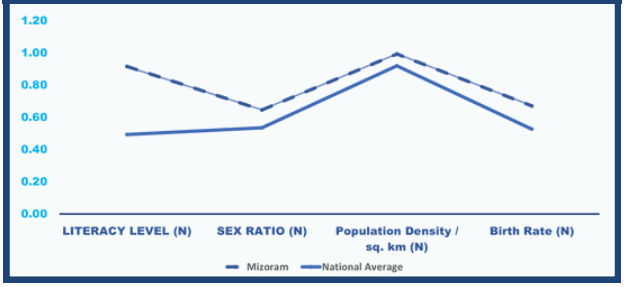


Indicator	Ranking
Social	24/36
Economic	11/36
Criminality	24/36
Infrastructure	6/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

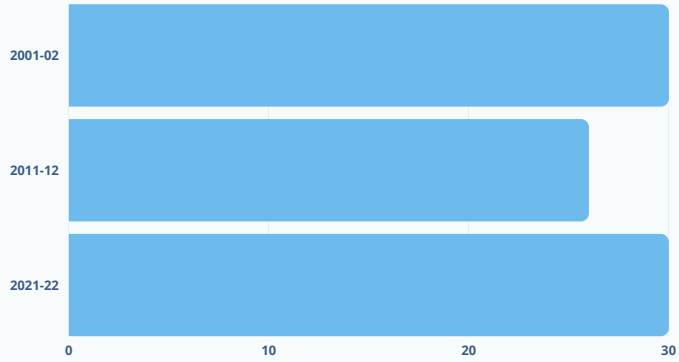
Mizoram has experienced mixed results across various indicators over the years. While its social development is yet to show room for improvement, the state has demonstrated positive strides in terms of economic growth. In terms of infrastructure, Mizoram has maintained an excellent level of development. Furthermore, the state has achieved a relatively worse position in terms of criminality indicators.

ANDAMAN AND NICOBAR ISLANDS

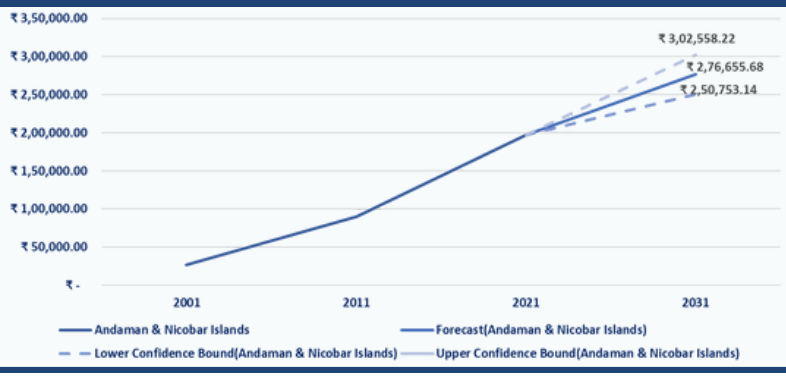
State Rank : 6 Index Score : 0.876

INDICATORS-WISE PERFORMANCE

RANKS OVER THE YEARS

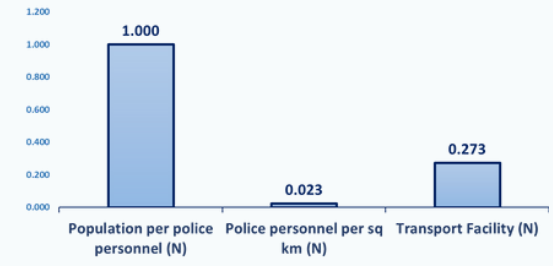


ECONOMIC INDICATORS (PER CAPITA INCOME)

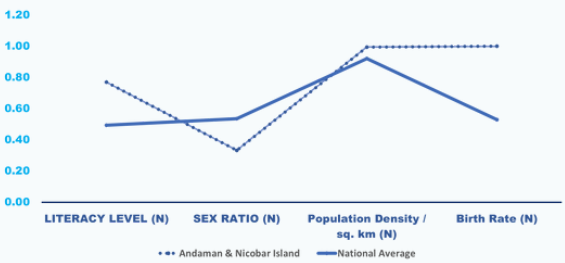


Indicator	Ranking
Social	27 / 36
Economic	2/36
Criminality	5 / 36
Infrastructure	1 / 36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

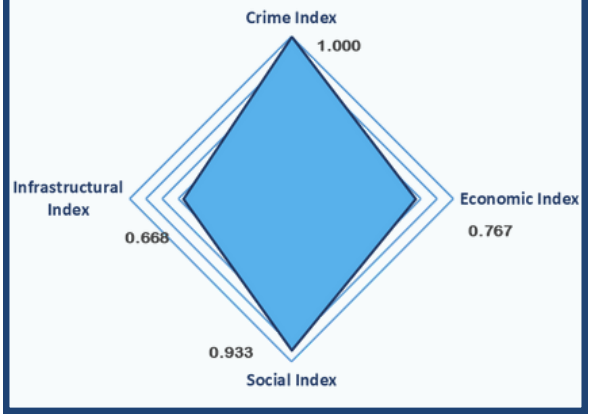
From the graphs, we can infer that Andaman and Nicobar have constantly improved their social and security levels to achieve Rank 6 for the year in review.

From the spider chart, we can see that it has performed exceptionally in all indicators except the social indicators. However, when considering social scores, we can see it consistently lies above the national average except for the sex ratio.

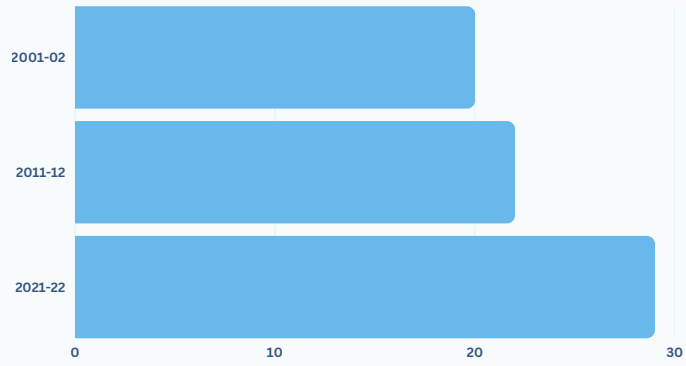
PUDUCHERRY

State Rank : 7 Index Score : 0.872

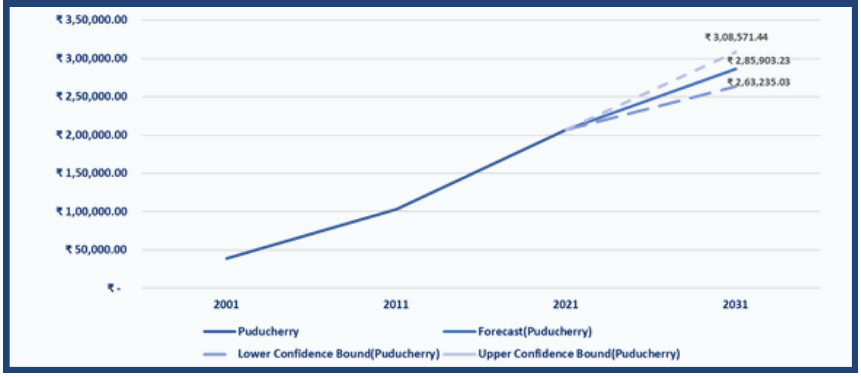
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

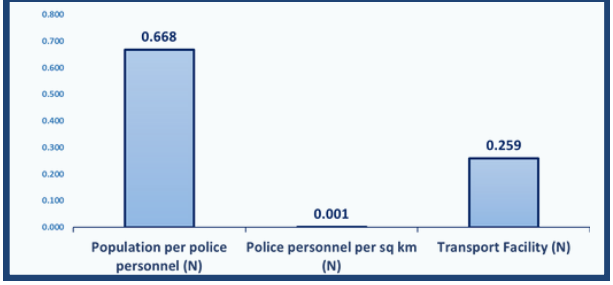


ECONOMIC INDICATORS (PER CAPITA INCOME)

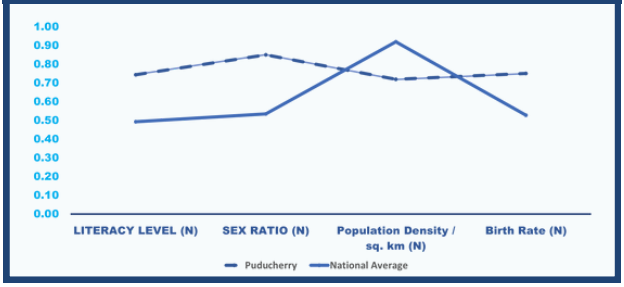


Indicator	Ranking
Social	5/36
Economic	10/36
Criminality	4/36
Infrastructure	16/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

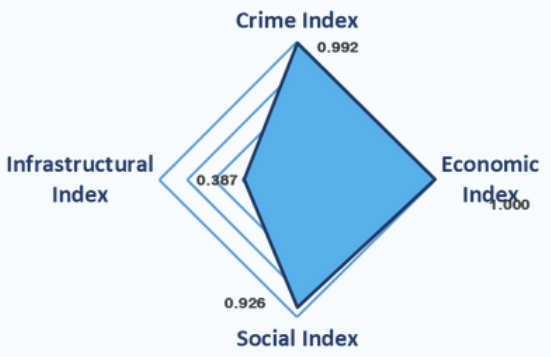
Puducherry's performance across different indicators falls within a moderate range compared to other states. While its social development and criminality indicators show promise, the state's economic performance lags behind. Puducherry also demonstrates a relatively better position in terms of criminality indicators, indicating a relatively lower crime rate.

KERELA

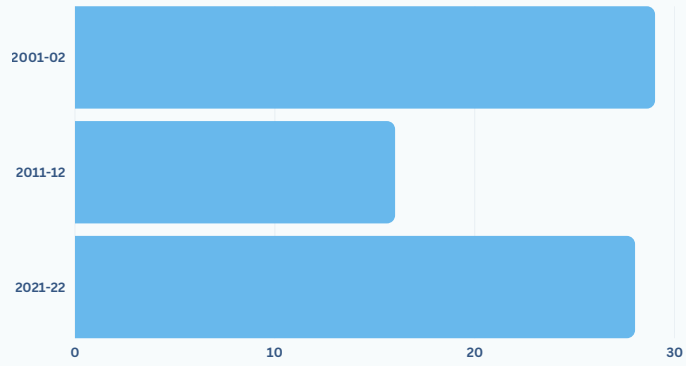
State Rank : 8

Index Score : 0.849

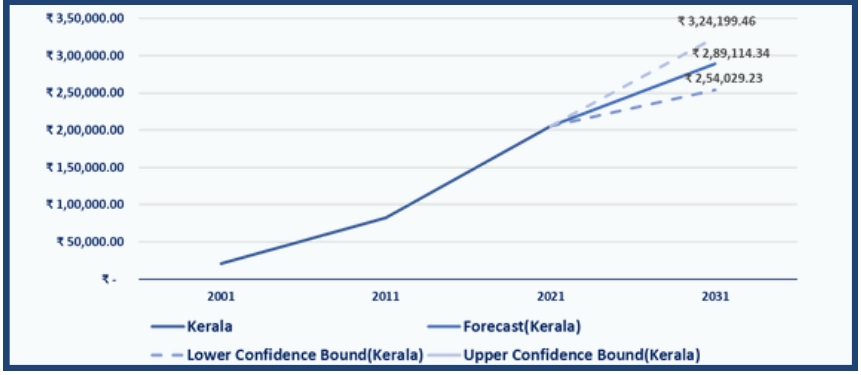
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

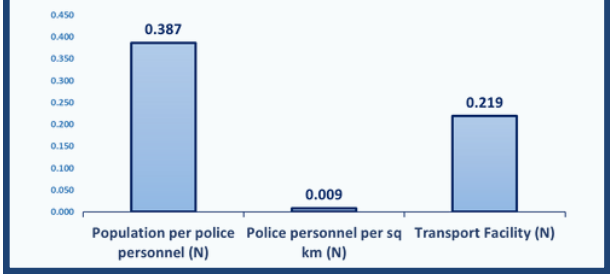


ECONOMIC INDICATORS (PER CAPITA INCOME)

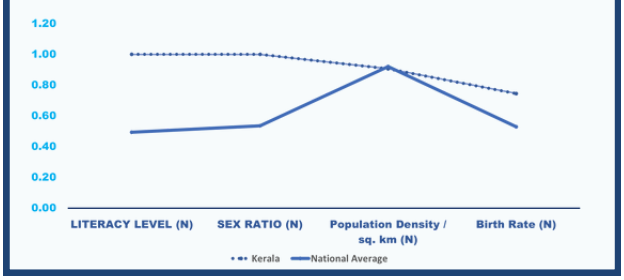


Indicator	Ranking
Social	6/36
Economic	1/36
Criminality	10/36
Infrastructure	26/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

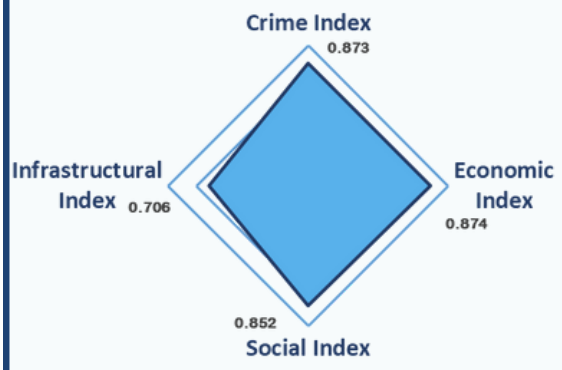
From the graphs, we can infer that Kerala has constantly improved its safety and security levels to achieve Rank 8 for the year in review.

From the spider chart, we can see that it has performed exceptionally in all indicators except the infrastructure indicators. It has also good social infrastructure scores with it being above the national average graph in all the four indicators.

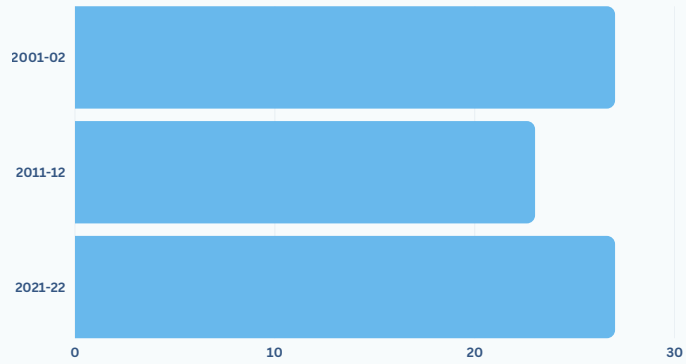
PUNJAB

State Rank : 9 Index Score : 0.839

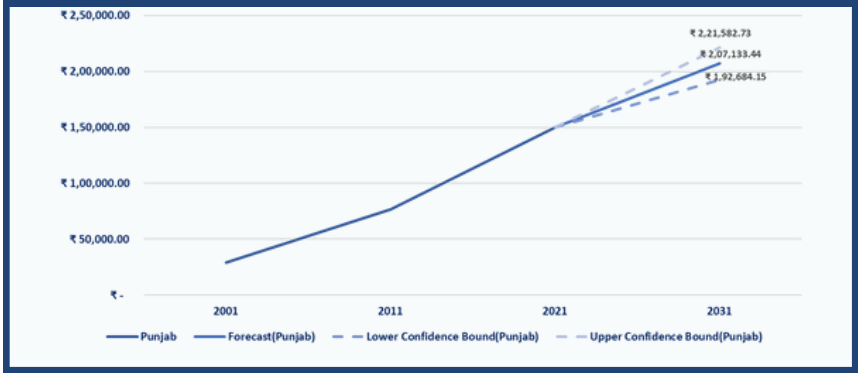
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

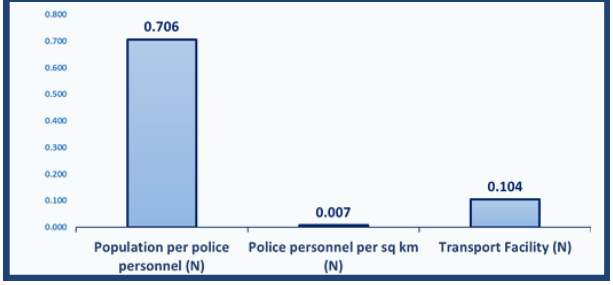


ECONOMIC INDICATORS (PER CAPITA INCOME)

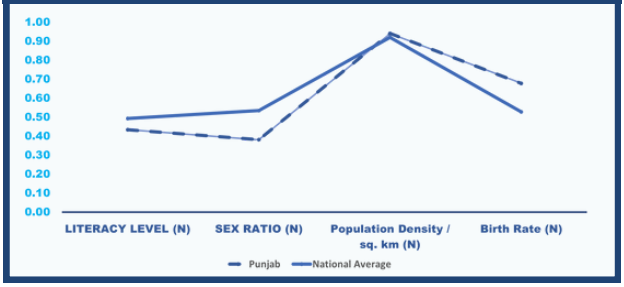


Indicator	Ranking
Social	11/36
Economic	8/36
Criminality	26/36
Infrastructure	15/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

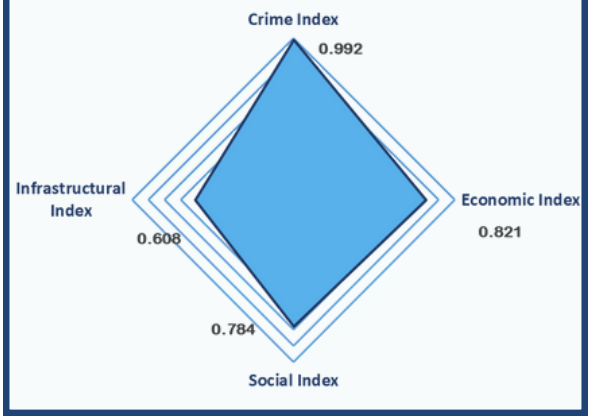
Punjab has shown mixed performance across social, economic, infrastructure, and criminality indicators compared to other states. Its social development has remained strong, while its economic progress has improved over the years. The state's infrastructure development is moderate, with room for improvement.

However, Punjab faces challenges in maintaining law and order, as indicated by its criminality rank.

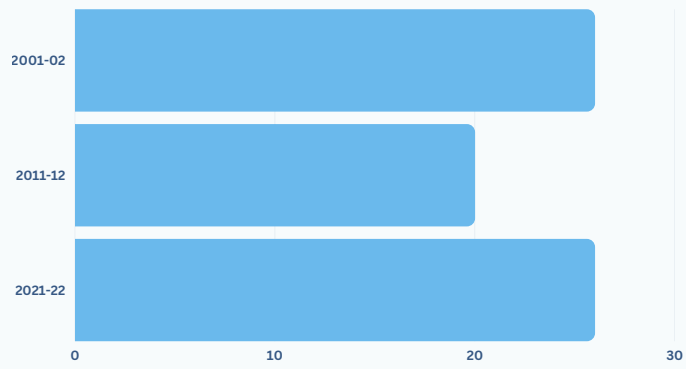
HIMACHAL PRADESH

State Rank : 10 Index Score : 0.819

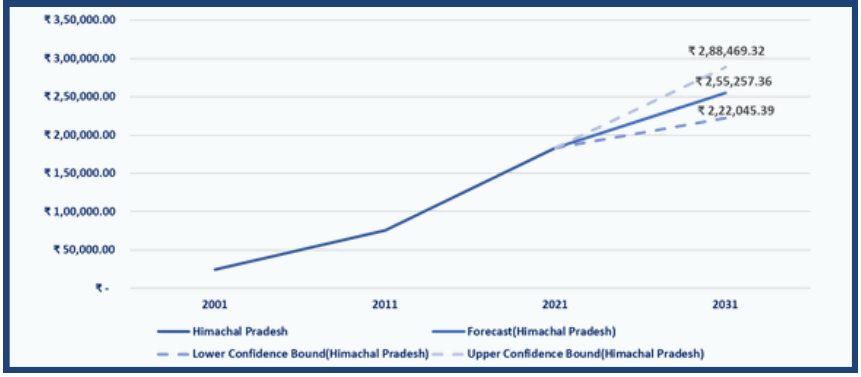
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

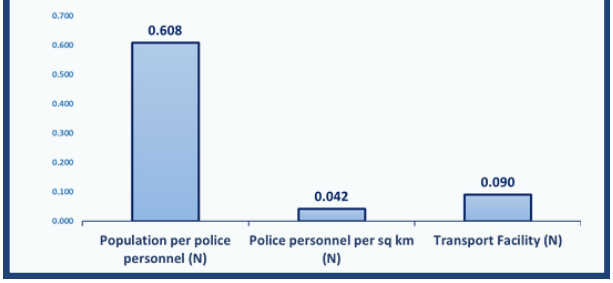


ECONOMIC INDICATORS (PER CAPITA INCOME)

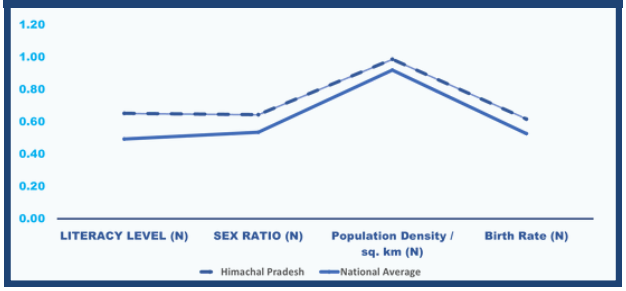


Indicator	Ranking
Social	16/36
Economic	9/36
Criminality	7/36
Infrastructure	18/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



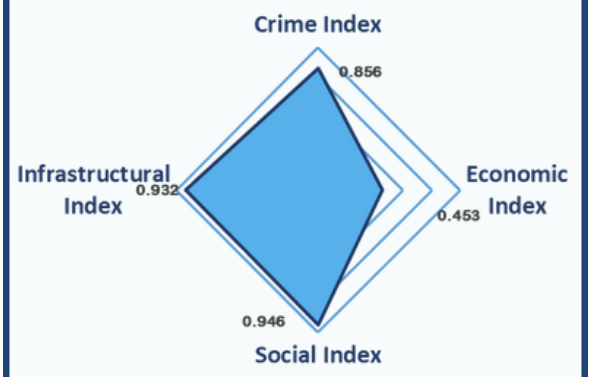
OBSERVATIONS

Himachal Pradesh holds a commendable economic rank of 9, indicating high economic development. However, the state faces challenges in terms of infrastructure, with a rank of 18. Even though it secures a social rank of 16, it has been consistenly above the national average scores of many social indicators. It holds a good criminal rank showing less occurence of crimes in the state.

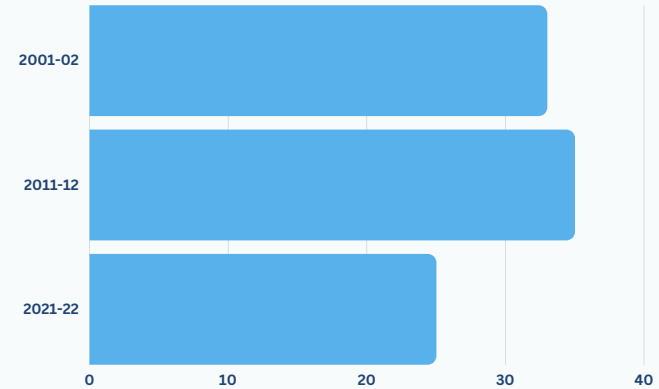
CHANDIGARH

State Rank : 11 Index Score : 0.809

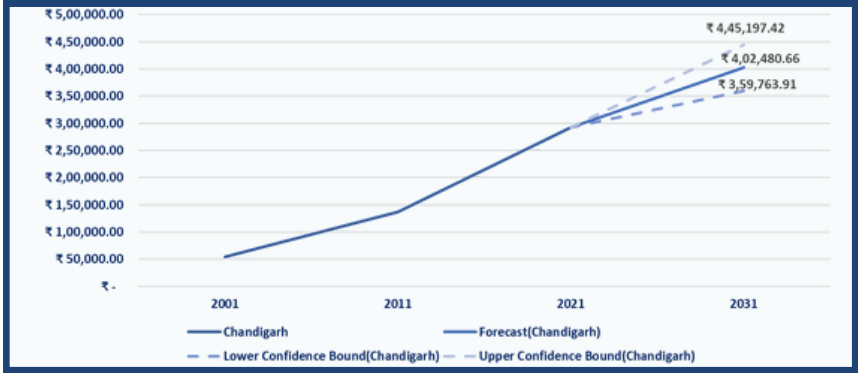
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

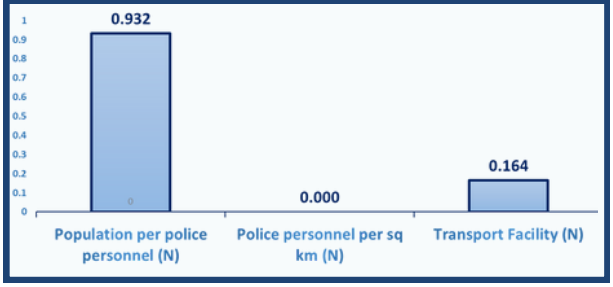


ECONOMIC INDICATORS (PER CAPITA INCOME)

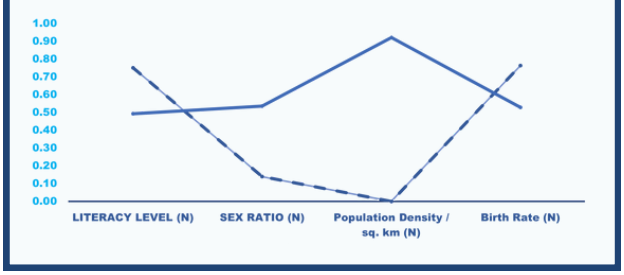


Indicator	Ranking
Social	4/36
Economic	24/36
Criminality	27/36
Infrastructure	8/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

Chandigarh has really done well in infrastructure and social indicators as can be noticed from the spider web and rankings

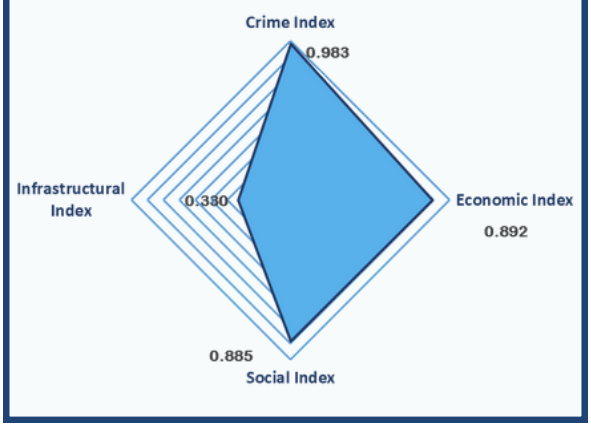
Police personnel per sq km is negligible that is zero

From the social indicators, the sex ratio and population density are meagre which is very concerning for its social status.

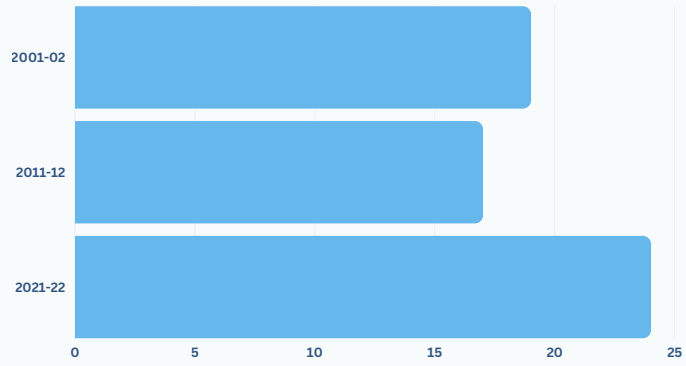
TAMIL NADU

State Rank : 12 Index Score : 0.784

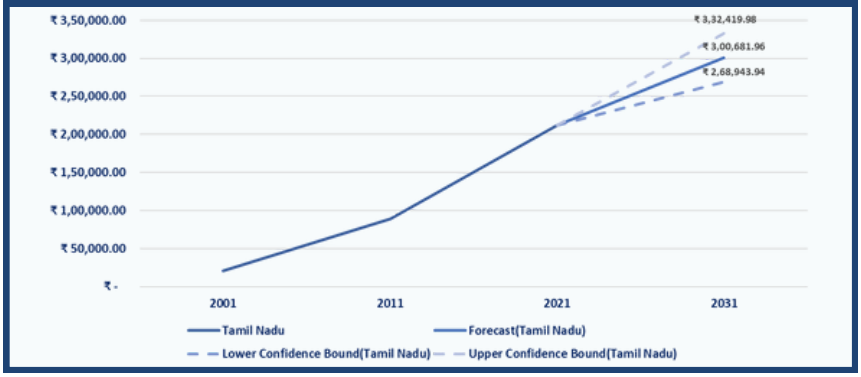
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

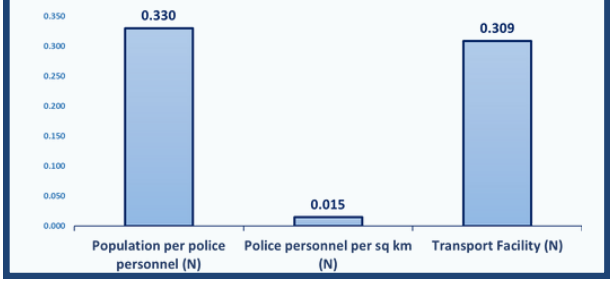


ECONOMIC INDICATORS (PER CAPITA INCOME)

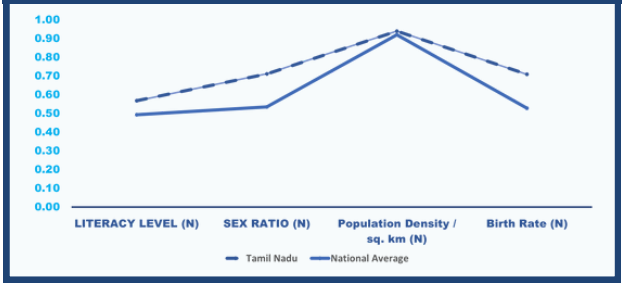


Indicator	Ranking
Social	8/36
Economic	7/36
Criminality	13/36
Infrastructure	27/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

From the graphs, we can infer that Tamil Nadu has improved its levels gradually to achieve Rank 12 for the year in review.

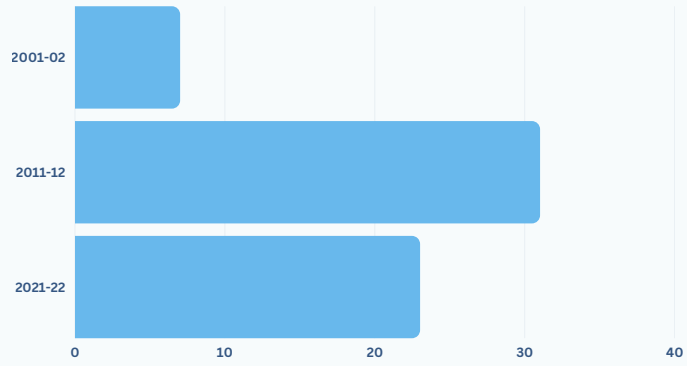
From the ranks we can infer that Tamil Nadu has performed exceptionally well in social and economic aspects with their ongoing schemes and policies. However, they still need to work on the infrastructure aspect for moving up in the ranks.

JAMMU & KASHMIR

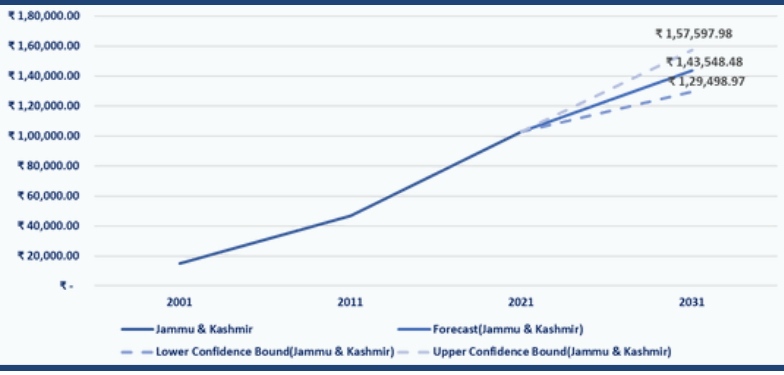
State Rank : 13 Index Score : 0.761

INDICATORS-WISE PERFORMANCE

RANKS OVER THE YEARS

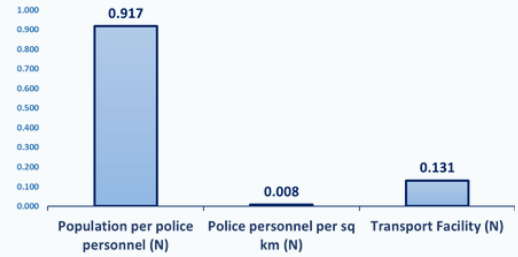


ECONOMIC INDICATORS (PER CAPITA INCOME)

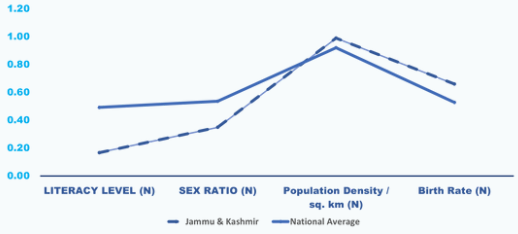


Indicator	Ranking
Social	07/36
Economic	22/36
Criminality	21/36
Infrastructure	17/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

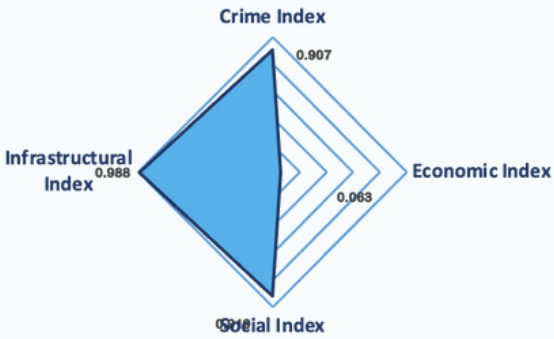
Jammu and Kashmir has seen a drastic drop in the rank over the years, with the highest being in 2011-12.

Its criminality index score is very low , on the other hand, social indicator is depicting very good results. Against high population density, literacy level is very less.
Infrastructure and economic indicators are fairly managed.

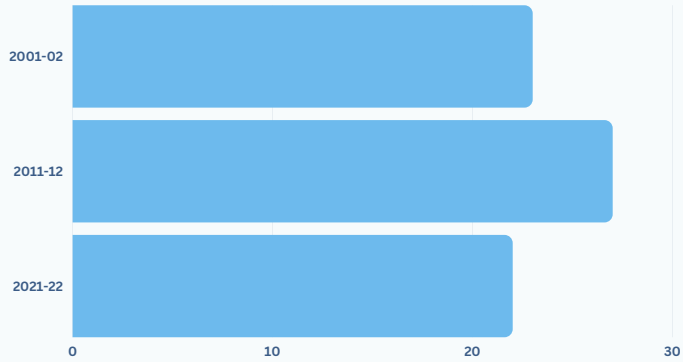
MANIPUR

State Rank : 14 Index Score : 0.724

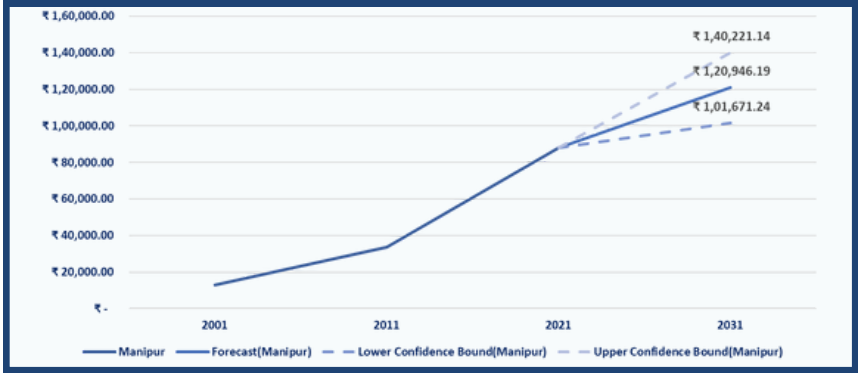
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

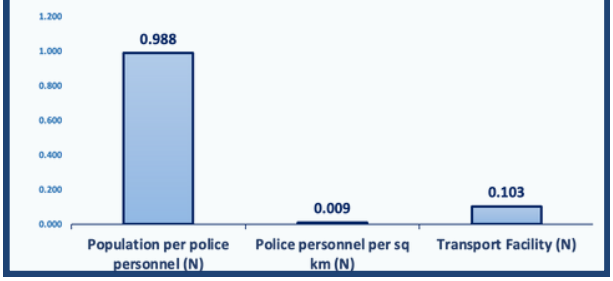


ECONOMIC INDICATORS (PER CAPITA INCOME)

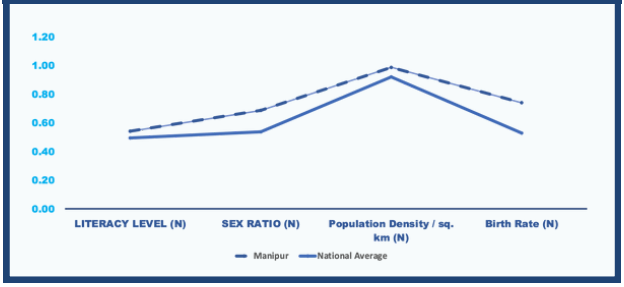


Indicator	Ranking
Social	2/36
Economic	25/36
Criminality	23/36
Infrastructure	35/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

From the graphs, we can infer that the overall rankings of Manipur have fallen and stands at 14 for 2020-21.

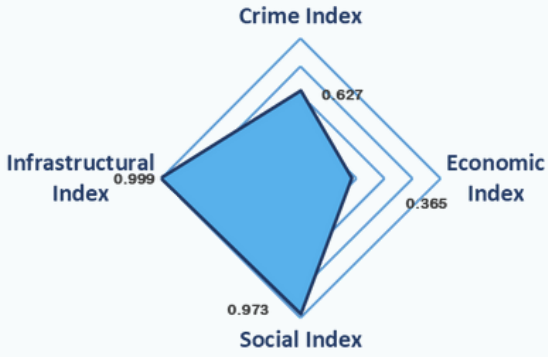
From the spider chart, we can see that it has performed exceptionally in the area of infrastructure. However, its performance in economic, criminal and social indicators remains low. Thus, there is a lack of overall development.

It has very low number of police personnel per sq km and low transportation facilities.

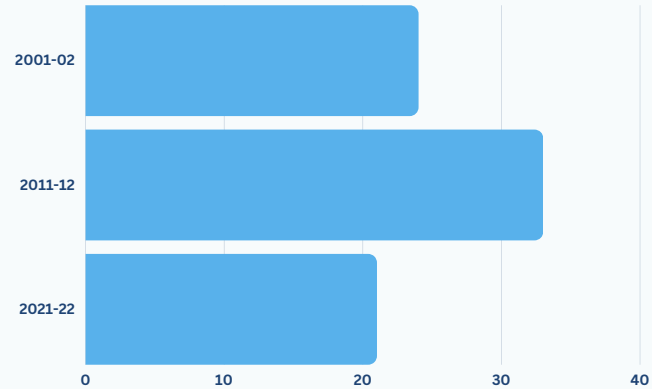
NAGALAND

State Rank : 15 Index Score : 0.723

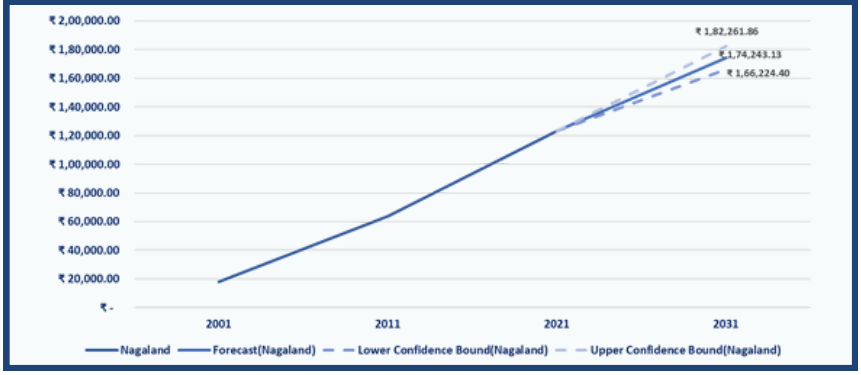
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

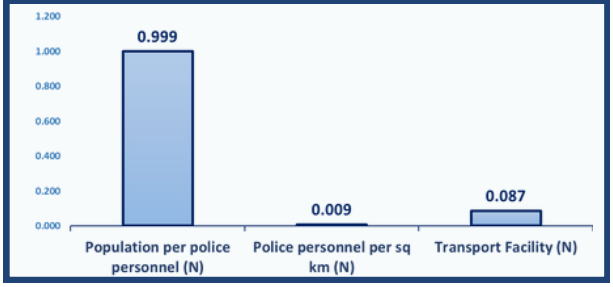


ECONOMIC INDICATORS (PER CAPITA INCOME)

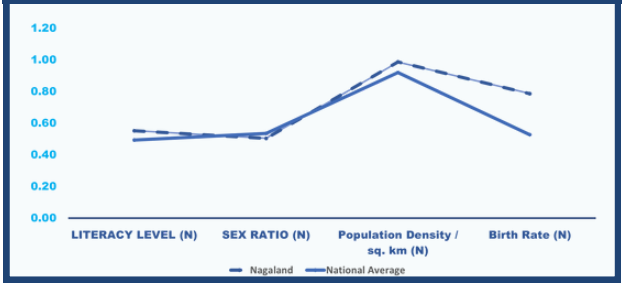


Indicator	Ranking
Social	2/36
Economic	26/36
Criminality	32/36
Infrastructure	2/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

From the above graphs, we can see that Nagaland has shown a very fluctuating performance over the years with its highest rank being in the year 2011-12 and then showing a major dip for the year in review.

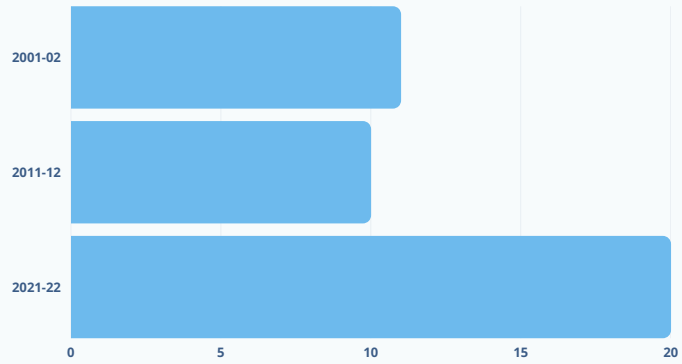
It has shown a very irregular performance in terms of overall index scores with the lowest being in economics and the highest being in the infrastructural sector.

CHHATTISGARH

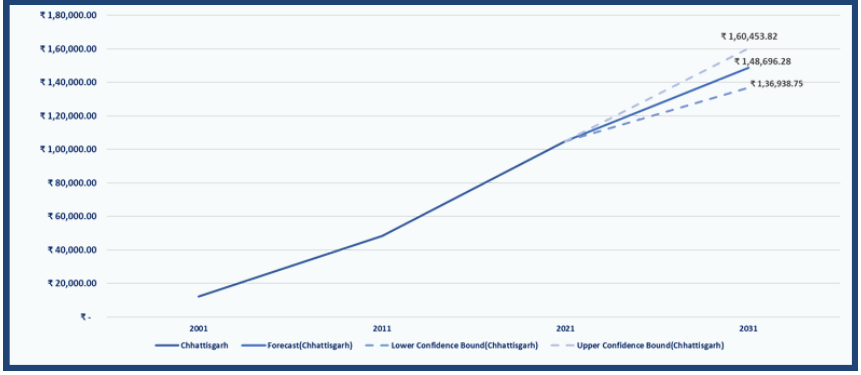
State Rank : 16 Index Score : 0.695

INDICATORS-WISE PERFORMANCE

RANKS OVER THE YEARS

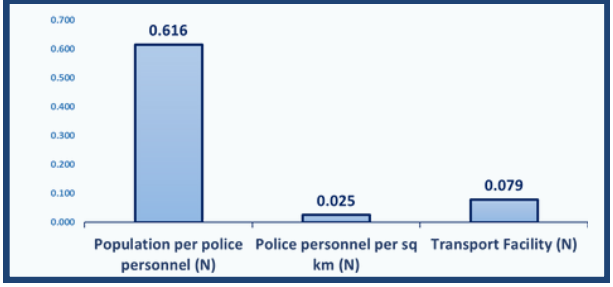


ECONOMIC INDICATORS (PER CAPITA INCOME)

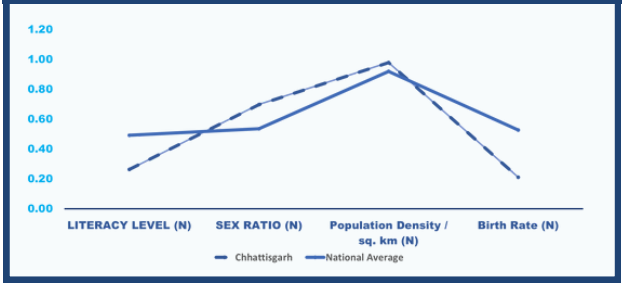


Indicator	Ranking
Social	30/36
Economic	6/36
Criminality	17/36
Infrastructure	17/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

Chattisgarh's performance has been continuously improving each year. This year it secured rank 16 which is not that good but still a major improvement over its past records.

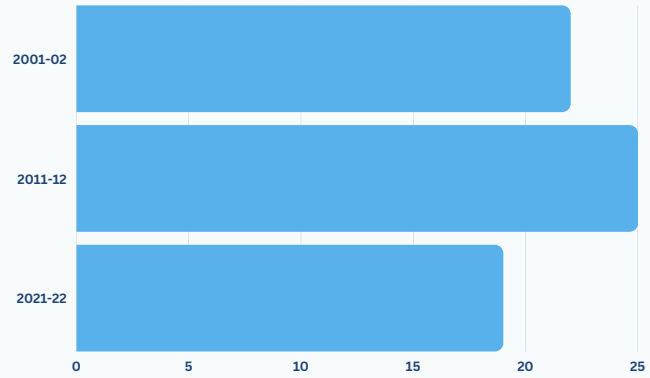
From the spider chart we can infer that Chattisgarh has been doing well incase of Criminal and Economic Indicators but it still has make major impovements to achieve a holistic performance.

MAHARASHTRA

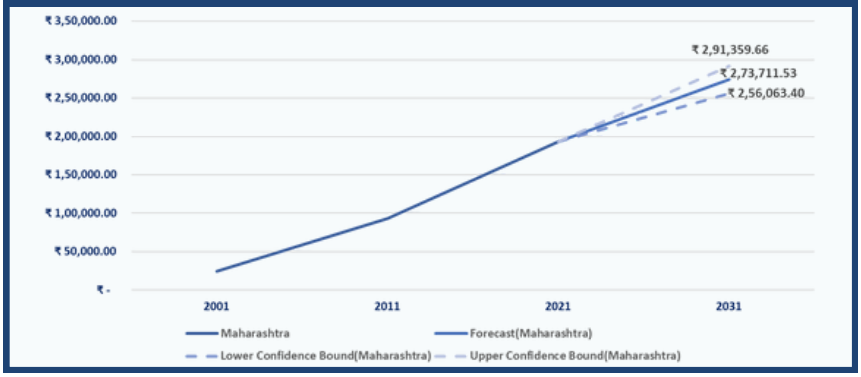
State Rank : 17 Index Score : 0.691

INDICATORS-WISE PERFORMANCE

RANKS OVER THE YEARS

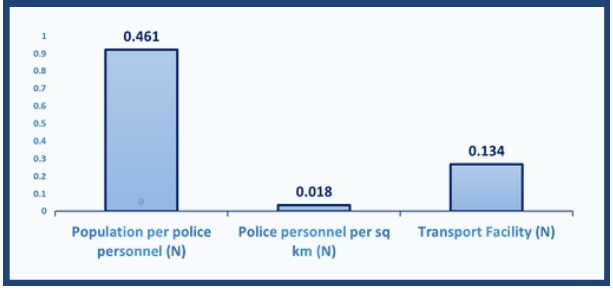


ECONOMIC INDICATORS (PER CAPITA INCOME)

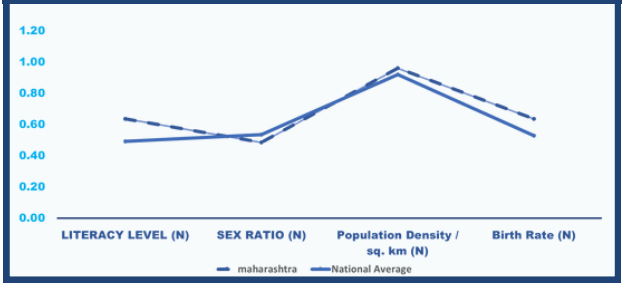


Indicator	Ranking
Social	15/36
Economic	22/36
Criminality	20/36
Infrastructure	23/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

The scores in social infrastructure indices are almost the same or more than the national average

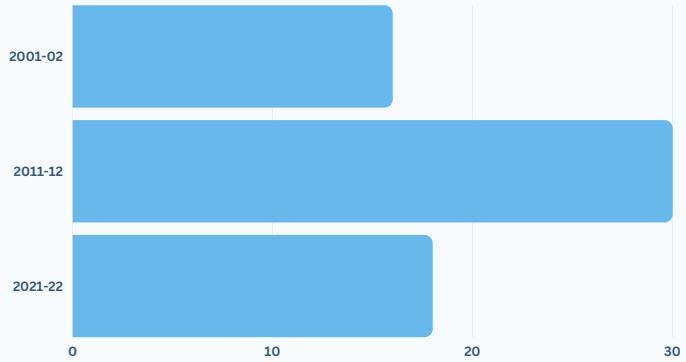
From the infrastructure indicators, the transport facility is meager especially in a highly populated state which has to be taken care of to maintain order in the state

ARUNACHAL PRADESH

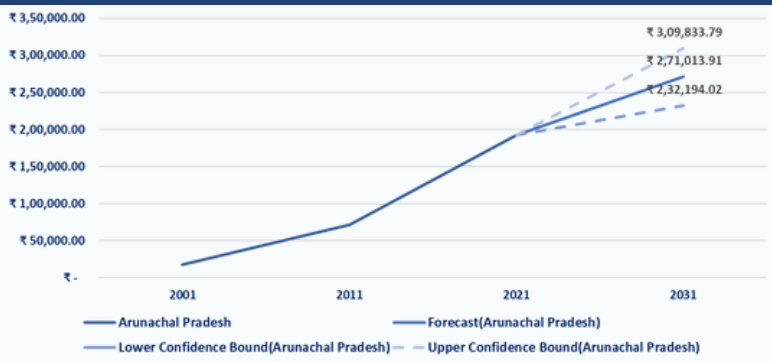
State Rank : 18 Index Score : 0.684

INDICATORS-WISE PERFORMANCE

RANKS OVER THE YEARS

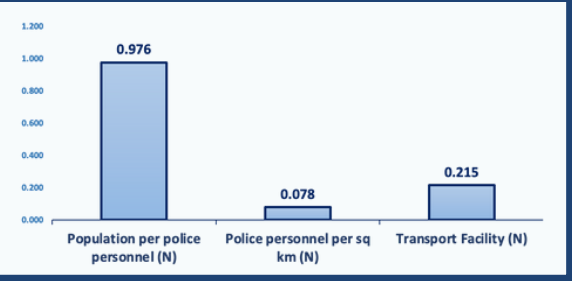


ECONOMIC INDICATORS (PER CAPITA INCOME)

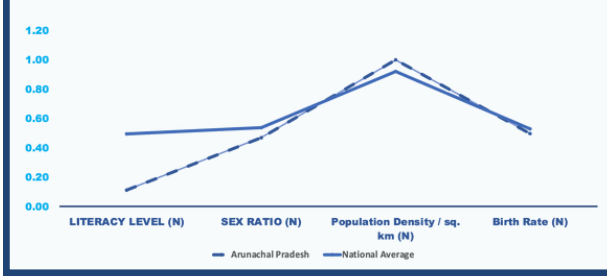


Indicator	Ranking
Social	14/36
Economic	36/36
Criminality	28/36
Infrastructure	10/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

From the graphs, we can infer that the overall rankings of Arunachal Pradesh have fallen from 2011-12.

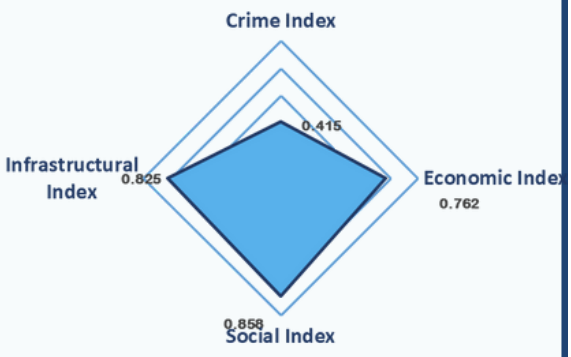
From the spider chart, we can see that it has performed exceptionally in the area of infrastructure. However, its performance in economic, criminal and social indicators remains low.

It has very low number of police personnel per sq km and low transportation facilities.

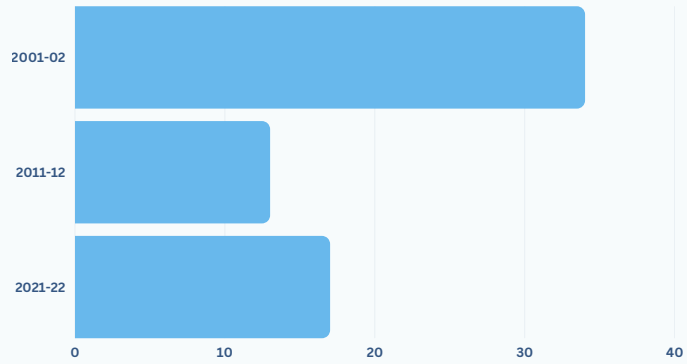
DELHI

State Rank : 19 Index Score : 0.666

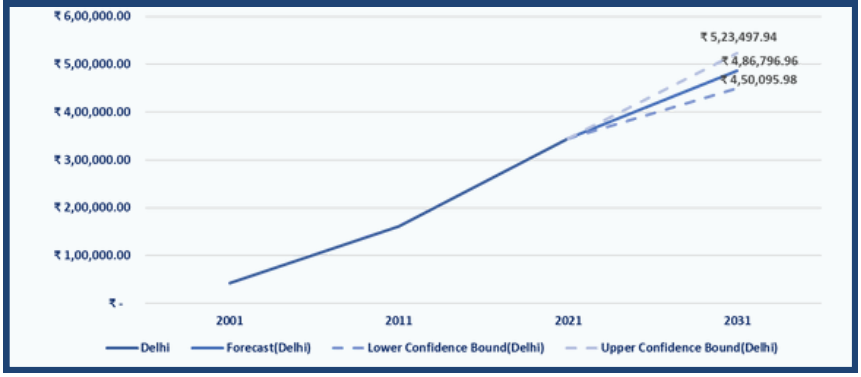
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

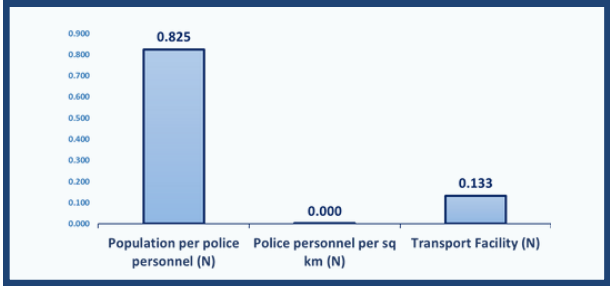


ECONOMIC INDICATORS (PER CAPITA INCOME)

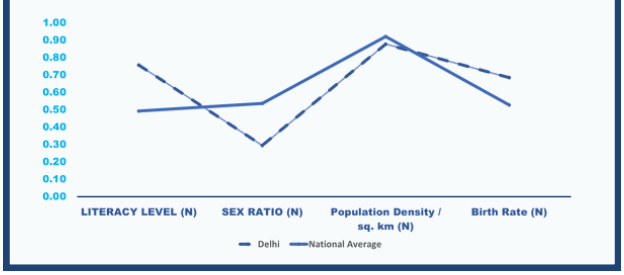


Indicator	Ranking
Social	15/36
Economic	21/36
Criminality	33/36
Infrastructure	21/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

In terms of ranking, Delhi has seen a dip in ranking throughout the years, with a major dip in 2011-12. From the spider chart we can infer that Delhi has performed extremely bad in criminality indicators.

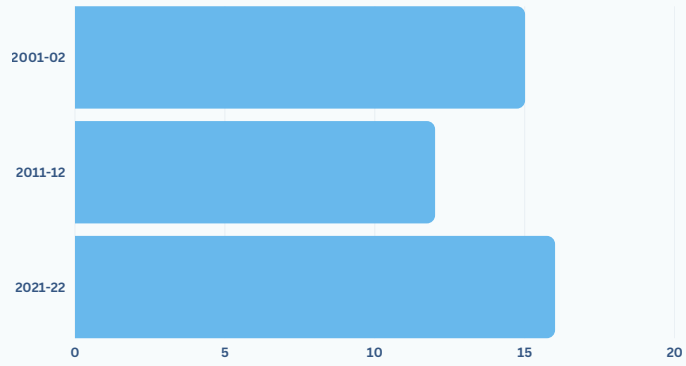
It also needs to improve its social performance as it has performed less than the national average scores in sex ratio and popualtion density per sq. km.

KARNATAKA

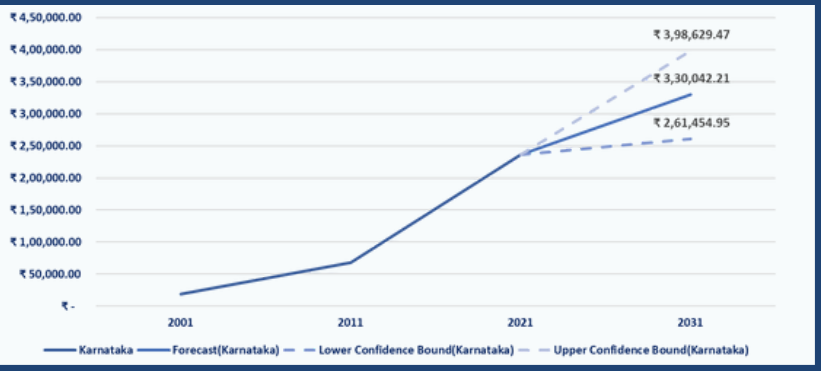
State Rank : 20 Index Score : 0.655

INDICATORS-WISE PERFORMANCE

RANKS OVER THE YEARS

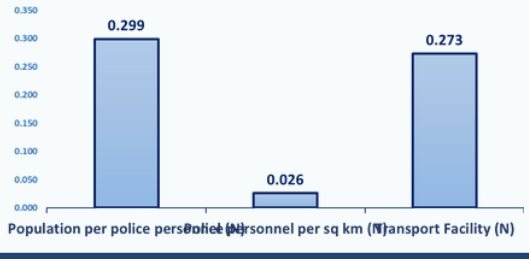


ECONOMIC INDICATORS (PER CAPITA INCOME)

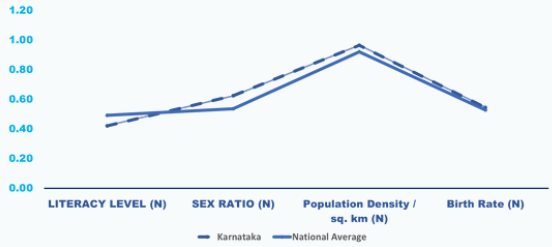


Indicator	Ranking
Social	21/36
Economic	17/36
Criminality	14/36
Infrastructure	30/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

From the spider chart, we can infer that Karnataka has high crime score indicating low level of crime.
It might be due to better infrastructural and security facilites.

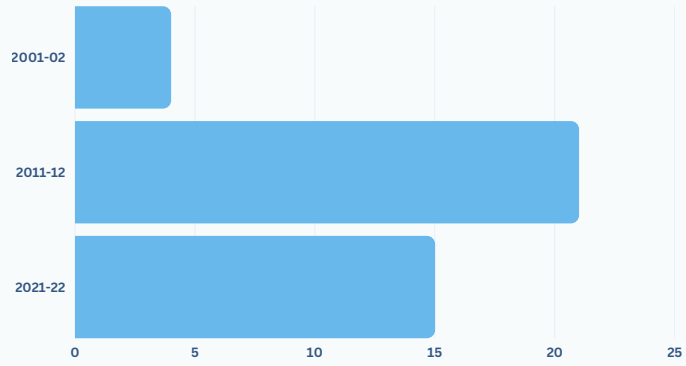
From the ranking chart, it is conspicuous that Karnataka's overall rank has seen a dip in 2011-12, which it has regained in the year 2021-22.

ANDHRA PRADESH

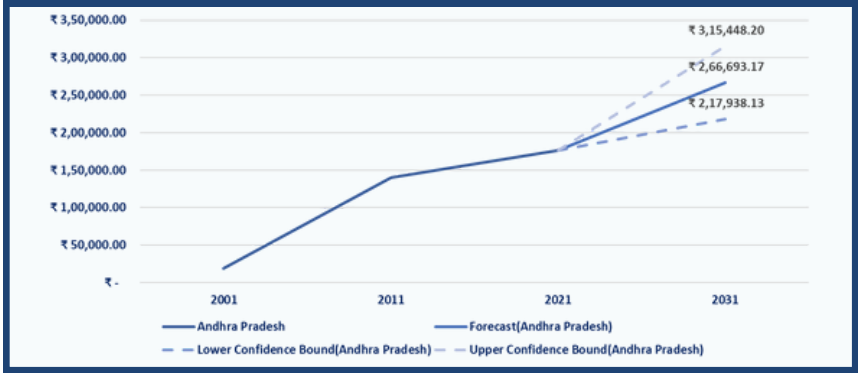
State Rank : 21 Index Score : 0.653

INDICATORS-WISE PERFORMANCE

RANKS OVER THE YEARS

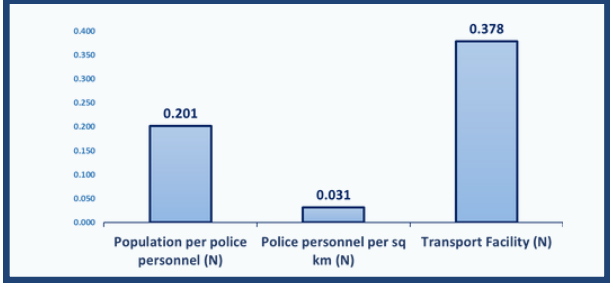


ECONOMIC INDICATORS (PER CAPITA INCOME)

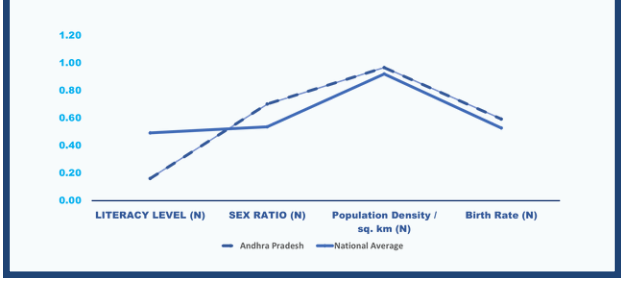


Indicator	Ranking
Social	29/36
Economic	23/36
Criminality	35/36
Infrastructure	34/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

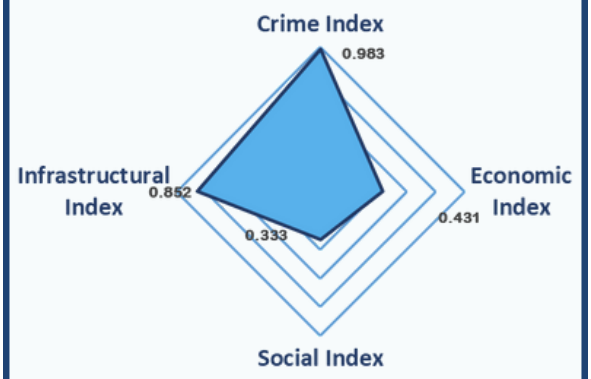
Andhra Pradesh is one of the state with highest crime concentration in the country. The reason can be justified by pointing at the poor security infrastructure, moreover, a high population density and low literacy level can be prospective reasons.

The overall ranking has see has seen a dip in 2021-22 from the past ranking in 2011-12.

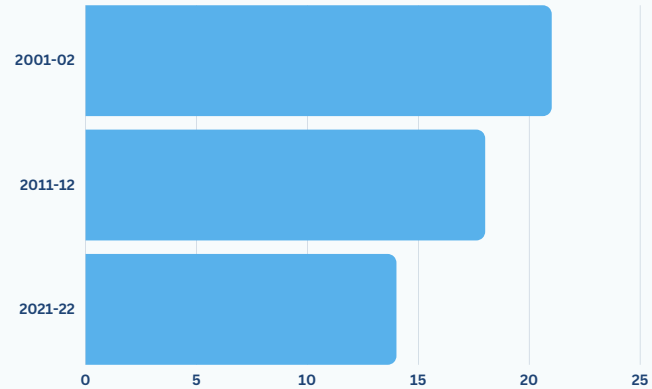
MEGHALAYA

State Rank : 22 Index Score : 0.633

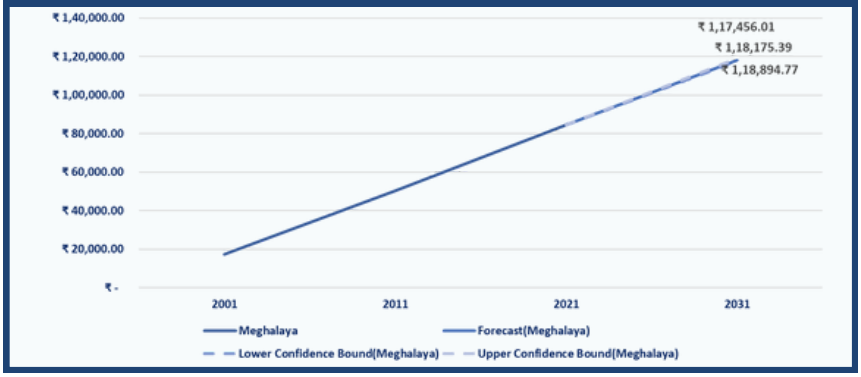
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

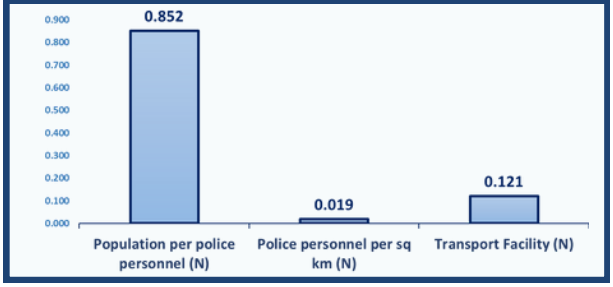


ECONOMIC INDICATORS (PER CAPITA INCOME)

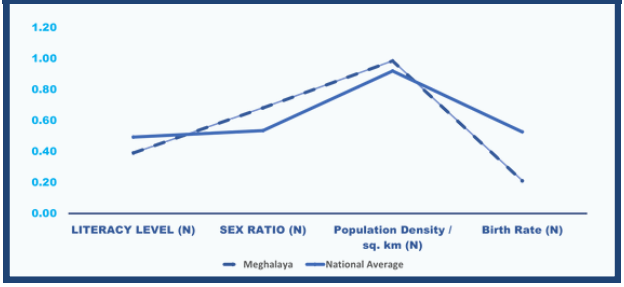


Indicator	Ranking
Social	29/36
Economic	25/36
Criminality	15/36
Infrastructure	12/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

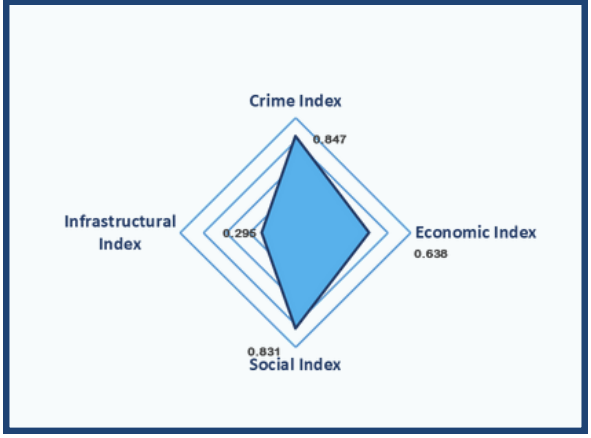
From the graphs we can infer that the overall performance of Meghalaya has constanly declined over the years with it achieving the lowest rank in the year in review.

It also needs to improve its social security scores as it is below the national average in case of literacy level and birth rate.

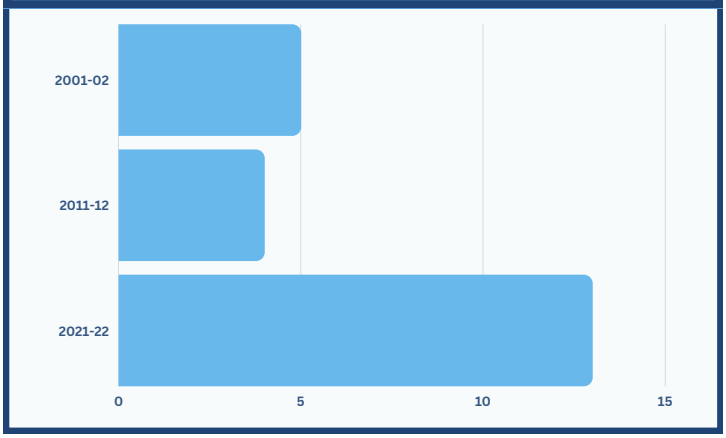
WEST BENGAL

State Rank : 23 Index Score : 0.630

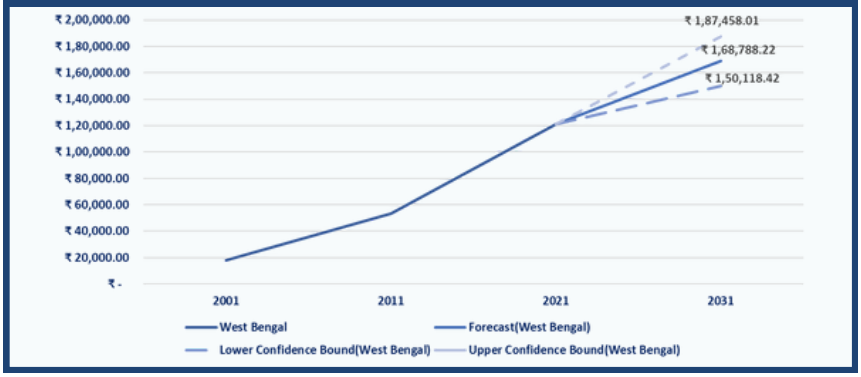
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

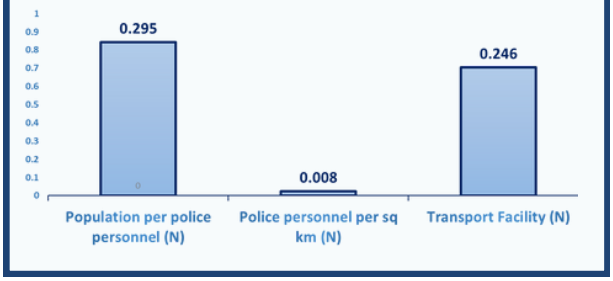


ECONOMIC INDICATORS (PER CAPITA INCOME)

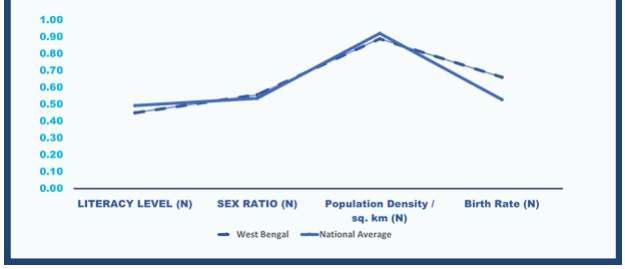


Indicator	Ranking
Social	36/36
Economic	8/36
Criminality	28/36
Infrastructure	32/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

From the social infrastructure graph, it can be inferred that the national average and the state average are almost the same except for the birth rate and ranked at the bottom

From the spider chart ,it has fared well only in the economic indicator leaving the rest which has to be taken care of

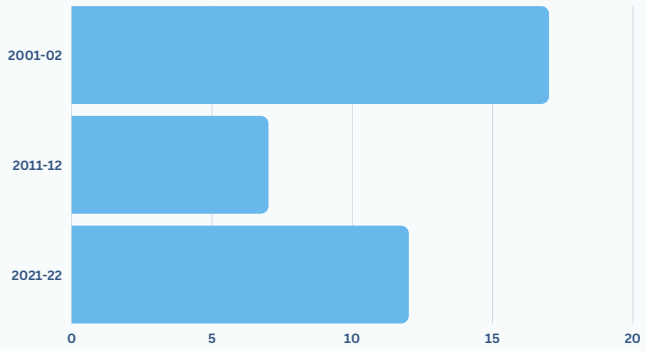
GUJARAT

State Rank : 24

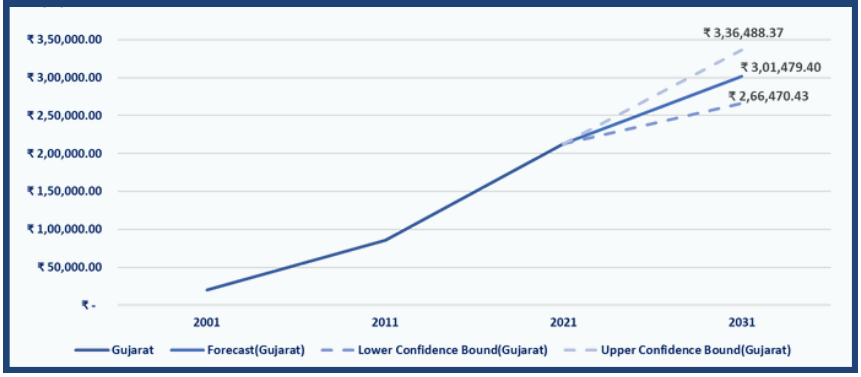
Index Score : 0.556

INDICATORS-WISE PERFORMANCE

RANKS OVER THE YEARS

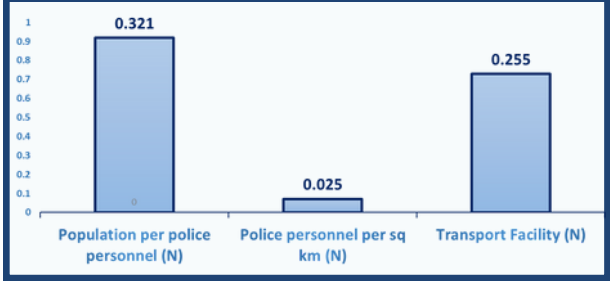


ECONOMIC INDICATORS (PER CAPITA INCOME)

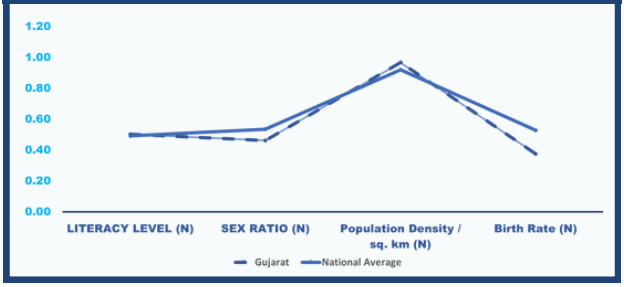


Indicator	Ranking
Social	24/36
Economic	20/36
Criminality	22/36
Infrastructure	29/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

From the infrastructure indicator, one can notice that the number of police personnel per sq km is very low.

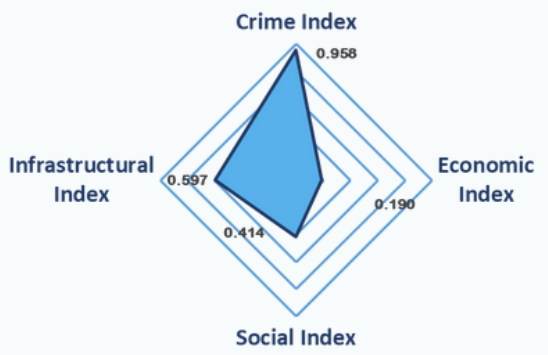
Gujarat has performed adequately in its social, economic and criminality indicators but this can be improved by a lot. The state needs to focus on improving its infrastructure as well.

It also needs to focus on its literacy level since it is the same as the national average.

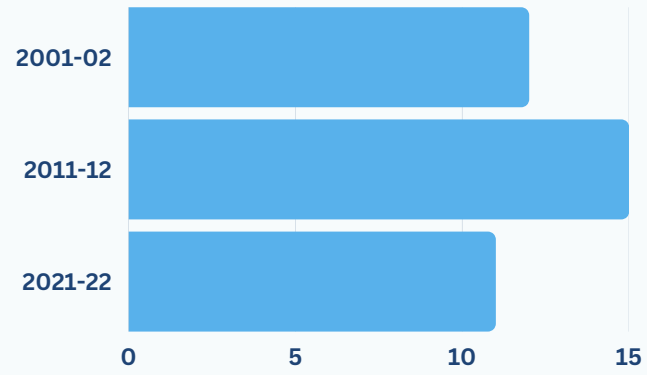
ASSAM

State Rank : 25 Index Score : 0.502

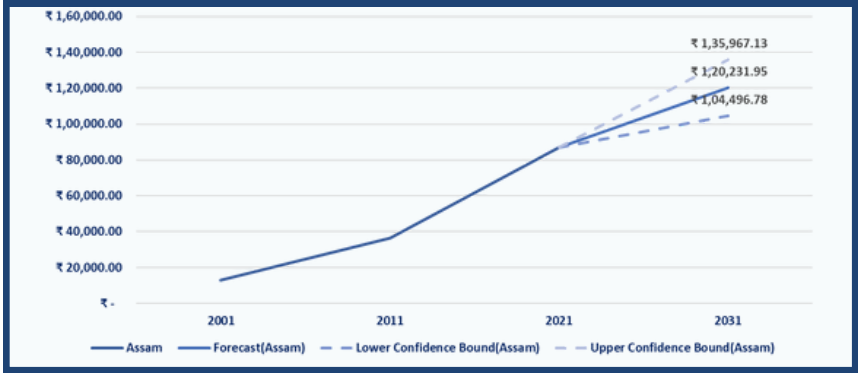
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

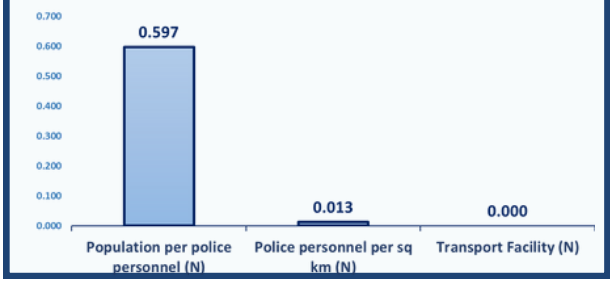


ECONOMIC INDICATORS (PER CAPITA INCOME)

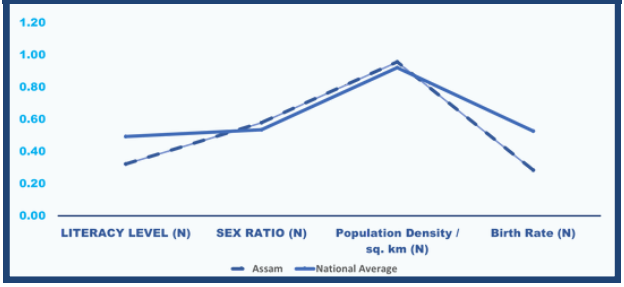


Indicator	Ranking
Social	28/36
Economic	30/36
Criminality	19/36
Infrastructure	19/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

Assam has had a fluctuating performance over the years. It saw a dip in its performance from the rankings in 2011-12

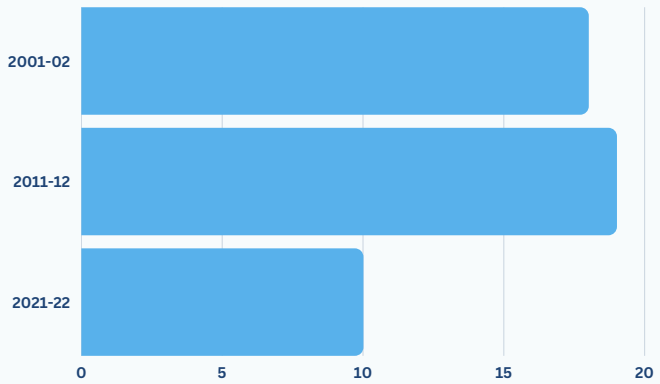
It also has a very miserable performance when it comes to infrastructural indicators. It has performed below the national average in social indicators like literacy level and birth rate.

UTTARAKHAND

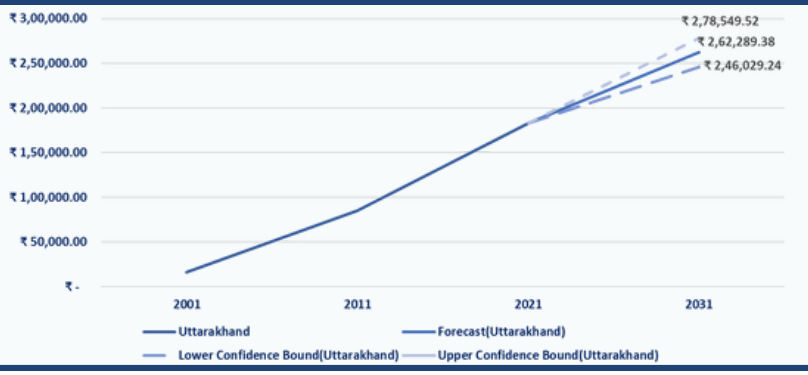
State Rank : 26 Index Score : 0.459

INDICATORS-WISE PERFORMANCE

RANKS OVER THE YEARS

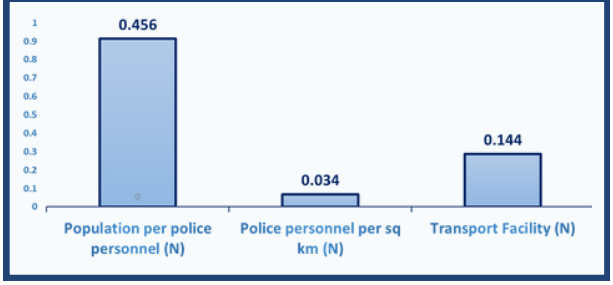


ECONOMIC INDICATORS (PER CAPITA INCOME)

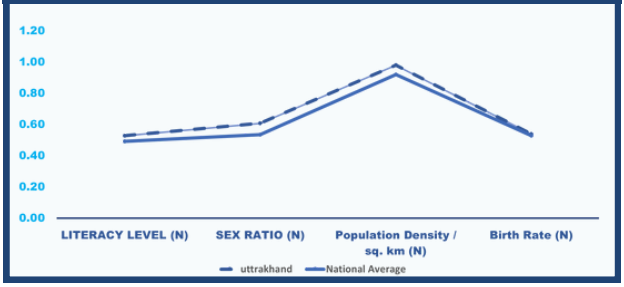


Indicator	Ranking
Social	17/36
Economic	23/36
Criminality	34/36
Infrastructure	24/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

From the spider web, Uttarakhand has to focus on improving the criminality indicator by implementing policies to combat the crime

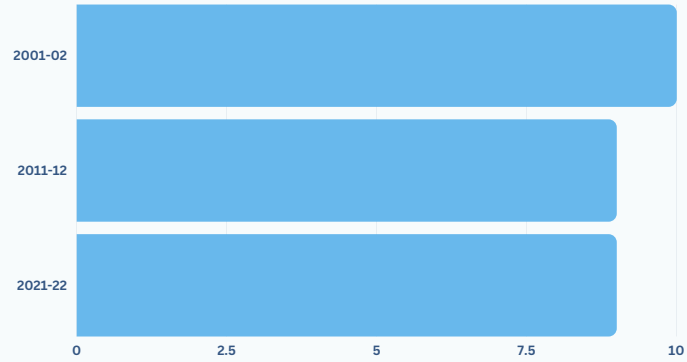
From the social infrastructure indicator,it maintained above the national average in all the indicators

ODISHA

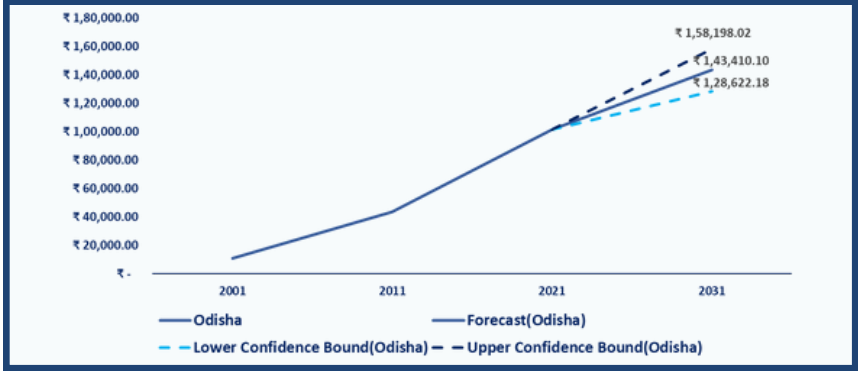
State Rank : 27 Index Score : 0.455

INDICATORS-WISE PERFORMANCE

RANKS OVER THE YEARS

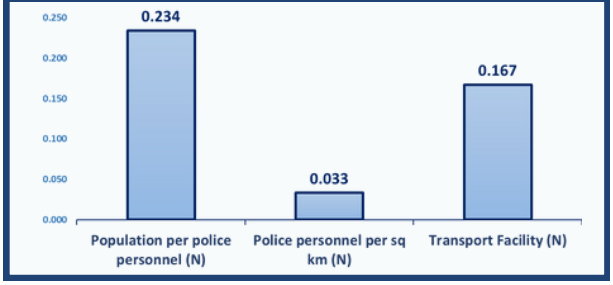


ECONOMIC INDICATORS (PER CAPITA INCOME)

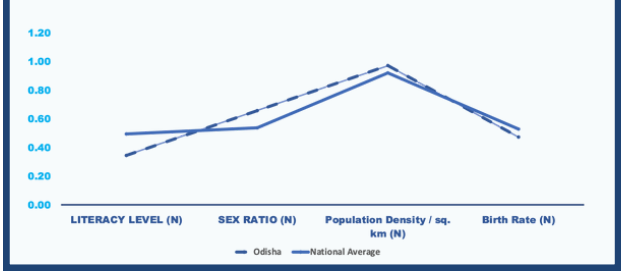


Indicator	Ranking
Social	26/36
Economic	14/36
Criminality	18/36
Infrastructure	33/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

From the graphs, we can infer that the overall rankings of Odisha have been consistently low and it currently stands at 27, making it a poor performer.

From the spider chart, we can see that Odisha lacks development in all four areas.

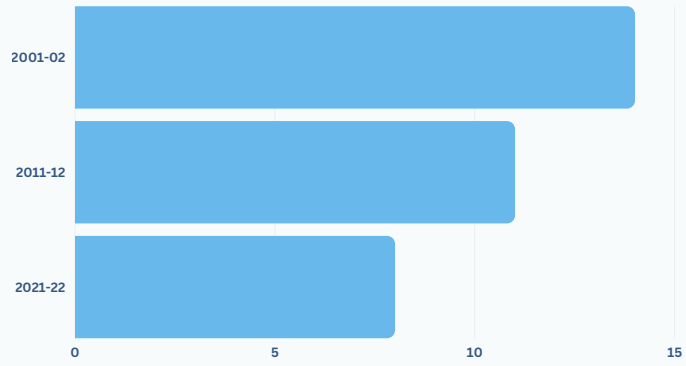
It has very low number of police personnel per sq km and low transportation facilities.

HARYANA

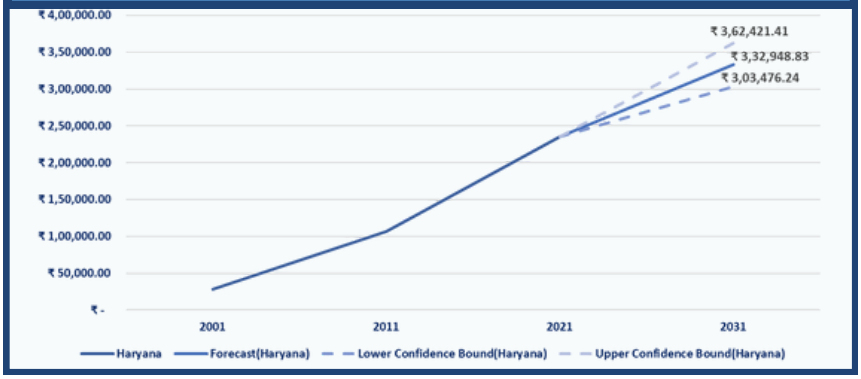
State Rank : 28 Index Score : 0.425

INDICATORS-WISE PERFORMANCE

RANKS OVER THE YEARS

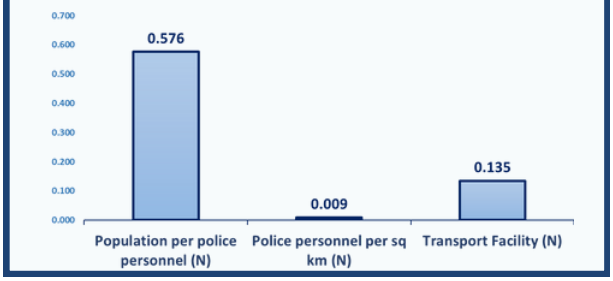


ECONOMIC INDICATORS (PER CAPITA INCOME)

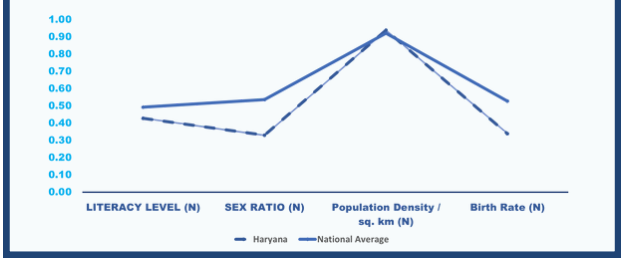


Indicator	Ranking
Social	29/36
Economic	23/36
Criminality	35/36
Infrastructure	34/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

From the ranking chart, it can be inferred that the rank of Haryana have fallen throughout the year, with the lowest in 2021-22.

In terms of social indicator, there is scope for improvement in the future.

From the spider chart, it can also be seen that criminality score of Haryana is less as compared to other indicators.

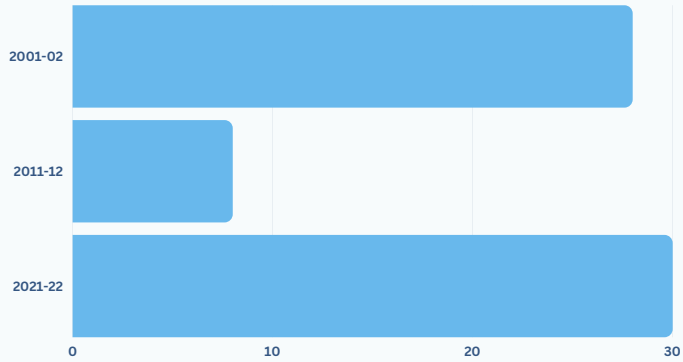
JHARKHAND

State Rank : 29

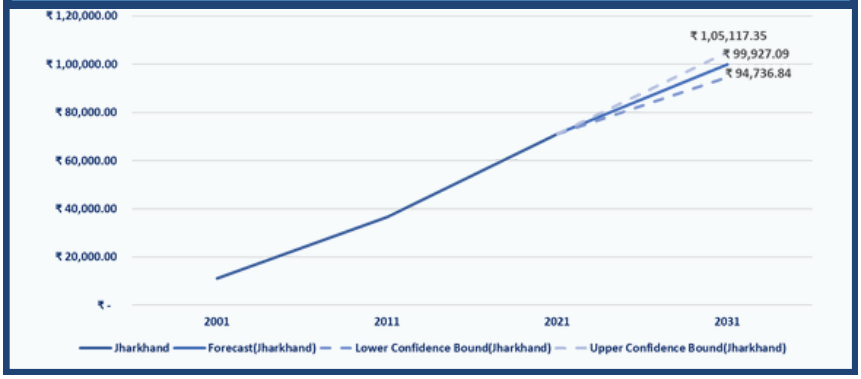
Index Score : 0.393

INDICATORS-WISE PERFORMANCE

RANKS OVER THE YEARS

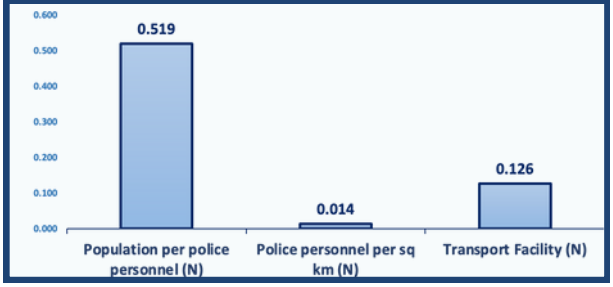


ECONOMIC INDICATORS (PER CAPITA INCOME)

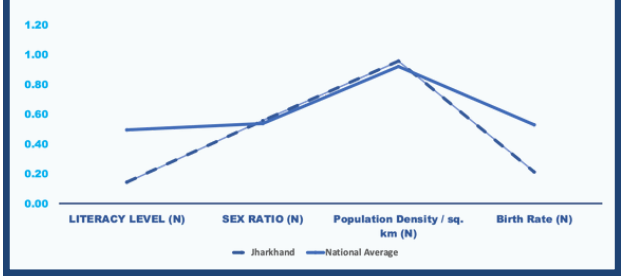


Indicator	Ranking
Social	23/36
Economic	26/36
Criminality	25/36
Infrastructure	12/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

From the graphs, we can infer that the overall rankings of Jharkhand have fallen in 2020-21 and it currently stands at 29, making it a an extremely poor performer. From the spider chart, we can see that although there have been some improvements in infrastructural and criminality indicators, Jharkhand lacks development in all four areas.

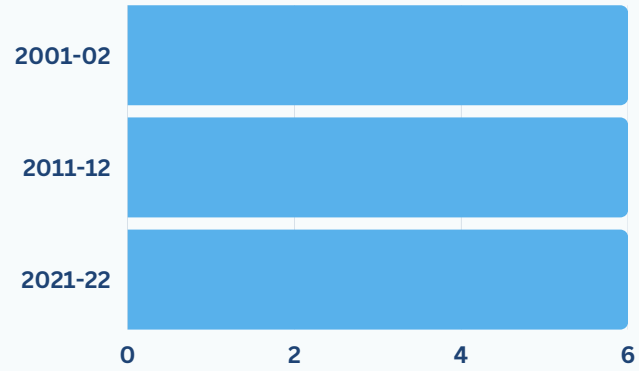
It has negligible number of police personnel per sq km and poor transportation.

MADHYA PRADESH

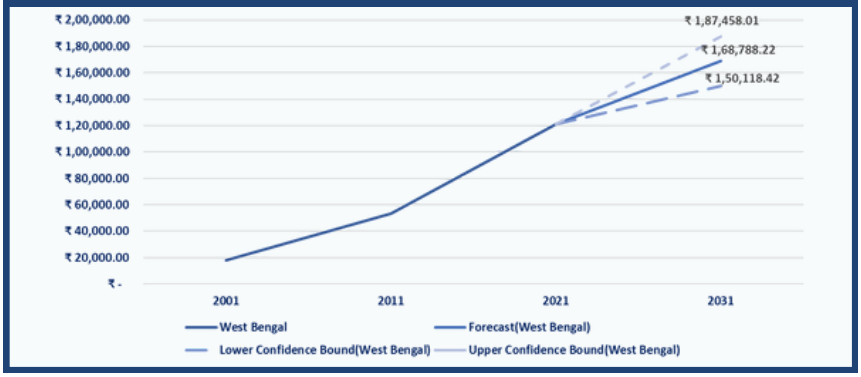
State Rank : 30 Index Score : 0.262

INDICATORS-WISE PERFORMANCE

RANKS OVER THE YEARS

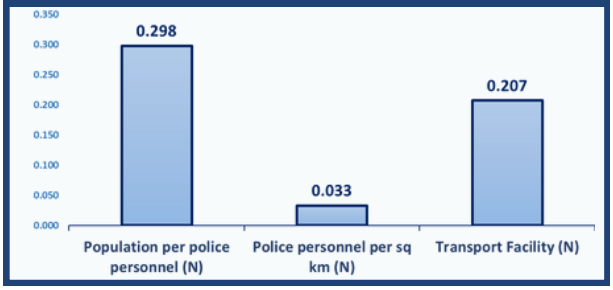


ECONOMIC INDICATORS (PER CAPITA INCOME)

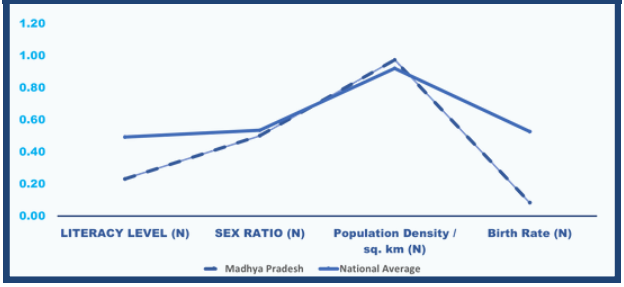


Indicator	Ranking
Social	33/36
Economic	29/36
Criminality	30/36
Infrastructure	31/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

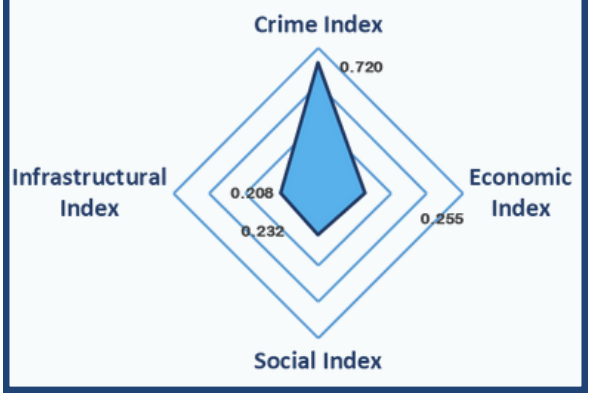
From the above graphs, we can infer that Madhya Pradesh has maintained a constant rank of 30 over the years and showed little to no improvement in its status.

It has also been below the national average of social indicators like Literacy Rate and Birth Rate. It has also shown a very uneven performance in Indicator wise scores with only a spike being there in criminal indicators.

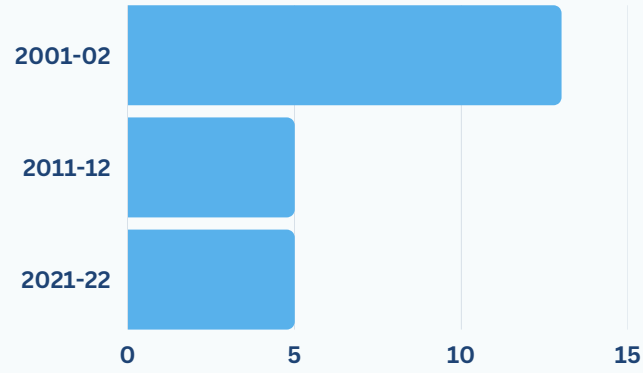
RAJASTHAN

State Rank : 31 Index Score : 0.254

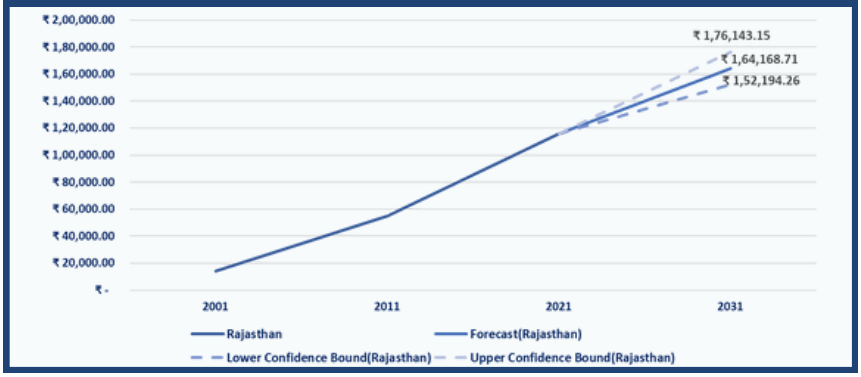
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

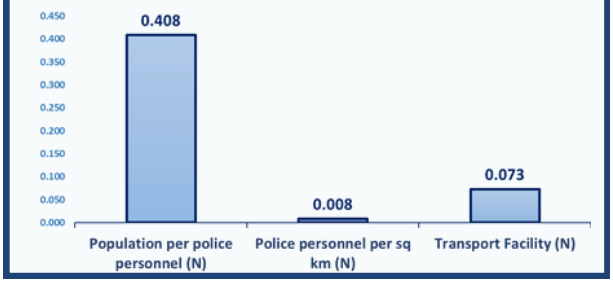


ECONOMIC INDICATORS (PER CAPITA INCOME)

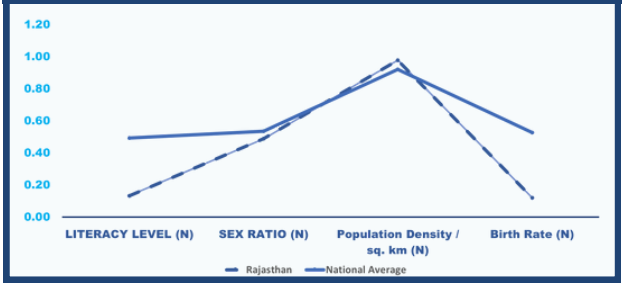


Indicator	Ranking
Social	32/36
Economic	28/36
Criminality	31/36
Infrastructure	34/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

Uttar Pradesh over the years have consistently performed at the last. it has recieved Rank 34 (lowest) in every year making it the most unsafe state to live in India.

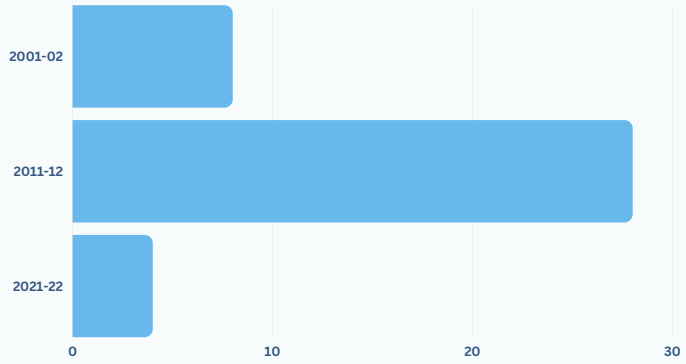
It has performed miserably in al indicators. The data gathered for Uttar Pradesh indicates the need to introduce major reforms to improve the socio-economic conditions which are getting worse by worse.

DAMAN & DIU AND DADAR & NAGAR HAVELI

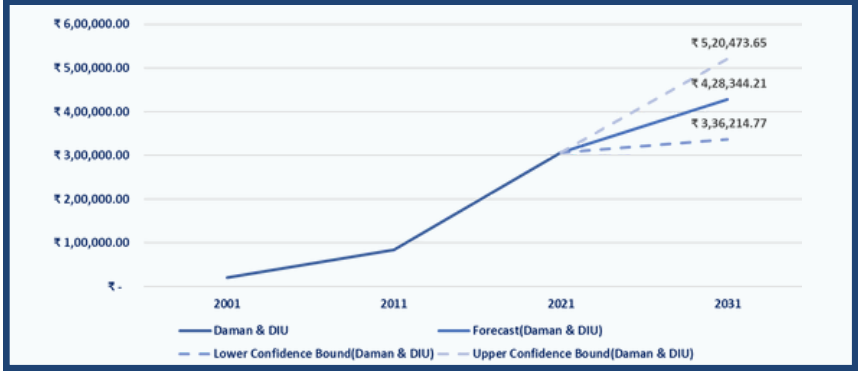
State Rank : 32 Index Score : 0.252

INDICATORS-WISE PERFORMANCE

RANKS OVER THE YEARS

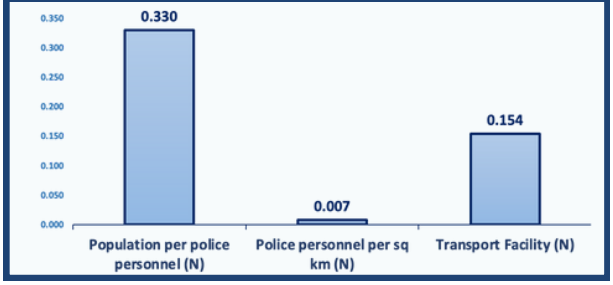


ECONOMIC INDICATORS (PER CAPITA INCOME)

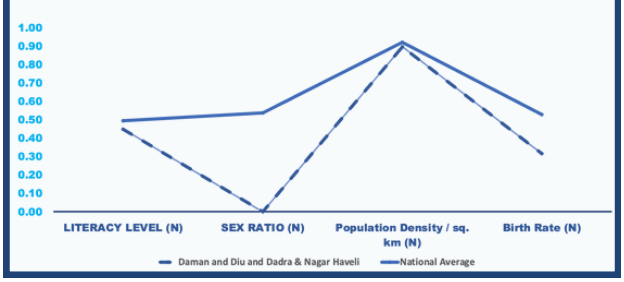


Indicator	Ranking
Social	12/36
Economic	24/36
Criminality	6/36
Infrastructure	20/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

From the graphs, we can infer that the overall rankings of Daman and Diu and Dadar and Nagar Haveli had been high, however, it faced a steep fall in 2020-21 and stands at 32, being one of the worst performer.

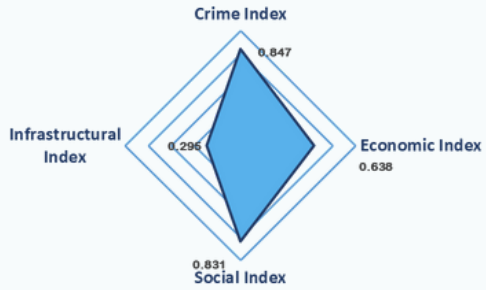
From the spider chart, we can see that all four indicators have little to no development except Crime Indicators .

It has very negligible number of police personnel per sq km.

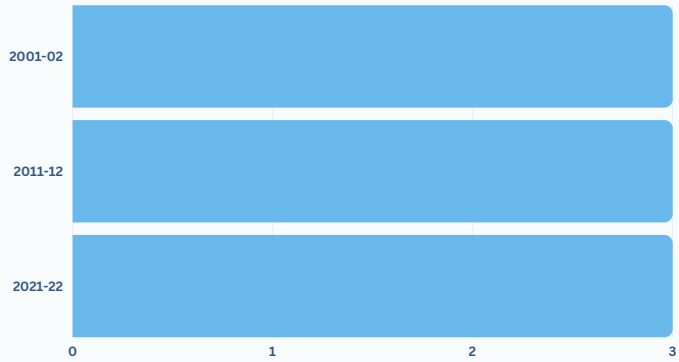
BIHAR

State Rank : 33 Index Score : 0.143

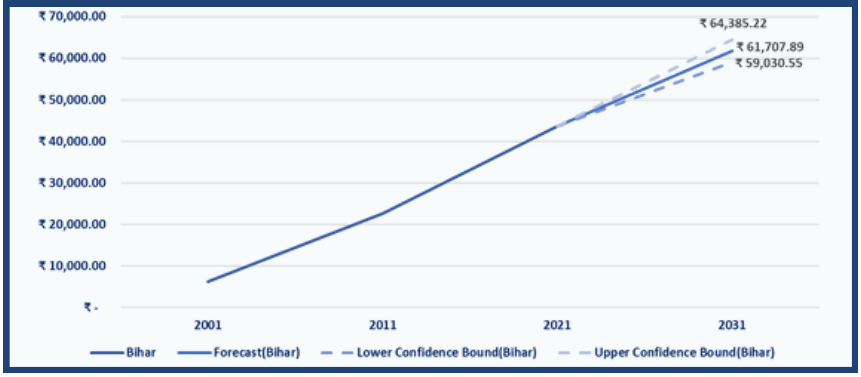
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

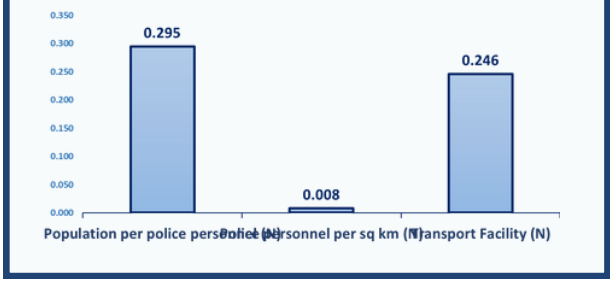


ECONOMIC INDICATORS (PER CAPITA INCOME)

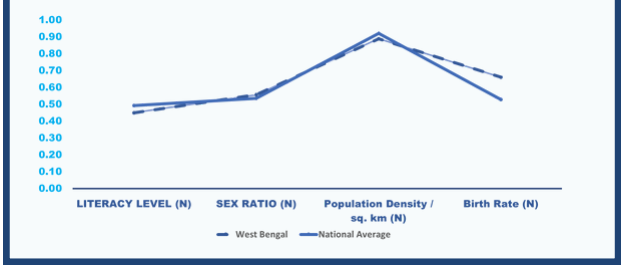


Indicator	Ranking
Social	11/36
Economic	29/36
Criminality	28/36
Infrastructure	32/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

From the graphs, we can infer that the overall rankings of Bihar have been consistently low and it currently stands at 30, making it a very poor performer.

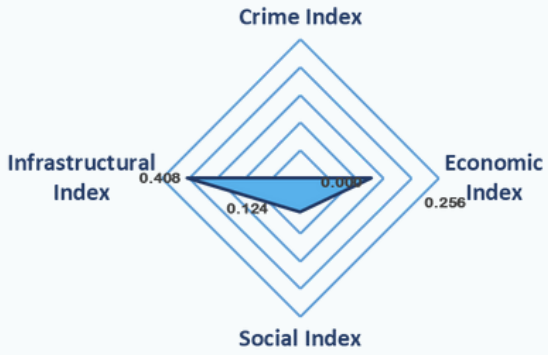
From the spider chart, we can see that although there has been development in economic indicators, Bihar lacks development in all four areas.

It has negligible number of police personnel per sq km.

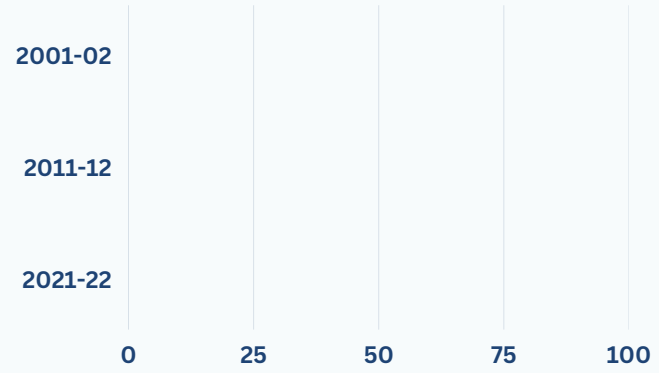
UTTAR PRADESH

State Rank : 34 Index Score : 0.000

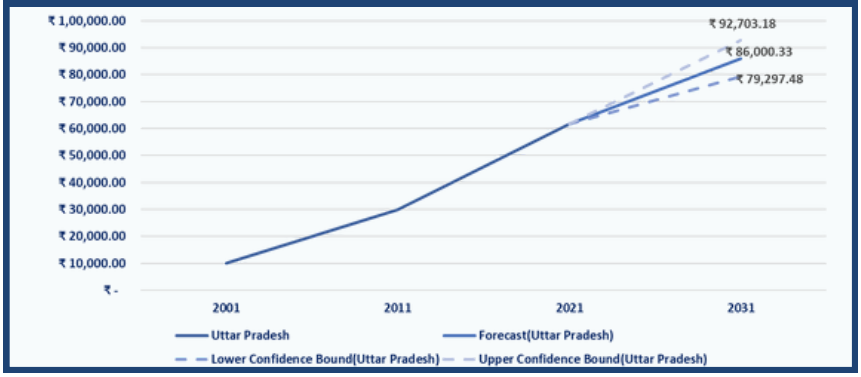
INDICATORS-WISE PERFORMANCE



RANKS OVER THE YEARS

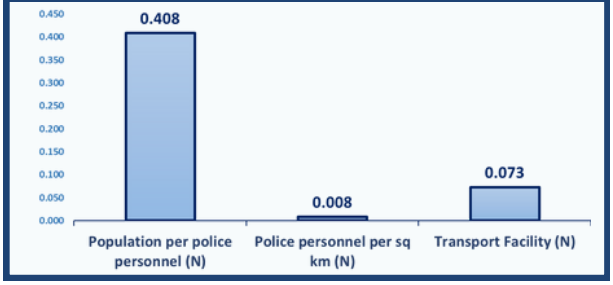


ECONOMIC INDICATORS (PER CAPITA INCOME)

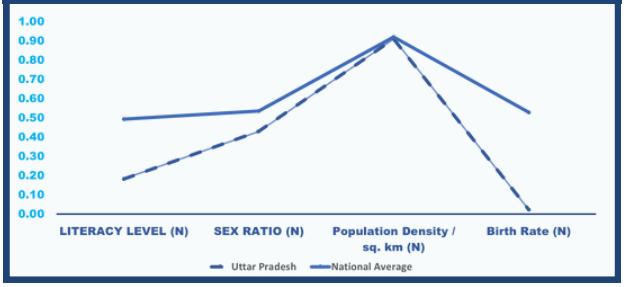


Indicator	Ranking
Social	34/36
Economic	27/36
Criminality	36/36
Infrastructure	25/36

INFRASTRUCTURE INDICATORS



SOCIAL INFRASTRUCTURE SCORES



OBSERVATIONS

Uttar Pradesh over the years have consistently performed at the last. it has recieved Rank 34 (lowest) in every year making it the most unsafe state to live in India.

It has performed miserably in al indicators. The data gathered for Uttar Pradesh indicates the need to introduce major reforms to improve the socio-economic conditions which are getting worse by worse.

CONCLUSION

This study focuses on the prevailing crime rate in India including all its states and union territories. It can be concluded that Jharkhand has the highest crime rate with the 35th rank in all the states and union territories whereas Kerela has least crime rate with the 1st rank in all the states and union territories.

The analysis reflects a reasonably strong relationship between economic indicators, social indicators, infrastructure indicators, and per capita crime under IPC in India.

Crime has existed in all societies, and efforts to legislate, enforce, punish, or otherwise correct criminal behaviour have not succeeded in eliminating crime. While some have concluded that crime is a necessary evil in human society, and have sought to justify its existence by pointing to its role in social change, an alternative view is that the cause of crime is to be found in the problems of human nature and human relationships that have plagued us since the origins of human society. Correcting these problems would effectively remove the source of crime, and bring about a peaceful world where all people could realize their potential as individuals, and develop satisfying, harmonious relationships with others.

The criminal justice system is the system that controls the functioning of institutions like the police, prisons, courts, etc., that work towards granting justice to the victim. The state must maintain peace and harmony in society, and this can only be achieved with the proper implementation of laws and the

efficient criminal justice system of a country. The criminal laws in India were majorly enacted by the British East India Company, but after a lot of amendments were made to the laws.

With the advancements of time and technology, new crimes like organized crimes, white collar crimes, cyber crimes, etc., are increasing, and the government feels the need to reform the justice system to deal with such offenses. As a result of this, various committees set up by the government gave various suggestions and recommendations. But still, the condition has not improved. Courts are still suffering from pressure due to the pendency of cases, which is a result of the shortage of judges. It is perceived by the public that the police force is under the influence of politicians, and corruption has made them ineffective in fulfilling their duties. Instances of custodian rapes and death are increasing day by day. This creates fear in the minds of the public. Prisons witness a situation of overcrowding and prisoners suffer from inhuman and degrading treatment. The recommendations of various committees are on the paper but not implemented properly. There is a need to solve all the issues and fill the gaps in the criminal justice system in India in order to provide fair justice.