Regional Disparities in the Human Development Index (HDI) in Indian States: Analyzing Determinants and Policy Implications

This paper focuses on the key determinants and causes of disparities in the Human Development Index (HDI) in the Indian states of Kerala, Punjab, Bihar, Chhattisgarh and Telangana. It studies how policy interventions impact HDI outcomes in different regions.

The Human Development Index is "a summary measure of average achievement in key dimensions of human development: a long and healthy life, knowledge, and decent living standards. The HDI is the geometric mean of normalized indices for each dimension. [United Nations report https://hdr.undp.org/data-center/human-development-index#/indicies/HDI]]

HDI aims to measure at least some choices besides income to access a country's economic development. This study is the analysis and findings of the causes of the discrepancies between states of the same country, India, and a few policies initiated by the government for bridging the gap.

While economic growth is a quantitative measure, development is a qualitative measure. The HDI enables to access whether the economy has achieved actual growth because evaluation based only on the numerical growth output of GDP cannot reflect whether there is an equitable distribution of income, wealth and opportunity in the country.

Research paper by Siddh Vora

Computation of HDI

The CSEP working paper, 2023 serves as a valuable resource for analyzing the trends in the Human Development Index (HDI) and developing meaningful inferences.

The table below outlines the methodology used for the calculation of HDI:

DIMENSIONS	HEALTH	KN	STANDARD OF LIVING	
Indicators	Life expectancy Number of years a new born child would live if subject to the prevailing mortality risks.	Mean years of schooling Number of years of schooling a child of school entrance age can expect to receive if the current aged 25 years and older. Expected years of schooling Number of years of schooling a child of school entrance age can expect to receive if the current age-specific enrolment rates persist throughout the child's years of schooling.		GNI per capita (PPP US\$)
Index	LE index	MYSI MYS	EYSI EYS	Income index $\ln(GNIpc) - \ln(100)$
	85 – 20	15 Educa	ln(75000) – ln(100)	
		² √LE index * Educat		

Source: UNDP. Note: Index of Non-Income human development has been calculated by taking the geometric average of the health and education indices.

The Life Expectancy Index (LEI), Education Attainment Index (ATI) and Adjusted Gross National income index (AGNI) are the key indicators used to calculate the HDI. The fixed minimum and maximum values have been established for each indicator, and then the HDI is calculated, which varies from 0 to 1 for each country.

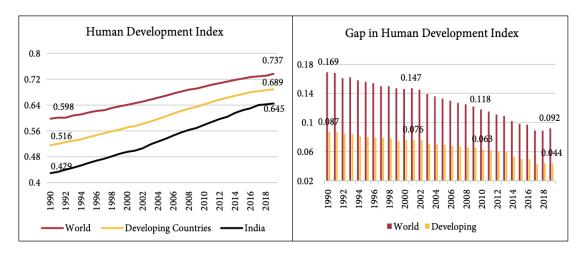
This method found that *India's HDI score has always been lower than the world average and the developing-country average.*

Indian HDI as compared to the World HDI

India ranks 132 out of 191 countries with an HDI value of 0.633, according to the 2022 report published by the United Nations using 2021 data. This places India in the medium human development category.

Though the gap between India and the rest of the world has almost halved in the last 30 years, a significant part of this improvement occurred only after 2000, with the largest reduction in this gap in the last decade. This was even though India's HDI has remained broadly unchanged since 2017.

This is reflected below graphically:



Source: Human development report 2019.

This implies that the advanced economies are very close to the highest possible HDI level and do not have much scope for incremental improvement; developing economies still have a long way to go toward achieving optimal health and education indicators.

In this context, the gradual narrowing of the gap in India's non-income HDI is noteworthy. The rise in scores can be attributed to a heightened emphasis on health and education. Nevertheless, India still has a considerable distance to cover in order to align with global benchmarks.

Inequality-adjusted Human Development Index:

The IHDI indicates a percentage loss in HDI due to inequality in the distribution of each dimension across the population.

Inequality-adjusted HDI						
Country (HDI rank)	India (#132)	World	China (#79)	Switzerland (#1)		
What happens to HDI when adjusted for inequality	Falls by 25%	Falls by 19%	Falls by 15%	Falls by 7%		
Income share held by poorest 40% of	20%	18%	17%	20%		
Income share held by the richest 1%	22%	17%	14%	12%		

India's HDI falls by 25% when adjusted for inequality as compared to the world average of 19% loss. The breakup of the same can be seen below:

India	
2021 IHDI value	0.475
IHDI change from 2020	-0.006
HDI value	0.633
Overall loss (from HDI to IHDI)	25.0%
Inequality in life expectancy	16.9%
Inequality in education	36.9%
Inequality in income	19.4%

Source: UNDP Human Development reports

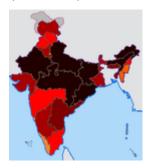
This signifies that either the policy priorities are not in place or even if right, are not implemented well.

However, the images below provide evidence of a gradual improvement in India's HDI over the years, yet they underscore the substantial disparities that persist among the various states.

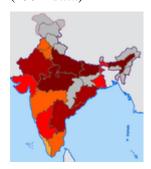
1981 to 2011 Human Development Index in India



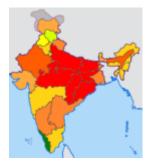
National Human Development Report 1981 (1981 data)



National Human Development Report 1991 (1991 data)

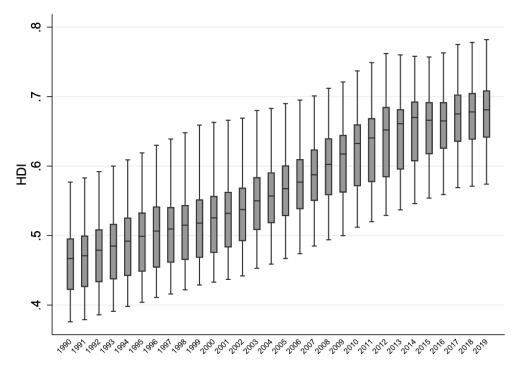


National Human Development Report 2001 (2001 data)



National Human Development Report 2011 (2007–2008 data)

State-wise general analysis



Source: Global Data Lab of the Institute of Management Research of the Radboud University, the Netherlands.

The graph above shows that over the years, *HDI scores have improved consistently, as reflected in the gradual upward movement for India.* However, all states have not grown at the same rate. The reasons are related to different state government initiatives to promote the three variables of HDI.

State-wise comparison on SDG

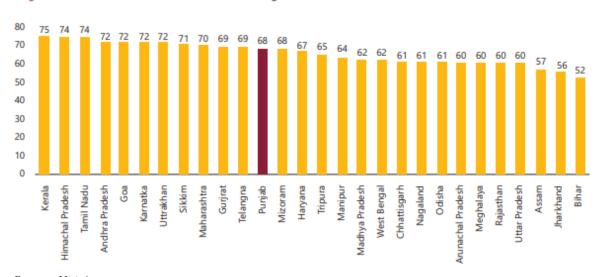


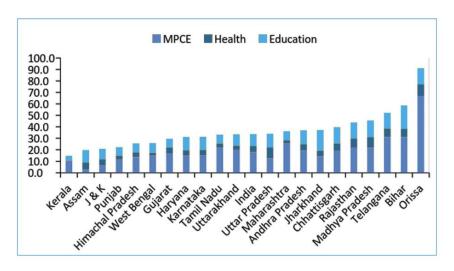
Figure 2: SDG India Index 2020-2021 State Ranking

Source: Niti Aayog

Niti Aayog, officially known as the National Institution for Transforming India, is a policy think tank and government institution in India. It serves as a platform for formulating and implementing economic, social and development policies and works on issues related to sustainable development goals.

The above graph shows significant disparities among Indian states when it comes to the achievement of Sustainable Development Goals (SDGs). These disparities are multi-dimensional and manifest in economic, healthcare, education, gender equality, sanitation, environmental sustainability, poverty, and urban-rural divides. States with diverse economic structures, development levels, and governance capacities vary in their progress towards the SDGs. While some states like Kerala, Himachal Pradesh, and Tamil Nadu have made commendable strides in specific areas, others like Bihar, Jharkhand, and Assam continue to grapple with challenges, reflecting the immense diversity within India. National and state-level initiatives are working to bridge these disparities and ensure that all states contribute to India's progress towards the SDGs, but this remains a complex and ongoing endeavor.

According to the 2017 State of Telangana report, the table presented below illustrates the Monthly per capita consumer expenditure (MPCE), as well as indicators of health and education, which collectively contribute to the calculation of the Human Development Index (HDI) for the year 2011-2012. This table highlights disparities in human development and its constituent components, including standard of living, healthcare, and education.



Kerala

It is worth noting that Kerala exhibits the least amount of inequality in these aspects and has recorded the highest level of HDI: 0.766 (in 2019). Attempts aimed by the Kerala state government at alleviating poverty were sharp-sighted, and hence the rate of decline in poverty in Kerala was faster than that of India as a whole. The attainment of this was made possible by implementing the following strategies, as outlined in the Kerala State planning report:

- Effective public distribution system, achievement of high literacy rate, improving health indicators like low infant mortality rate and high life expectancy.
- Participatory approach for alleviation of poverty through Kudumbasree Mission.
- "Kudumbashree" is the State Poverty Eradication Mission, by the nodal State agency, for the implementation of major Centrally-Sponsored Urban Poverty Reduction Programs viz Swarna Jayanthi Shahari Rozgar Yojana (SJSRY) and the Integrated Housing and Slum Development Program.
- Implementation and inclusion of major Centrally-Sponsored Schemes for poverty eradication like The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) and Swarnajayanti Grama Swarojgar Yojana (SGSY)

Source: Kerala State Planning Board

Punjab

The state of Punjab also boasted a moderately high HDI of 0.707, in 2019. A recent study conducted by Niti Ayog, focusing on the Sustainable Development Goals (SDG) and using the Punjab SDG Index for the year 2020-21, stated that the state of Punjab achieved a Composite Index Score of 68. This represents a notable increase of 6-points when compared to the previous year, where the score was 62 in 2019-20.

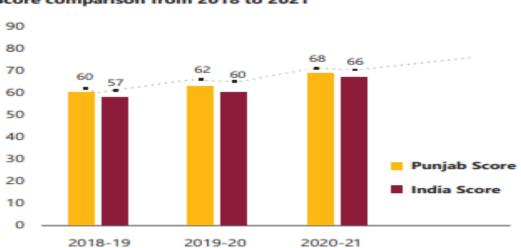


Figure 1: India and Punjab Composite Index Score comparison from 2018 to 2021

Source: Niti Aayog

This table below reflects the reasons why Punjab has achieved an HDI level of moderate value.

Responsible Consumption and Production

Sustainable Cities and Communities

No Poverty

Thirti

Reduced Inequality

Tero Hunger

Total Communities

Affordable and clean Energy

Total Communities

Tero Hunger

Total Communities

Tero Hunger

Total Communities

Tero Hunger

Total Communities

Total

Figure 5: Change in Index Score on 15 SDGs in Punjab from 2019-20 to 2020-21

Source: Niti Aayog

Education: The state has a relatively high literacy rate and invests in primary, secondary, and higher education. Access to quality education and a relatively high school enrolment level contribute positively to the education component of HDI.

<u>Healthcare Infrastructure:</u> Punjab has a well-developed healthcare infrastructure with numerous hospitals and healthcare facilities. This contributes to higher life expectancy as the population has access to medical care and health services.

<u>Infrastructure and Connectivity:</u> Punjab has invested in infrastructure development, including road networks and transportation systems. This facilitates economic growth and improves overall well-being.

Bihar

As compared to these states, Bihar has long struggled with the lowest HDI of 0.581 (in 2019) amongst all Indian states due to a combination of economic, social and infrastructural challenges. Some of the reasons are as follows:

- Educational Challenges: Bihar has historically had a weak education system with low school enrolment, high dropout rates, and a shortage of quality educational institutions. These factors result in low literacy rates and a lack of skilled human resources.
- <u>Healthcare Issues:</u> Access to quality healthcare services is limited in many parts of Bihar. The state faces high maternal and infant mortality rates, as well as health issues related to malnutrition and inadequate sanitation facilities.
- <u>Economic Underdevelopment:</u> Bihar's economy relies heavily on agriculture, which is characterized by small landholdings and traditional farming practices. Lack of industrialization and economic diversification contributes to low-income levels.
- <u>Infrastructure Deficits:</u> Poor infrastructure, including inadequate road networks, electricity, and transportation facilities, hinders economic growth and access to essential services.
- <u>Poverty:</u> High levels of poverty and income inequality are prevalent in Bihar, leading to insufficient access to basic needs such as food, clean water, and housing.
- <u>Social Challenges:</u> The state faces various social challenges, including issues related to caste-based discrimination, which limit opportunities for marginalized communities.
- **Political Instability:** Bihar has experienced political instability over the years, which impacts policy implementation and overall development efforts.
- Environmental Vulnerability: The state is prone to natural disasters, such as floods, which disrupts livelihoods and infrastructure.

Efforts are being made by both the state government and various organizations to address these challenges and improve Bihar's HDI by investing in education, healthcare, infrastructure, and economic development. However, addressing these complex issues requires sustained and coordinated efforts over an extended period.

Chhattisgarh

Table 3: HDI and IHDI estimates across Indian states

State	HDI	IHDI	Ratio	Loss (%)	Rank HDI	Rank IHDI	Difference
Andhra Pradesh	0.485	0.332	0.685	31.55	11	12	-1
Assam	0.474	0.341	0.718	28.17	12	11	1
Bihar	0.447	0.303	0.679	32.06	18	16	2
Chhattisgarh	0.449	0.291	0.649	35.14	17	18	-1
Gujarat	0.514	0.363	0.705	29.50	8	7	1
Haryana	0.545	0.375	0.688	31.18	5	6	-1
Himachal Pradesh	0.558	0.403	0.722	27.81	3	3	0
Jharkhand	0.464	0.308	0.663	33.67	15	14	1
Karnataka	0.508	0.353	0.696	30.44	10	9	1
Kerala	0.625	0.520	0.832	16.78	1	1	0
Madhya Pradesh	0.451	0.290	0.643	35.74	16	19	-3
Maharashtra	0.549	0.397	0.722	27.75	4	4	0
Orissa	0.442	0.296	0.669	33.11	19	17	2
Punjab	0.569	0.410	0.720	28.04	2	2	0
Rajasthan	0.468	0.308	0.660	34.02	14	13	1
Tamil Nadu	0.544	0.396	0.727	27.28	6	5	1
Uttar Pradesh	0.468	0.307	0.655	34.47	13	15	-2
Uttarakhand	0.515	0.345	0.670	33.03	7	10	-3
West Bengal	0.509	0.360	0.707	29.30	9	8	1
India	0.504	0.343	0.680	32.00			

Source: UNDP Report

Referring to the data provided in the table above, sourced from the UNDP report on inequality-adjusted HDI for Indian states (Suryanarayana, Agarwal, et al., 2011), it is evident that the average impact of inequality, which results in reduced human development, stands at 32% for India as a whole. However, in the case of Chhattisgarh, this impact is one of the highest at 35.14%, while for Kerala it is the least at 16.78%.

Chhattisgarh, one of the newly formed states in India, has recorded the lowest level of HDI (0.617 in 2019), due to the following reasons:

- <u>Economic Development</u>: The state is a predominantly agrarian economy, and the agricultural sector faces issues like small landholdings, low productivity, and limited diversification. This results in lower income levels for a significant portion of the population.
- Educational Gaps: Chhattisgarh has a relatively low literacy rate and faces challenges related to access to quality education, high dropout rates, and a lack of educational infrastructure. These issues hinder human capital development and economic progress.

The percentage of women with ten or more years of schooling is an abysmal 26.5% (in rural Chhattisgarh, the number is as low as 20.1%).

- <u>Healthcare Disparities:</u> Access to healthcare services in rural and tribal areas is limited, leading to high maternal and infant mortality rates, malnutrition, and various health challenges. Inadequate sanitation and hygiene facilities exacerbate health issues. In the National Family Health Survey (2015-16), the State Fact Sheet for Chhattisgarh revealed that Chhattisgarh had an infant mortality rate (IMR) of 54 per 1,000 live births, which exceeded the targeted IMR of 27 per 1,000 live births by 2015. In comparison, the average IMR for India was 39 during that period. Additionally, Chhattisgarh reported an under-five mortality rate of 64
- <u>Tribal Populations:</u> Chhattisgarh has a significant tribal population, and many tribal communities in the state face socio-economic marginalization and difficulties in accessing education, healthcare, and other basic services.
- <u>Infrastructure and Connectivity</u>: Limited road networks and transportation facilities can hinder economic growth and access to healthcare and education, particularly in remote and rural areas.
- **Poverty:** A substantial portion of the state's population lives in poverty, which results in challenges related to nutrition, housing, and overall quality of life.
- <u>Environmental Factors:</u> Environmental issues, such as deforestation, land degradation, and water pollution, impact the livelihoods of rural communities.

Nevertheless, the Chhattisgarh government is actively striving to elevate the state's status by undertaking significant initiatives like:

- <u>Strengthening Agricultural Sector:</u> Since a large part of the rural population in Chhattisgarh is dependent on agricultural labor i.e., small, marginal or landless farmers, the government has provided special packages and concessions to prioritize agriculture and forest-based industries through schemes like 'Rajiv Gandhi Gramin Bhumihin Krishi Mazdoor Nyay Yojana', which started in the financial year 2021-22. The government has also distributed interest-free loans of about 924 crores (USD 110m) to 3.5 lakh farmers, to make them debt-free.
- Expanding education network: 247 Swami Atmanand English Medium schools for modern and free education to 2.52 lakh children are started, new courses in graduate and postgraduate colleges have been introduced, and construction of new buildings has been initiated for additional classrooms for government colleges. Additional funds are allocated for Sarva Shiksha Abhiyan meaning education for all.
- Affordable and accessible healthcare: The government of Chhattisgarh has been dedicated to improving healthcare and prompt treatment for low-income groups, women, and child healthcare. The state has implemented various health insurance models and schemes like Rashtriya Swasthya Bima Yojana, Mukhyamantri Swasthya Bima Yojana, Sanjeevani sahayata Kosh, Pradhan Mantri Jan Arogya Yojana to provide

quality and affordable healthcare to its population, with a special focus on urban slums. Initiatives like the 'Mukhyamantri Dai-Didi Clinic Yojana' and 'Dr. Khoobchand Baghel Swastyha Sahayata Yojana' ensures accessible healthcare services. Chhattisgarh has also seen an expansion of Primary Health Care centers and a reduction in malnutrition through various programs, leading to improved health indicators like reduced Infant Mortality Rate and Maternal Mortality rate, contributing to a healthier future for the state.

- Women and Youth upliftment: The government has launched the 'Kaushalya Maitritva Yojana,' providing financial assistance of Rs 5000 (USD 60) to women on the birth of a second daughter to support their upbringing and education. The state is also transforming Gauthans into rural industrial parks, offering opportunities for women in areas like paint production, electricity generation, and vermicompost from cow dung. Women's financial independence is being promoted with loans and loan waivers for self-help groups, and provisions have been made to facilitate small and cottage industries in bamboo, wood crafts, metal crafts, and other handicrafts. The 'Chhattisgarh Herbals' brand promotes products from local initiatives. Additionally, the Chief Minister's Resham Mission is supporting women with the setup of Kakoon banks, providing extra income for thousands of women through sericulture.
- <u>Upliftment of the tribal sector:</u> The government is actively focused on protecting and conserving tribal culture and tradition. Significant efforts have been made to improve education and healthcare facilities in tribal areas, including the opening of 300 schools. New rules under PESA Panchayat empower tribals to make decisions about resources in their areas, enhancing the role of gram sabhas with increased tribal representation. Autonomy for Gram Panchayats has been increased, and investments have been made to create new job opportunities through the Chhattisgarh Rojgaar Mission. The state has also made strides in the industrial and education sectors while preserving its rich and diverse cultural heritage represented by over 35 vibrant tribal communities with unique folk music, dances, and traditions.
- Environment Conservation on priority list: Mineral-based industries have expanded in Chhattisgarh, due to which challenges of air and water pollution have emerged. But Chhattisgarh has met the pollution challenges by increasing forest cover of the state, setting up air quality stations, and implementing micro-action plans in the three major municipal corporations most affected by air pollution Raipur, Bhilai, and Korba. The state has set up multiple stations to check the water quality in 7 major rivers of the state under its Water Quality Monitoring Program.

Telangana:

Telangana, as a geographical and political entity, was born on June 2, 2014, as the 29th and the youngest state in the Union of India. It recorded an HDI of 0.658 in 2019, above the national average of 0.645

Telangana was ranked 10th in the Human Development Index (HDI) in 2011-12, among twenty-one central states of India, through a significant improvement over its previous rank of 13 in 2004-05.

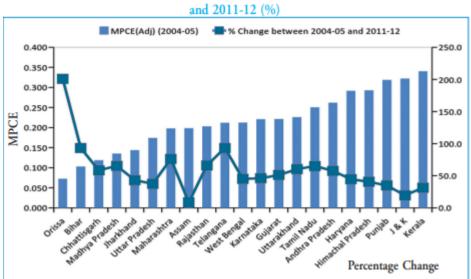
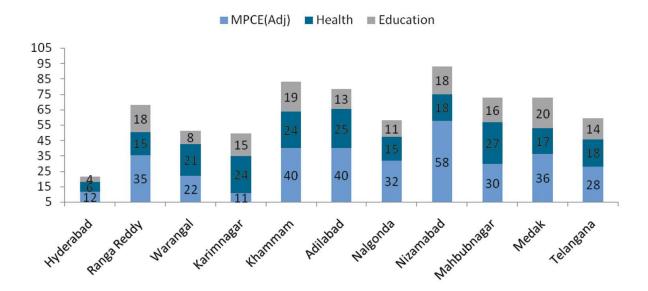


Fig. 2.2: MPCE (Adj) Index of States (2004-05) and Change in MPCE between 2004-05

According to the 2017 Human Development Report for Telangana State, there has been a decline in disparities in the levels of human development between different districts and social groups. However, growth in per capita income has been more pronounced than the improvements in indicators on education and health, suggesting that economic growth has not been translated into commensurate development in social sectors, particularly for rural areas and for vulnerable sections of society, e.g., women, backward classes and minorities.

Inequalities in human development had declined during the period under consideration due to the public policies pursued in the combined state. Following the UNDP methodology, HDI has been computed for the 10 districts of Telangana for the years 2004-05 and 2011-12. Monthly Per Capita Consumer Expenditure (MPCE) for measuring the standard of living, adult (15 + years) literacy (with one-third weight) and average years of schooling (6-14 years) with two-thirds weight for knowledge and infant survival rate for long and healthy life are used to estimate HDIs at district levels. Equal weight is given to all the three dimension for arriving at HDI.

Decomposition of Changes in HDI across Districts of Telangana (%)



The districts with a lower HDI in 2004-05 had improved their HDI status faster compared to the other districts by 2011-12. This reflects the declining inequalities in HDI across the districts. The same is evident in the case of the three components of HDI, viz., standard of living, health and education. Thus convergence in HDI has taken place across the districts of Telangana.

Districts with lower but inclusive growth have also achieved higher improvements in human development, when their economic growth has been achieved through growth in labor productivity; hence more funds need to be allocated to improve the education and health status for increasing labor productivity.

The report also said that there has been a big increase in the enrolment of children in schools; however, the learning outcomes of children in government schools have been poor, as compared to private schools. The responses of the children about the attitude of the teachers in terms of punctuality, correcting homework and watching over the children as well as the lack of infrastructure highlight the inefficiencies in the educational system.

The deprivation of natural resources across the districts in the state due to the lack of groundwater, lower forest cover and high moisture, stress less availability of safe drinking water and poor indoor sanitation. These issues should be addressed by the government to improve the human development in a sustainable manner.

The recent budget of Telangana made significant contributions to the backward castes, scheduled castes, tribes and minorities in order to achieve inclusive growth. Initiatives like Mission Kakatiya, Haritha Haram, and Mission Bhageeratha have been implemented to improve the forest cover and supply of drinking water, leading to sustained growth and improvements in human development.

The new decentralized social framework in Telangana is a substantial departure from the traditional approach, as it introduces an official unit dedicated to overseeing human development and aiming for a higher Human Development Index (HDI).

Conclusion:

One of the primary reasons for the significant human development disparities in India is the uneven distribution of economic growth. A striking statistic is that the wealthiest 10% of the Indian population possesses more than 77% of the country's wealth. This wealth concentration results in substantial inequalities in access to basic amenities, healthcare, and education for most of the population. While the country has achieved near-universal enrolment in primary education, the quality of education remains low. Healthcare is considered a luxury good here and hence is treated as a financial burden by the poor. Despite making significant strides in poverty reduction and expanding access to healthcare and education; the quality of these services remains a pressing concern. (Mishra, 2023).

Addressing these disparities requires a comprehensive approach to prioritizing human development and economic growth. This multifaceted strategy should encompass tackling income inequality and gender disparities, enhancing access to high-quality social services, addressing environmental challenges, and increasing investments in vital social infrastructure. These include building a robust healthcare infrastructure, provision of superior education at affordable rates, and providing essential household amenities such as clean water, improved sanitation, reliable electricity, and internet access, especially in underdeveloped states. The country should continue with the introduction of more social protection schemes to reduce inequalities and give equal opportunities to the underprivileged. India must channel resources into human development initiatives and job creation, focusing on its youth.

Prioritizing these aspects will improve living standards and promote inclusive growth, ensuring that the benefits of economic progress are more equitably distributed across the population.

Bibilography

- 1. https://acrobat.adobe.com/id/urn:aaid:sc:AP:81f3e5ee-d128-41a4-8b57-122d9a550e65
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Annexure I

Trends by UNDP reports

Human Development Index (by UN Method) of Indian states since 1990 (2019 revision).^[14]

St. 4	HDI							
State	1990	1995	2000	2005	2010	2015	2019	
Northern India								
<u>Chandigarh</u>	0.635	0.635	0.630	0.658	0.643	0.737	0.759	
<u>New Delhi</u>	0.580	0.615	0.657	0.685	0.702	0.734	0.744	
<u>Haryana</u>	0.471	0.501	0.543	0.587	0.628	0.689	0.704	
Himachal Pradesh	0.484	0.526	0.584	0.641	0.661	0.707	0.717	
Jammu and Kashmir	0.498	0.508	0.523	0.583	0.636	0.677	0.712	
Madhya Pradesh	0.407	0.427	0.453	0.495	0.531	0.585	0.607	
Punjab	0.501	0.533	0.573	0.611	0.651	0.706	0.707	
Uttar Pradesh	0.398	0.423	0.456	0.498	0.528	0.577	0.603	
<u>Uttarakhand</u>	0.627	0.626	0.621	0.650	0.634	0.666	0.684	
Western India								
Dadra and Nagar Haveli	0.672	0.673	0.673	0.702	0.688	0.665	0.631	
Daman and Diu	0.651	0.652	0.655	0.682	0.669	0.693	0.674	

	HDI							
State	1990	1995	2000	2005	2010	2015	2019	
Goa	0.557	0.578	0.609	0.668	0.731	0.758	0.765	
Gujarat	0.474	0.493	0.521	0.569	0.599	0.654	0.650	
<u>Maharashtra</u>	0.498	0.521	0.552	0.598	0.638	0.683	0.701	
<u>Rajasthan</u>	0.406	0.431	0.463	0.505	0.542	0.606	0.650	
Eastern India								
Andaman and Nicobar Islands	0.685	0.685	0.686	0.714	0.700	0.726	0.719	
West Bengal	0.443	0.468	0.500	0.534	0.567	0.622	0.636	
Bihar	0.379	0.402	0.430	0.465	0.508	0.558	0.581	
<u>Chhattisgarh</u>	0.562	0.559	0.555	0.581	0.566	0.595	0.617	
<u>Jharkhand</u>	0.562	0.560	0.555	0.582	0.567	0.585	0.600	
<u>Odisha</u>	0.402	0.424	0.452	0.489	0.529	0.586	0.608	
Northeastern India								
Assam	0.412	0.442	0.482	0.526	0.560	0.599	0.609	
Arunachal Pradesh	0.442	0.467	0.497	0.530	0.635	0.664	0.677	

	HDI							
State	1990	1995	2000	2005	2010	2015	2019	
Manipur	0.499	0.522	0.553	0.593	0.674	0.698	0.691	
Meghalaya	0.461	0.465	0.471	0.528	0.613	0.651	0.654	
<u>Mizoram</u>	0.531	0.544	0.564	0.626	0.679	0.700	0.701	
Nagaland	0.539	0.531	0.518	0.553	0.654	0.682	0.683	
Sikkim	0.546	0.543	0.543	0.587	0.628	0.695	0.715	
<u>Tripura</u>	0.449	0.483	0.525	0.557	0.602	0.646	0.640	
Southern India		•	•	•	•		-	
Andhra Pradesh	0.427	0.446	0.473	0.526	0.574	0.631	0.642	
<u>Karnataka</u>	0.447	0.474	0.512	0.561	0.599	0.662	0.679	
Kerala	0.550	0.565	0.593	0.675	0.709	0.763	0.766	
<u>Lakshadweep</u>	0.694	0.694	0.695	0.724	0.710	0.735	0.728	
<u>Puducherry</u>	0.711	0.720	0.720	0.750	0.736	0.734	0.739	
Tamil Nadu	0.475	0.500	0.537	0.596	0.641	0.693	0.699	
<u>Telangana</u>	0.624	0.621	0.618	0.646	0.631	0.654	0.658	

State	HDI	HDI					
State	1990	1995	2000	2005	2010	2015	2019
India	0.434	0.458	0.491	0.534	0.575	0.629	0.645

The following values are estimates from 2021 calculated by Global Data Lab, [9] using the same method of calculation as UNDP. [10] It is important to note that other sources report different HDI rankings (typically higher).

Annexure II

Rank	State/Union Territory	HDI (2021)	Country comparison			
High Human Development						
1	<u>Kerala</u>	0.752	Colombia			
2	Goa	0.751	Saint Vincent and the Grenadines			
3	Chandigarh	0.744	<u>Tonga</u>			
4	<u>Delhi</u>	0.730	<u>Fiji</u>			
5	Puducherry	0.726	<u>Uzbekistan</u>			
6	<u>Lakshadweep</u>	0.715	<u>Palestine</u>			
7	Himachal Pradesh	0.703	<u>Vietnam</u>			
8	Sikkim	0.702	<u>Vietnam</u>			
Medium	Human Development					
9	Jammu and Kashmir	0.699	<u>Philippines</u>			
10	<u>Punjab</u>	0.694	<u>Botswana</u>			
11	<u>Haryana</u>	0.691	<u>Venezuela</u>			
12	<u>Maharashtra</u>	0.688	Iraq			

Rank	State/Union Territory	HDI (2021)	Country comparison
High Hu	ıman Development		
12	<u>Mizoram</u>	0.688	<u>Iraq</u>
13	Tamil Nadu	0.686	Iraq
14	<u>Manipur</u>	0.678	El Salvador
15	<u>Uttarakhand</u>	0.672	El Salvador
16	Nagaland	0.670	Nicaragua
17	<u>Karnataka</u>	0.667	Nicaragua
18	Arunachal Pradesh	0.665	Bhutan
19	Daman and Diu	0.661	Bangladesh
20	<u>Telangana</u>	0.647	<u>Tuvalu</u>
21	Meghalaya	0.643	<u>Tuvalu</u>
22	<u>Rajasthan</u>	0.638	Marshall Islands
23	<u>Gujarat</u>	0.638	Marshall Islands
_	India (average)	0.633	<u>Ghana</u>
24	Andhra Pradesh	0.630	<u>Ghana</u>

Rank	State/Union Territory	HDI (2021)	Country comparison				
High Human Development							
25	<u>Tripura</u>	0.629	Micronesia				
26	West Bengal	0.624	<u>Kiribati</u>				
27	Dadra and Nagar Haveli	0.620	<u>Honduras</u>				
28	<u>Chhattisgarh</u>	0.605	Laos				
29	Assam	0.597	<u>Eswatini</u>				
30	<u>Odisha</u>	0.597	<u>Eswatini</u>				
31	Madhya Pradesh	0.596	Equatorial Guinea				
32	<u>Uttar Pradesh</u>	0.592	<u>Zimbabwe</u>				
33	<u>Jharkhand</u>	0.589	Angola				
34	Bihar	0.571	Republic of the Congo				