

A Comparative Study of Health, Education and Income Indices for Selected States of India

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1. INTRODUCTION

“Human development is concerned with what I take to be the basic development idea: namely, advancing the richness of human life, rather than the richness of the economy in which human beings live, which is only a part of it. Human development is a concept within the scope of the study of the human condition, specifically international development, relating to international and economic development. (Amartya Sen, Nobel Laureate, 1998)

HDI is the abbreviated as Human Development Index. It was developed and launched by Pakistani economist Mahbub-ul-Haq, followed by Amartya Sen, an Indian economist, in 1990. Human Development Index, HDI, is a comprehensive tool devised by the United Nations for measuring the levels of social and economic developments of the different countries and ranking them accordingly. It is a comparative measure of life expectancy, education, literacy and standard of living. Essentially, Human Development Index, HDI, makes use of four parameters for measuring and ranking countries according to their social and economic development which includes the Life Expectancy at Birth, Expected Years of Schooling, Mean Years of Schooling and Gross National Income per Capita.

There are six basic pillars of human development: equity, sustainability, productivity, empowerment, cooperation and security.

- Equity is the idea of fairness for every person, between men and women; we each have the right to an education and health care.
- Sustainability is the view that we all have the right to earn a living that can sustain our lives and have access to a more even distribution of goods.
- Productivity states the full participation of people in the process of income generation. This also means that the government needs more efficient social programs for its people.
- Empowerment is the freedom of the people to influence development and decisions that affect their lives.

2. ABOUT THE UNITED NATIONS DEVELOPMENT PROGRAMME

UNDP partners with people at all levels of society to help build nations that can withstand crisis, and drive and sustain the kind of growth that improves the quality of life for everyone. On the ground in 177 countries and territories, we offer global perspective and local insight to help empower lives and build resilient nations. World leaders have pledged to achieve the Millennium Development Goals, including the overarching goal of cutting poverty in half by 2015. UNDP's network links and coordinates global and national efforts to reach these Goals. Our focus is helping countries build and share solutions to the challenges of:

- Poverty Reduction and Achievement of the MDGs
- Democratic Governance
- Crisis Prevention and Recovery

- Environment and Energy for Sustainable Development

UNDP helps developing countries by giving aid and it's used effectively. It encourages the protection of human rights, empowerment of women and capacity development. And it also focuses the global debate on key development issues, innovative analysis, providing new measurement tools and sometimes controversial policy proposal. The global analytical framework and inclusive approach carryover into national, regional and local Human Development are well supported by UNDP.

3. REVIEW OF LITERATURE

Gustav Ranis (2004): In his study entitled that Human Development and Economic Growth

Recent literature has contrasted Human Development, described as the ultimate goal of the development process, with economic growth, described as an imperfect proxy for more general welfare, or as a means toward enhanced human development. This debate has broadened the definitions and goals of development but still needs to define the important interrelations between human development (HD) and economic growth (EG).

To the extent that greater freedom and capabilities improve economic performance, human development will have an important effect on growth. Similarly, to the extent that increased incomes will increase the range of choices and capabilities enjoyed by households and governments, economic growth will enhance human development. This paper analyzes these relationships and the two-way linkages involved.

Rajarshi Majumder (2005) in his study entitled that Human Development in India: Regional Pattern and Policy Issues

Development literature in the past decade has become more people centric with human development being projected as one of the 'ends' of development planning. The present paper tries to explore the trends, patterns and regional dimension of human development (HD) in India through construction of alternate HD indices for the districts of India. The association between HD indices and conventional measures like per capita income has been explored. Substantial inter-regional disparity in HD is observed. Probable reasons for such disparity have been inquired. Suggested policies to enhance HD include greater role of the State in provisioning of social infrastructure, especially to the hitherto marginalized groups.

Purusottam Nayak (2009) in his study entitled that Human Development in Northeastern Region of India: Issues and Challenges

4. STATEMENT OF THE PROBLEM

Now a day's several recent model of development have given lot of importance to human development. It can take place through education, health and family welfare and also influenced by legal, political and social environments in the society. It's very much required for economic, social and cultural developments in society.

A government of new emerging states is incapable of social regulatory services in rural areas. Many economic policies are besieged by the cost of servicing their foreign debt and thus the government is under stringent requirement from international financial institution to reduce spending. To achieve the greater cost effectiveness the government must have active support and greater contribution from the people. Thus the government is obliged to seek new unfamiliar partners like local leaders and people from non- governmental organization.

5. OBJECTIVES OF THE STUDY

- To analyse the trend of human development of Indian states.
- To compare measures of education, income & health index.

6. RESEARCH METHODOLOGY

Data	Secondary
Type of Research	Descriptive
Tools	Simple statistical tools such as time series cross section analysis etc.
Parameters	Human Development Indicators (education, income, health)

7. ANALYSIS

Human Development Index

- ✓ Health Index
- ✓ Education Index
- ✓ Income Index

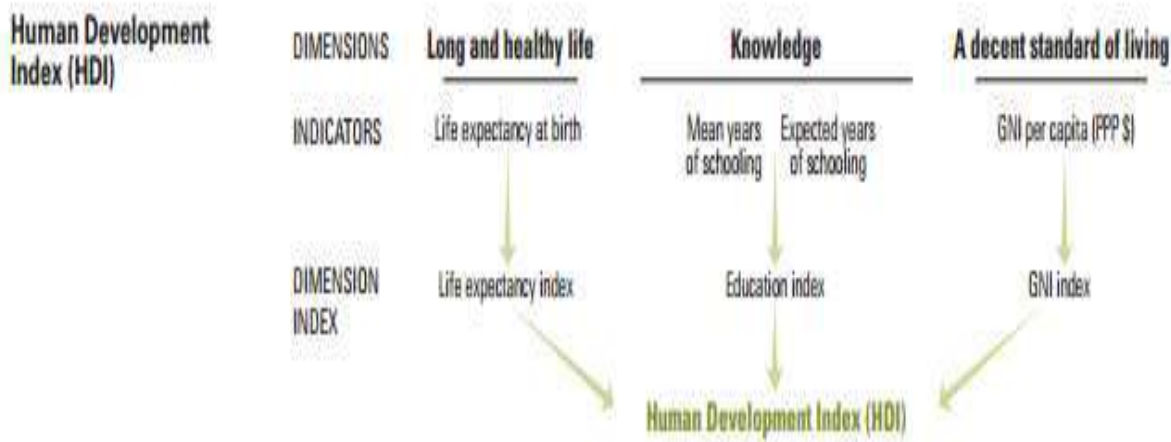


Figure 1: HDI Indicators

Source: UNDP

Health Index

Table 1: Health Index (State wise)

States	Health Index 2000	Health Index 2008
Andhra Pradesh	0.521	0.58
Assam	0.339	0.407
Bihar	0.506	0.563
Chhattisgarh	0.341	0.417
Delhi	0.735	0.763
Goa	0.363	0.65
Gujarat	0.562	0.633
Haryana	0.576	0.627
Jharkhand	0.434	0.5
Karnataka	0.567	0.627
Kerala	0.782	0.817
Madhya Pradesh	0.363	0.43
Maharashtra	0.601	0.65
Orissa	0.376	0.45
Punjab	0.632	0.667
Rajasthan	0.52	0.587
Tamil Nadu	0.586	0.637
Uttar Pradesh	0.398	0.473
West Bengal	0.6	0.65
Himachal Pradesh	0.681	0.717
Jammu & Kashmir	0.457	0.53
NE (excluding Assam)	0.567	0.663
Uttarakhand	0.465	0.53
India (Overall)	0.497	0.563

This index is an indicator of life expectancy at birth for a state or may be country at large. Kerala has scores highest in this index following Delhi, Himachal Pradesh, and Punjab then for year 2000. Same is the case in the year 2008 as well. Considering the change / improvement then, Goa has improved a lot (79.06%) in the index. Delhi and Kerala are among the states where there is not much Improvement in terms of life expectancy. HI for India is 0.497 in the year 2000 and it has increased to 0.563 in the year 2008.

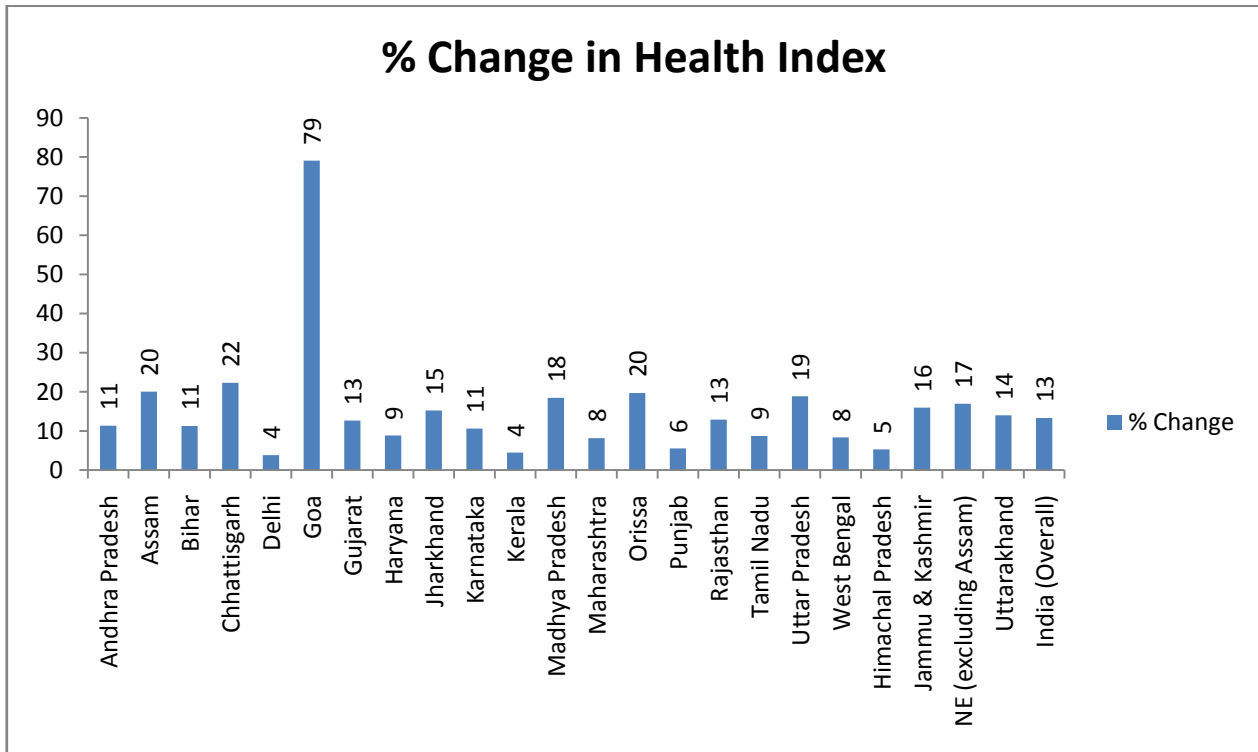


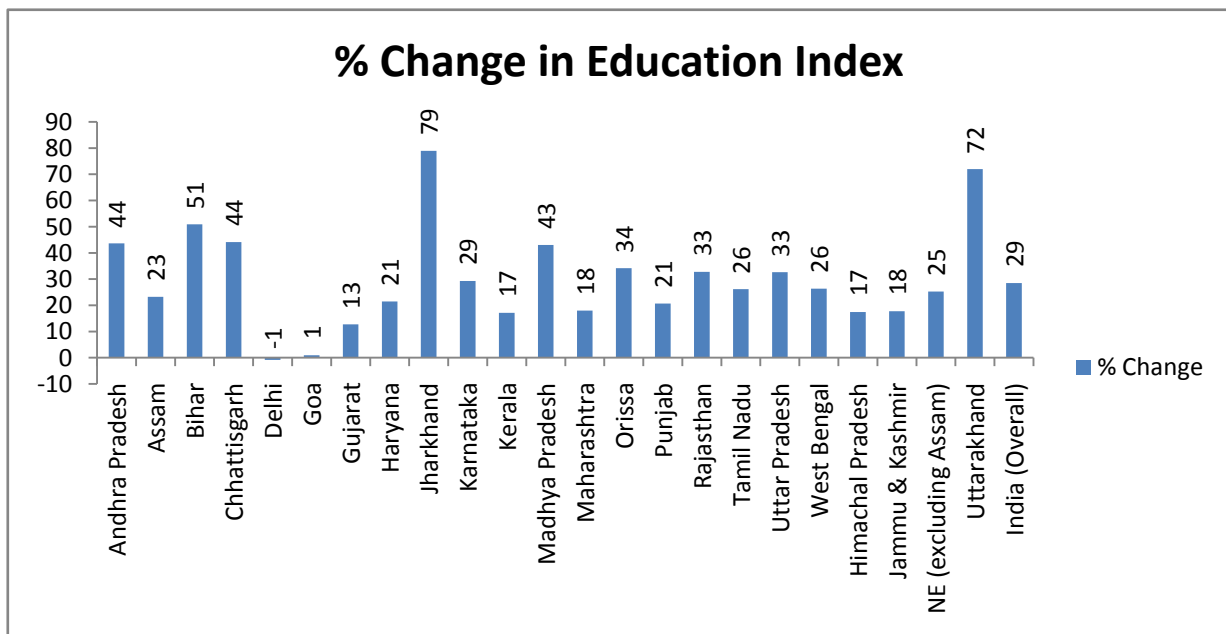
Table 2: Health Index (State wise Rank)

States	Health Index 2000	Health Index 2008
Andhra Pradesh	12	14
Assam	23	23
Bihar	14	15
Chhattisgarh	22	22
Delhi	2	2
Goa	20	6
Gujarat	11	10
Haryana	8	11
Jharkhand	17	18
Karnataka	9	11
Kerala	1	1
Madhya Pradesh	20	21
Maharashtra	5	6
Orissa	19	20
Punjab	4	4
Rajasthan	13	13
Tamil Nadu	7	9
Uttar Pradesh	18	19
West Bengal	6	6
Himachal Pradesh	3	3
Jammu & Kashmir	16	16
NE (excluding Assam)	9	5
Uttarakhand	15	16

Education Index

Table 3: Education Index (State wise)

States	Education Index 2000	Education Index 2008
Andhra Pradesh	0.385	0.553
Assam	0.516	0.636
Bihar	0.271	0.409
Chhattisgarh	0.365	0.526
Delhi	0.816	0.809
Goa	0.751	0.758
Gujarat	0.512	0.577
Haryana	0.512	0.622
Jharkhand	0.271	0.485
Karnataka	0.468	0.605
Kerala	0.789	0.924
Madhya Pradesh	0.365	0.522
Maharashtra	0.606	0.715
Orissa	0.372	0.499
Punjab	0.542	0.654
Rajasthan	0.348	0.462
Tamil Nadu	0.57	0.719
Uttar Pradesh	0.371	0.492
West Bengal	0.455	0.575
Himachal Pradesh	0.636	0.747
Jammu & Kashmir	0.507	0.597
NE (excluding Assam)	0.535	0.67
Uttarakhand	0.371	0.638
India (Overall)	0.442	0.568



As shown in above table of education index, it is clear that Delhi scores highest (0.816) on education index in the year 2000. While in 2008 Kerala has claimed top spot with Education index of 0.924. On the other hand Jharkhand and Bihar have lowest education index value of 0.271 in the year 2000. While in the year 2008 Bihar has the lowest education index of 0.409. Almost all states have improved on the education index from 2000 to 2008 except Delhi. Delhi has negative growth for education index. Goa is also having minor growth of less than 1%. Jharkhand and Uttarakhand has improved largely as their percentage change is above 70%.

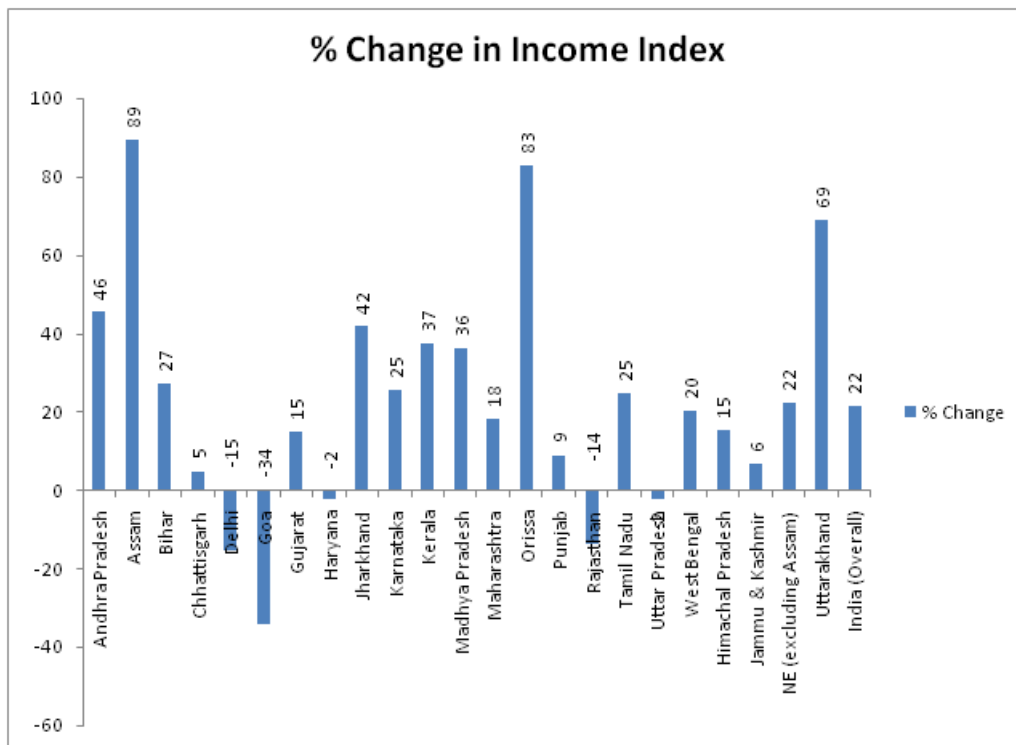
Table 4: Education Index (State wise Rank)

States	Education Index 2000	Education Index 2008
Andhra Pradesh	15	16
Assam	9	10
Bihar	22	23
Chhattisgarh	19	17
Delhi	1	2
Goa	3	3
Gujarat	10	14
Haryana	10	11
Jharkhand	22	21
Karnataka	13	12
Kerala	2	1
Madhya Pradesh	19	18
Maharashtra	5	6
Orissa	16	19
Punjab	7	8
Rajasthan	21	22
Tamil Nadu	6	5
Uttar Pradesh	17	20
West Bengal	14	15
Himachal Pradesh	4	4
Jammu & Kashmir	12	13
NE (excluding Assam)	8	7
Uttarakhand	17	9

INCOME INDEX

Table 5: Income Index (State wise)

States	Income Index 2000	Income Index 2008
Andhra Pradesh	0.197	0.287
Assam	0.152	0.288
Bihar	0.1	0.127
Chhattisgarh	0.127	0.133
Delhi	0.8	0.678
Goa	0.672	0.443
Gujarat	0.323	0.371
Haryana	0.417	0.408
Jharkhand	0.1	0.142
Karnataka	0.26	0.326
Kerala	0.458	0.629
Madhya Pradesh	0.127	0.173
Maharashtra	0.297	0.351
Orissa	0.076	0.139
Punjab	0.455	0.495
Rajasthan	0.293	0.253
Tamil Nadu	0.285	0.355
Uttar Pradesh	0.179	0.175
West Bengal	0.21	0.252
Himachal Pradesh	0.426	0.491
Jammu & Kashmir	0.431	0.459
NE (excluding Assam)	0.316	0.386
Uttarakhand	0.179	0.302
India (Overall)	0.223	0.271



It is inferred from the above table of income index, it is clear that Delhi scores highest 0.8 and 0.678 on income index in the year 2000 and 2008 respectively. On the other hand Orissa has 0.076 income index in 2000 and Bihar has 0.127 of income index in the year 2008 which is lowest among all. Almost all states have improved on the income index from 2000 to 2008 except Delhi, Goa, Haryana, Rajasthan and Uttar Pradesh. Goa has highest negative growth of 34% followed by Delhi with 15%. Assam is having highest growth of 89%.

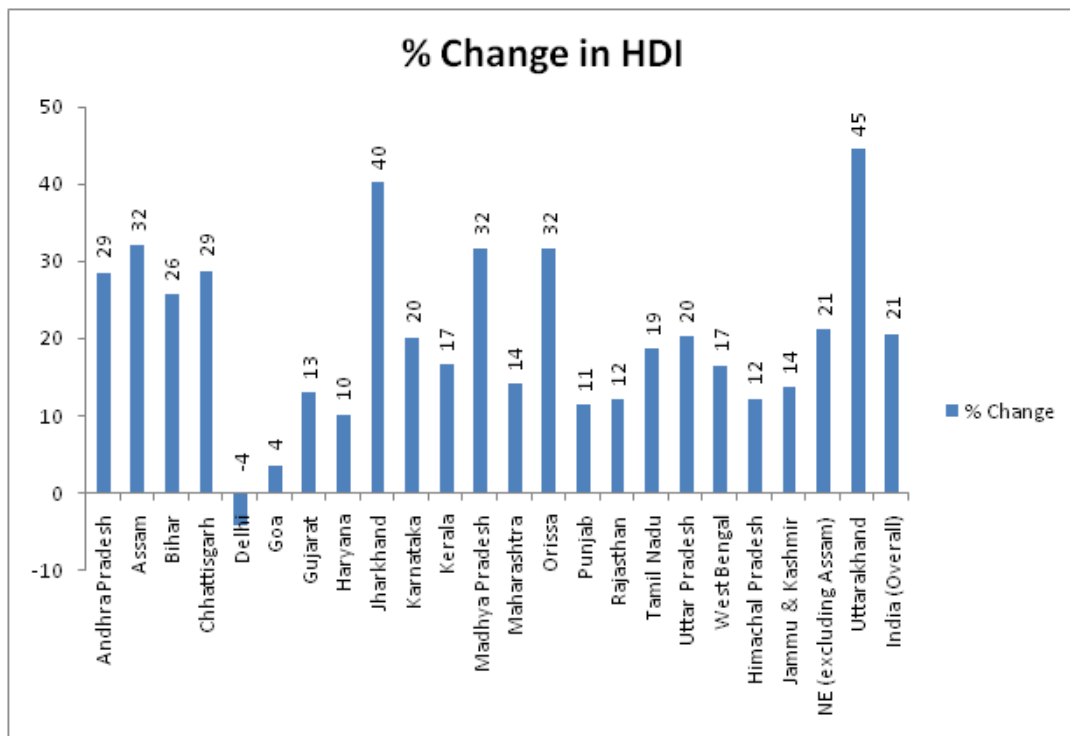
Table 6: Income Index (State wise Rank)

States	Income Index 2000	Income Index 2008
Andhra Pradesh	15	15
Assam	18	14
Bihar	21	23
Chhattisgarh	19	22
Delhi	1	1
Goa	2	6
Gujarat	8	9
Haryana	7	7
Jharkhand	21	20
Karnataka	13	12
Kerala	3	2
Madhya Pradesh	19	19
Maharashtra	10	11
Orissa	23	21
Punjab	4	3
Rajasthan	11	16
Tamil Nadu	12	10
Uttar Pradesh	16	18
West Bengal	14	17
Himachal Pradesh	6	4
Jammu & Kashmir	5	5
NE (excluding Assam)	9	8
Uttarakhand	16	13

HUMAN DEVELOPMENT INDEX

Table 7: HDI (State wise)

States	HDI 2000	HDI 2008
Andhra Pradesh	0.368	0.473
Assam	0.336	0.444
Bihar	0.292	0.367
Chhattisgarh	0.278	0.358
Delhi	0.783	0.75
Goa	0.595	0.617
Gujarat	0.466	0.527
Haryana	0.501	0.552
Jharkhand	0.268	0.376
Karnataka	0.432	0.519
Kerala	0.677	0.79
Madhya Pradesh	0.285	0.375
Maharashtra	0.501	0.572
Orissa	0.275	0.362
Punjab	0.543	0.605
Rajasthan	0.387	0.434
Tamil Nadu	0.48	0.57
Uttar Pradesh	0.316	0.38
West Bengal	0.422	0.492
Himachal Pradesh	0.581	0.652
Jammu & Kashmir	0.465	0.529
NE (excluding Assam)	0.473	0.573
Uttarakhand	0.339	0.49
India (Overall)	0.387	0.467



It is inferred from the above table of Human Development Index, it is clear that Delhi scores highest 0.783 in the year 2000 and Kerala (0.79) claimed top spot in 2008. On the other hand Jharkhand has 0.268 HDI in 2000 and Chhattisgarh has 0.358 of HDI in the year 2008 which is lowest among all. Almost all states have improved on the

overall HDI from 2000 to 2008 except Delhi. Delhi has negative growth of 4%. Uttarakhand has improved about 45% on HDI from the year 2000 to 2008.

Table 8 Income Index (State wise Rank)

States	HDI 2000	HDI 2008
Andhra Pradesh	15	15
Assam	17	16
Bihar	19	21
Chhattisgarh	21	23
Delhi	1	2
Goa	3	4
Gujarat	10	11
Haryana	6	9
Jharkhand	23	19
Karnataka	12	12
Kerala	2	1
Madhya Pradesh	20	20
Maharashtra	6	7
Orissa	22	22
Punjab	5	5
Rajasthan	14	17
Tamil Nadu	8	8
Uttar Pradesh	18	18
West Bengal	13	13
Himachal Pradesh	4	3
Jammu & Kashmir	11	10
NE (excluding Assam)	9	6
Uttarakhand	16	14

8. FINDINGS

- Kerala is at top for Health Index in 2000 as well as in 2008.
- Assam is having lowest Health Index in both 2000 and 2008.
- Goa has improvement of about 80% in Health Index from 2000 to 2008.
- Delhi was at the top in Education Index in 2000. While Kerala claimed top spot in Education Index in 2008.
- Bihar and Jharkhand were both at the bottom in Education Index in the year 2000. In 2008 Bihar was at the bottom.
- Delhi is having negative growth in Education Index which is about 1%. Still Delhi claimed 2nd spot.
- Delhi is at top for Income Index in 2000 as well as in 2008.
- Orissa and Bihar are at the bottom for Income Index in the year 2000 and 2008 respectively.
- Though Delhi is at the top, Delhi has negative growth of about 15% from 2000 to 2008.
- Goa has highest negative growth in Income Index from 2000 to 2008.
- Delhi and Kerala are at the top in overall HDI in year 2000 and 2008 respectively.

9. CONCLUSION

- Finally several states have good health index and highest ranked like Kerala then Punjab, Maharashtra. Some states have good education index and highest ranked like Himachal Pradesh has taken highest rank, Tamil Nadu then Kerala. Some states have good income index and highest ranking like Haryana, Maharashtra, and then Gujarat.

- But some states have lowest health index and lowest ranked Madhya Pradesh, Andhra Pradesh, Assam then Bihar. Some states have lowest education index and lowest ranked Rajasthan, Bihar, Jharkhand, Assam then Bihar. Some states have lowest income index and lowest ranked Madhya Jharkhand, Assam then Bihar.

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