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Beyond HDI
A Framework for Characterising Human Development with Application to India

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Abstract

In this paper, we development a framework for characterising human development in the three-dimensional space of individual capacity, individual knowledge and individual standard of living. The framework is based on the profiling of human development in the three-dimensional space and the inequality or the disparity in progrerss in the three core dimensions of human development. The framework can be used to understand the dynamics of human development. It can also be used for setting priorities for investment in human development to maximise the impact of the investment on human progress. Application of the framework to India highlights the variation in the dynamics of human development within India, across states/Union Territories and across districts in terms of both human development profile and inequality in human progress across three core dimensions of human development. The variation in the dynamics of human development within the country calls for a decentralised approach for planning and programming human development activities and for prioritising investment in human development.

Introduction

The human development index (HDI) is the universally accepted index to measure and monitor human development. HDI reflects development in the three core dimensions of human development – individual capacity, individual knowledge, and individual standard of living. Macro indicators are used to measure the development in the three dimensions of human development. These indicators have evolved over time since 1990 when HDI was first used to rank countries in terms of human development (United Nations, 1990). The HDI in the first Human Development Report prepared by the United Nations was based on an index of health to measure the development in individual capacity, an index of education to measure the development in individual knowledge and an index of income to measure the development in the standard of living. The index of health was based on the life expectancy at birth, the index of education was based on the adult literacy rate, while the index of income was based on the gross national product per capita (United Nations, 1990). Since 2010, United Nations estimates HDI based on four indicators – life expectancy at birth to construct the health index, mean years of schooling and expected years of schooling to construct the education index and gross national income per capita in terms of purchasing power parity to construct the income index (United Nations, 2010). The construction of the three indexes involves setting of goal posts for the minimum and maximum possible values of the four macro indicators and normalisation so that all the three indexes range between 0 and 1. The normalised indexes are then combined into HDI through an aggregation function which has also evolved over time. Initially, the arithmetic mean was used as the aggregation function in the construction of HDI. However, since 2010, United Nations uses the geometric mean as the aggregation function to construct HDI because of the concerns raised in using the arithmetic mean as the aggregation function (Desai, 1991; Klugman et al, 2011; Kovacevic, 2010). There are also problems in using the geometric mean as the aggregation function in the construction of HDI (Anand, 2018). Other aggregation functions have also been suggested to construct HDI (Chaurasia, 2022; Mishra and Nathan, 2018). It may, however, be noted that HDI is sensitive to the aggregation function used for aggregating health index, education index and income index. For the same set of health, education and income indexes, HDI is the highest when the arithmetic mean is used as the aggregation function but the lowest when the product is used as the aggregation function (Sagar and Najam, 1998).

The HDI is a composite index and, therefore, it has major limitations in characterising human development. HDI is a number that corresponds to a set of three numbers - health index, education index, and income index. There is always loss of some information in using a number to reflect a set of numbers or using a scalar to reflect a vector (Chaurasia, 2024). There is, however, no way of capturing the entire wealth of information embodied in a set of numbers (a vector) through one number (a scalar) (Anand and Sen, 1994). This means that HDI hides more than what it reveals. HDI tells little about the three indexes on which it is based. It is possible that more than one set of the three indexes has the same HDI. In other words, many combinations of the three indexes that constitute HDI may have the same HDI. Since human development is a multi-dimensional construct, it is obvious that HDI cannot characterise human development in its true perspective. The characterisation of human development is, however, important for understanding the dynamics of human development which is necessary for prioritising investment in human development. A population which has a high health index, but a low education index will require increased investment in the knowledge dimension of human development whereas a population which has a high education index, but a low health index will require increased investment in the individual capacity dimension of human development to maximise the impact of the investment on human development. The HDI, because of it very construction, cannot contribute to understanding the dynamics of human development and to prioritising the investment in human development. It is imperative for human development planning and programming to go beyond HDI for characterising or profiling human development for better understanding of the dynamics of human development. To the best of our knowledge, there is little attempt in this direction. Measuring and monitoring of human development has generally been limited to constructing and calculating HDI and ranking populations based on HDI. Measuring and monitoring of human development and ranking populations in terms of HDI is, however, imperfect. It is only at the extremities that the increase in HDI implies increase in the three indexes that constitute HDI in the same proportion. HDI increases even if one of the three indexes increases but the other two remain unchanged. The HDI may also increase even if there is a decrease in one of the indexes but an increase in the other indexes that constitute HDI.

In this paper, we develop an analytical framework for characterising human development on the three-dimensional space of individual capacity, individual knowledge and individual standard of living in terms of human development profiles and inequality in development in the three dimensions of human development. We also apply the framework to characterise human development in India and in its states/Union Territories and districts of India. The characterisation of human development following the proposed analytical framework may contribute to more effective planning and programming for human development in the country. Human development matters for India as India ranked 134 out of 193 countries of the world in 2022 according to the estimates prepared by the United Nations (2024) and there is marked variation in HDI across states/Union Territories and districts of the country. An accelerated progress in human development remains a matter of aggrandisement for the country. Characterising human development is the first step towards prioritising investment in different dimensions of human development.

The paper is divided into four sections including this introduction. The next section of the paper presents the conceptual framework and the methodology for characterising or profiling human development in the three-dimensional space of individual capacity, individual knowledge and individual standard of living using the fuzzy logic. The third section characterises or profiles human development in states/Union Territories and districts of the country using the data available from the latest (2019-2021) round of the National Family Health Survey (NFHS) (Government of India, 2022) to highlight how human development varies across states/Union Territories and districts of the country. The characterisation of human development through the application of the fuzzy set theory also allows anticipation of the variation in the constellations and trajectories of human development across and within states/Union Territories and districts which has implications for planning and programming for human development. The fourth and the last section of the paper summarises the key findings of the analysis and discusses their relevance for accelerating human progress in the country.

A Framework for Characterising Human Development

In its core formulation, human development is represented on the three-dimensional space of individual capacity, individual knowledge and individual standard of living or a set of three elements that reflect, respectively, expanding individual capacity, enhancing individual knowledge and improving individual standard of living. The characterisation of human development on the three-dimensional space is challenging as the development or the progress in the three core dimensions of human development may be uneven within a population and across populations. The progress in, say, individual capacity dimension of human development in a population may be fairly advanced but the progress in other dimensions, say, individual standard of living dimension may be lagging. Similarly, rank of the population in one dimension of human development may be different from the rank in other dimensions. This implies that classifying human development on the three-dimensional space is fuzzy because different dimensions of human development may lead to different classification of the same population. The commonly followed approach to address the problem of fuzziness is to construct a composite measure of human development that aggregates the development or progress in the three dimensions of human development through some aggregation function, as is the case with HDI. However, the composite measure, by its construction, tells little about the variation in development or progress in different dimensions of human development in the population and, therefore, contributes little to characterising human development in the population.

One approach to addressing the fuzziness of the set that characterises human development is to establish some relationship in progress in the three dimensions of human development to construct categories or profiles of human development that are mutually exclusive, yet exhaustive in the context of the relationship under consideration. One such relationship that may serve as the basis for profiling human development is the relative ordering of the progress in the three core dimensions of human development from relatively the best progress to relatively the poorest progress. If the progress in the individual capacity dimension of human development is measured in terms of the index H ($0 \leq H \leq 1$); development in the individual knowledge dimension of human development is measured in terms of the index E ($0 \leq E \leq 1$); and the development in the standard of living dimension of human development is measured in terms of the index I ($0 \leq I \leq 1$), then the following 12 mutually exclusive yet exhaustive categories or profiles of human development is possible (Table 1):

Table 1: Possible profiles of human development in the population.

Profile 1:	H=E>I	Profile 5:	H>I>E	Profile 9:	I=H>E
Profile 2:	I>H=E	Profile 6:	E>H=I	Profile 10:	I>H>E
Profile 3:	H>E=I	Profile 7:	E>H>I	Profile 11:	I>E>H
Profile 4:	H>E>I	Profile 8:	E>I>H	Profile 12:	H=E=I

Source: Author

It is obvious that, based on the values of H, E and I, any population can be classified into one and only one of the 12 mutually exclusive and exhaustive human development categories or profiles so that the problem of fuzziness inherent in the conceptualisation of human development is addressed. An advantage of profiling human development according to table 1 is that this profiling also reflects the imbalance in human development as reflected through differential progress in the three dimensions of human development. It may be noted from table 1 that all but one of the 12 possible mutually exclusive yet exhaustive human development categories or profiles reflect the unevenness or the disparity in progress in the three dimensions of human development. There is no imbalance in human development when the development or the progress in different dimensions of human development is the same irrespective of the level of development or progress in three dimensions and this is the case when H=E=I. The remaining 11 human development profiles identified in table 1 reflect the imbalance in human development in different possible ways and serve an important aspect of characterising human development.

Profiling of human development according to table 1, however, is silent about the extent or the quantum of variation in the development or the progress in the three dimensions of human development. It is obvious that the larger the variation the larger the imbalance in the development or the progress in different dimensions of human development in the same population. It is also obvious that populations having the same human development profile as categorised in table 1 may differ each other in terms of the variation in the development or the progress in the three dimensions of development or in terms of the extent or the degree of imbalance in human development. In other words, human development in a population may also be classified in terms of the disparity in development or progress in the three dimensions of human development or in terms of human development. The human development inequality also reflects the magnitude of the imbalance in human development. This characterisation provides the impetus for reducing and ultimately eliminating the imbalance in the development or the progress in different dimensions of human development and setting up priorities for investment in different human development interventions and activities.

The disparity in the development or the progress in different dimensions of human development in a population can be quantified in many ways. Perhaps, the simplest and the most appealing is the difference between the arithmetic mean (AM) and the geometric mean (GM) of the three indexes H, E and I which reflect, respectively, the development or the progress in individual capacity, individual knowledge and individual standard of living dimensions of human development. It is well-known that the geometric mean of any set numbers is equal to the arithmetic mean of the numbers only when all numbers in the set are the same. If the numbers in the set are not the same, then the geometric mean of the set of numbers is always less than their arithmetic mean and the larger the difference or variation in the numbers in the set, the larger the difference in the arithmetic mean and the geometric mean. Since, by construct, the three indexes H, E and I range between 0 and 1, the arithmetic mean as well as the geometric mean of the three indexes also range between 0 and 1. Therefore, the difference between the arithmetic mean and the geometric mean of the three indexes is always bounded from the above by 1 and bounded from the below by 0. More specifically, if H_j, E_j, and I_j denote, respectively, the development or the progress in individual capacity, individual knowledge and individual standard of living in population j, then the human development inequality, D_j, in population j or the disparity in the development or the progress in different dimensions of human development in the population may be calculated as

$$D_j = \text{AM}(H_j, E_j, I_j)\text{-GM}(H_j, E_j, I_j)$$

The analytical framework described above characterises human development following the conceptual framework used for the construction of HDI or similar other variants of HDI. The framework facilitates better understanding of the dynamics of human development and, therefore, contributes to human development or human progress through focussed interventions and investments. The classification of human development in populations as very low, low, medium, high, and very high in terms of HDI or ranking populations according to HDI contributes little to understanding the dynamics of human development in different populations. At the best, the classification and ranking of populations in terms of HDI calls for exploring further the dynamics of human development. The characterisation proposed above provides an operational framework that helps in understanding the dynamics of human development in different populations and, therefore, contributes to advancing human development through focussed investment in those dimensions of human development which lag relative to other dimensions. The proposed characterisation may also contribute to monitoring human development towards the ultimate goal of balanced human development. It is obvious that all efforts and investments in human development should ensure enhancing individual capacity, advancing individual knowledge and improving individual standard of living in such a manner that the human development profile of any population should transit to the ultimate human development profile H=E=I which also implies that there is no imbalance in human development or the disparity in in development in different dimensions of human development.

Characterisation of Human Development in India

We have applied the above analytical framework to characterise human development in the states/Union Territories and districts of India. Estimates of the four indicators used by United Nations to construct HDI are, however, not available for the districts of the country. Chaurasia (2023) has used a different set of indicators - 1) probability of survival in the first five years of life (HE), 2) secondary school net attendance ratio (ED), defined as the proportion of secondary school age children attending a secondary school (Croft et al, 2018), and 3) proportion of individuals having wealth index equal to or more than the second quintile of the inter-household distribution of the wealth index (SL), a composite measure of the cumulative living standard of a household which is calculated using data on household ownership of selected assets; materials used for housing construction and types of water access and sanitation facilities (Rutstein and Johnson, 2004) - to measure human development in 707 districts of the country as they existed at the time of the latest (2019-2021) round of the National Family Health Survey (NFHS). The three proportions have been combined into the composite index of human development following the human development surface approach to construct the surface measure of human development (HDS) (Chaurasia, 2022). The probability of survival in the first five years of life (HE) reflects the progress in the individual capacity dimension of human development. It is directly related to the life expectancy at birth which is used by the United Nations to measure progress in individual capacity. The proportion of secondary school age children attending a secondary school (ED) reflects the progress in the individual knowledge dimension of human development. Finally, the proportion of individuals having wealth index equal to or more than the second quartile of the inter-household distribution of the wealth index (SL) reflects the progress in the individual standard of living dimension of human development. All the three indicators are proportion indicators which have advantages over the average indicators that are used by the United Nations for the construction of the index of human development (Chaurasia, 2023). We have first constructed the three indexes H, E and I from the proportions HE, ED and SL respectively as follows:

$$H = \frac{(HE - 0.85)}{(1.00 - 0.85)}$$

$$E = \frac{(ED - 0.35)}{(1.00 - 0.35)}$$

$$I = SL$$

Based on the indexes H, E and I, we have then classified 36 states and Union Territories and 707 districts of the country into one of the 12 human development profiles and calculated the human development inequality or the disparity in progress in the three dimensions of human development in each state/Union Territory and district. Table 2 presents the characterisation of states and Union Territories of the country in terms of human development profile and human development inequality. In 28 states/Union Territories of the country, human development is characterised by the profile H>E>I. In these states, the progress is relatively the most advanced in the individual capacity dimension of human development but relatively the slowest in the individual standard of living dimension. In four states/Union Territories – Haryana, Goa, Puducherry and Gujarat – human development is characterised by the profile H>I>E which means that the progress is relatively the most advanced in the individual capacity dimension but relatively the slowest in the individual knowledge dimension. Finally, in Lakshadweep, Punjab, National Capital Territory of Delhi and Chandigarh, human development is characterised by the profile I>H>E which means that the progress is the most advanced in the individual standard of living dimension but the slowest in the individual knowledge dimension of human development. In other words, in 32 states/Union Territories, the progress is relatively the most advanced in the individual capacity dimension of human development whereas there are only four states/Union Territories where the progress is relatively the most advanced in the individual standard of living dimension. There is no state or Union Territory where the progress is relatively the most advanced in the individual knowledge dimension of human development.

Table 2: Characterisation of human development in states and Union Territories of India, 2019-2021.

State/Union Territory	Health index (H)	Education index (E)	Income index (I)	Human development		Surface measure of human development (HDS)
				Profile	Inequality	
Andaman & Nicobar Islands	0.840	0.730	0.510	H>E>I	0.014	0.683
Andhra Pradesh	0.770	0.660	0.440	H>E>I	0.016	0.611
Arunachal Pradesh	0.870	0.630	0.200	H>E>I	0.088	0.504
Assam	0.740	0.560	0.140	H>E>I	0.094	0.415
Bihar	0.620	0.470	0.160	H>E>I	0.059	0.376
Chandigarh	0.870	0.710	0.910	I>H>E	0.005	0.827
Chhattisgarh	0.660	0.620	0.280	H>E>I	0.036	0.495
Dadra & Nagar Haveli and Daman & Diu	0.750	0.490	0.410	H>E>I	0.019	0.536
Goa	0.930	0.790	0.870	H>I>E	0.002	0.862
Gujarat	0.750	0.470	0.520	H>I>E	0.012	0.571
Haryana	0.740	0.680	0.740	H>I>E	0.001	0.720
Himachal Pradesh	0.810	0.750	0.580	H>E>I	0.007	0.708
Jammu & Kashmir	0.880	0.720	0.520	H>E>I	0.015	0.695
Jharkhand	0.700	0.520	0.180	H>E>I	0.063	0.421
Karnataka	0.800	0.700	0.460	H>E>I	0.017	0.641
Kerala	0.970	0.840	0.770	H>E>I	0.004	0.857
Ladakh	0.800	0.760	0.290	H>E>I	0.056	0.577
Lakshadweep	0.800	0.790	0.830	I>H>E	0.000	0.807
Madhya Pradesh	0.670	0.510	0.300	H>E>I	0.025	0.475
Maharashtra	0.810	0.720	0.540	H>E>I	0.010	0.683
Manipur	0.800	0.700	0.250	H>E>I	0.064	0.538
Meghalaya	0.730	0.480	0.140	H>E>I	0.085	0.390
Mizoram	0.840	0.670	0.550	H>E>I	0.010	0.679
Nagaland	0.780	0.610	0.230	H>E>I	0.063	0.496
National Capital Territory of Delhi	0.800	0.700	0.880	I>H>E	0.003	0.791
Odisha	0.730	0.550	0.210	H>E>I	0.056	0.455
Puducherry	0.970	0.670	0.760	H>I>E	0.010	0.793
Punjab	0.780	0.670	0.820	I>H>E	0.003	0.755
Rajasthan	0.750	0.580	0.440	H>E>I	0.014	0.580
Sikkim	0.930	0.790	0.440	H>E>I	0.034	0.695
Tamil Nadu	0.850	0.670	0.540	H>E>I	0.012	0.678
Telangana	0.800	0.690	0.500	H>E>I	0.013	0.654
Tripura	0.710	0.710	0.130	H>E>I	0.112	0.439
Uttar Pradesh	0.600	0.410	0.340	H>E>I	0.013	0.440
Uttarakhand	0.700	0.620	0.560	H>E>I	0.003	0.625
West Bengal	0.830	0.600	0.220	H>E>I	0.073	0.499

Source: Author.

Remark: The surface measure of human development (HDS) is calculated as

$$HDS = \frac{\sqrt{H \times E} + \sqrt{E \times I} + \sqrt{I \times H}}{3}$$

The HDS takes into consideration the correlation that exists among the three dimensions of human development. The rationale and the construction of HDS as a measure of human development are discussed in Chaurasia (2022).

The human development inequality or the disparity in progress in the three dimensions of human development also varies across states/Union Territories. This disparity is the highest in Tripura but the lowest in Lakshadweep. The human development inequality is also quite marked in Arunachal Pradesh, Assam, Meghalaya and West Bengal. A high human development inequality indicates that the imbalance in the progress in different dimensions of human development is quite marked and is a matter of concern. The surface measure of human development in these states is found to be very low with the lowest in Meghalaya. In contrast, there are eight states/Union Territories, where the inequality in progress in the three dimensions of human development is very low which implies that the progress in the three dimensions of human development in these states and Union Territories is nearly balanced. In all these states/Union Territories, the surface measure of human development is more than 0.740. This means that reducing the imbalance in human development or the disparity in progress in the three dimensions of human development can contribute significantly to advancing human development in these states. Human development in Tripura, Meghalaya, Assam and Arunachal Pradesh is characterised by H>E>I which means that investment in improving the individual standard of living may be critical for advancing human development in these states. In Tripura, just around 13 per cent of the households have wealth index equal to or higher than the second quintile of the intra-household distribution of wealth index. The corresponding proportion of Meghalaya, Assam and Arunachal Pradesh is 13.9 per cent, 13.8 per cent and 20.2 per cent respectively. The very marked imbalance in human development in these states is apparently due to relatively very slow progress in the standard of living of the people of these states.

It may also be seen from table 2 that out of the eight states/Union Territories where human development is very advanced and there is a near balance in the progress in the three dimensions of human development, the progress in relatively the slowest in the individual knowledge dimension in five states/Union Territories - Chandigarh, Goa, Haryana, National Capital Territory of Delhi and Punjab. Advancing human development further in these states/Union Territories requires additional investments in enhancing individual knowledge. On the other hand, in Himachal Pradesh, Kerala and Uttarakhand, the progress is relatively the slowest in the individual standard of living dimension of human development. In these states, additional investment is required in improving the standard of living of the people. Obviously, priorities for advancing human development is different in different states and Union Territories of the country. Since, there may be a shift in the human development profile of a state over time, the priorities for advancing human development keep on changing over time.

We have also characterised human development in 707 districts of the country as they existed at the time of National Family Health Survey 2019-2021. The human development profile of each district along with the human development inequality and the surface measure of human development (HDS) is given in the appendix table. The 707 districts of the country can be categorised into eight human development profiles as depicted in figure 1. There is only one district – district Mahe in Puducherry – where H=E=I which means that the human development inequality in the district is zero. In addition, there are four districts – Upper Siang and Lower Dibang Valley in Arunachal Pradesh, Kozhikode in Kerala, and Lakshadweep in Lakshadweep – where E=H>I. In another 43 districts, I>H>E whereas in 54 districts, E>I>H. Moreover, there are 63 districts in the country where I>E>H; 73 districts where H>I>E; 214 districts where E>H>I; and 255 districts where H.E>I. The distribution of districts by human development profiles suggests that in 473 or around two-third districts of the country, the index of individual standard of living (I) is relatively the lowest amongst the three indexes reflecting development in the three dimensions of human development. On the other hand, the index of individual capacity (H) is relatively the lowest in 117 or around 16 per cent districts whereas the index of individual knowledge is also relatively the lowest in 116 or around 16 per cent districts. The classification of districts by the human development profiles suggests that the major challenge to advancing human development in most of the districts of the country is the improvement in the individual standard of living, although there are districts, where expanding the individual capacity and enhancing the individual knowledge remains major challenge to human progress.

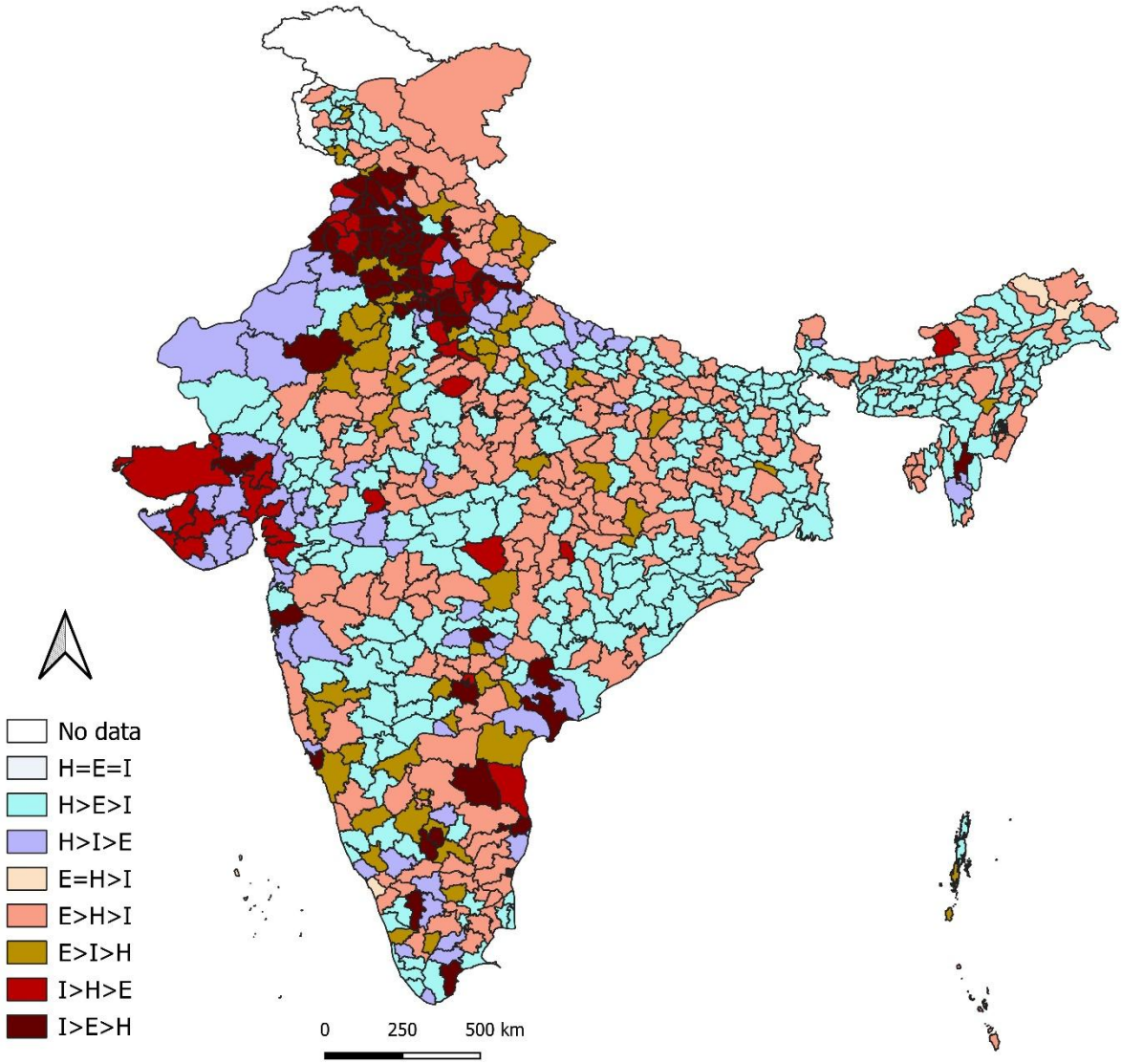

Figure 1: The distribution of human development profiles across 707 districts of India, 2019-2021.
Source: Author.

Table 3 gives the distribution of districts across states/Union Territories by the profile of human development to which the district belongs. In all districts of Assam, Jharkhand, Manipur, Meghalaya and Odisha, the progress in the individual standard of living dimension of human development is relatively the slowest among the three dimensions of human development. In Arunachal Pradesh, Bihar, Chhattisgarh, Jammu & Kashmir, Kerala, Nagaland, and West Bengal also, the progress in the individual standard of living dimension of human development is relatively the slowest in all but a few districts. On the other hand, the progress in the individual knowledge dimension of human development is relatively the slowest in 26 of the 33 districts of Gujarat whereas the progress in the individual capacity dimension of human development is found to be relatively the slowest in 20 of the 22 districts in Haryana, 15 of 22 districts in Himachal Pradsh and 14 of 22 districts of Punjab. There are only 6 states/Union Territories where there is no district in which the progress in the individual standard of living dimensions is relatively the slowest.

Table 3: Distribution of 707 districts by human development profile in India and states/Union Territories, 2019-2021.

State/Union Territory	Human development profile								Total
	H=E=I	H>E>I	H>I>E	E=H>I	E>H>I	E>I>H	I>H>E	I>E>H	
Andaman & Nicobar Islands	0	1	0	0	1	1	0	0	3
Andhra Pradesh	0	1	2	0	6	1	1	2	13
Arunachal Pradesh	0	11	0	2	6	0	1	0	20
Assam	0	20	0	0	13	0	0	0	33
Bihar	0	19	0	0	18	1	0	0	38
Chandigarh	0	0	0	0	0	0	1	0	1
Chhattisgarh	0	10	0	0	14	2	1	0	27
Dadra & Nagar Haveli and Danan & Diu	0	0	0	0	0	0	5	6	11
Goa	0	1	1	0	0	0	1	0	3
Gujarat	0	0	1	0	0	0	0	1	2
Haryana	0	6	15	0	0	0	11	1	33
Himachal Pradesh	0	0	2	0	0	5	0	15	22
Jammu & Kashmir	0	1	1	0	5	1	1	3	12
Jharkhand	0	12	0	0	5	3	0	0	20
Karnataka	0	11	0	0	13	0	0	0	24
Kerala	0	13	2	0	6	7	0	2	30
Ladakh	0	7	2	1	3	1	0	0	14
Lakshadweep	0	0	0	0	2	0	0	0	2
Madhya Pradesh	0	0	0	1	0	0	0	0	1
Maharashtra	0	23	5	0	20	1	2	0	51
Manipur	0	13	2	0	14	3	1	3	36
Meghalaya	0	3	0	0	6	0	0	0	9
Mizoram	0	9	0	0	2	0	0	0	11
Nagaland	0	4	2	0	1	0	0	1	8
National Capital Territory of Delhi	0	7	0	0	3	1	0	0	11
Odisha	0	20	0	0	10	0	0	0	30
Puducherry	1	0	2	0	0	0	1	0	4
Punjab	0	0	2	0	0	1	6	13	22
Rajasthan	0	11	5	0	10	6	0	1	33
Sikkim	0	1	1	0	2	0	0	0	4
Tamil Nadu	0	5	7	0	14	3	0	3	32
Telangana	0	7	6	0	7	6	1	4	31
Tripura	0	2	0	0	6	0	0	0	8
Uttar Pradesh	0	23	12	0	16	8	10	6	75
Uttarakhand	0	0	2	0	7	2	0	2	13
West Bengal	0	14	1	0	4	1	0	0	20
India	1	255	73	4	214	54	43	63	707

Source: Author

The inequality in progress in different dimensions of human development, measured in terms of the difference between the arithmetic mean and the geometric mean of the indexes H, E and I, also different in different districts (Figure 2). In 238 (34 per cent) districts, the human development inequality is very low whereas in another 92 (13 per cent) districts, it is low. On the other hand, there are 102 (14 per cent) districts, the human development inequality is very high and in 143 (20 per cent) districts, it is high. District Mahe in Puducherry is the only district in the country where there is no inequality in progress in the three dimensions of human development. On the other hand, the human development inequality is the highest in district Anjaw of Arunachal Pradesh. There are only around 18 per cent households in this district with a wealth index at least second quintile of intra-household distribution of the wealth index.

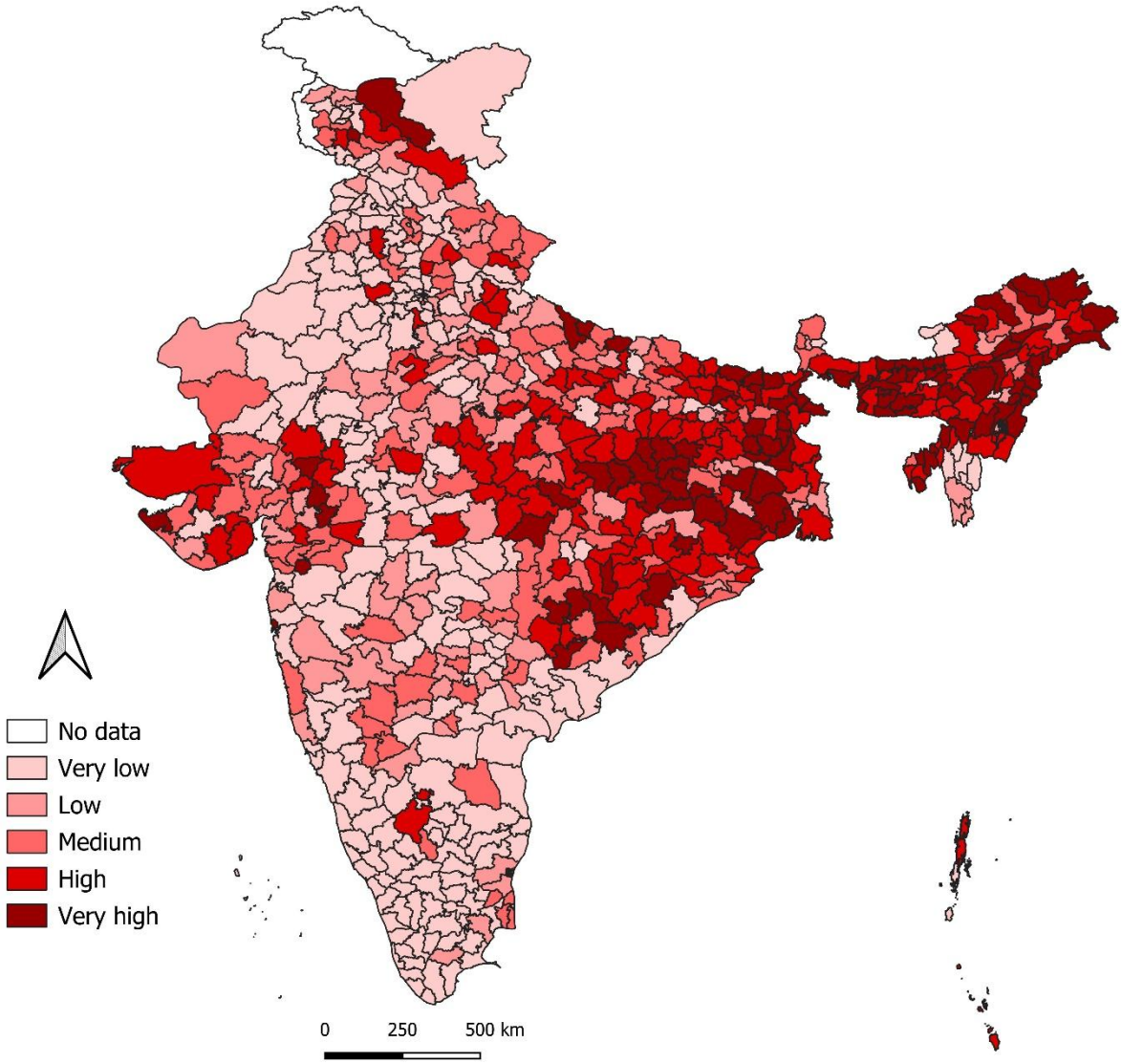

Figure 2: Human development inequality across the districts of India, 2019-2021.
Source: Author

Figure 2 also shows clustering of districts where the inequality in the progress in the three dimensions of human development is above the average. The human development inequality appears to be relatively high in the districts in the eastern parts of the country including all northeastern states, except Mizoram, and in Gujarat. In Gujarat, there are only 9 out of 33 districts where the human development inequality is either low or very low. The human development inequality is either high or very high in all districts of Meghalaya; in 7 of 9 districts in Manipur; in 30 of 33 districts in Assam, in 8 of 11 districts in Nagaland; in 14 of 20 districts in Arunachal Pradesh; in 29 of 38 districts in Bihar; in 19 of 24 districts in Jharkhand; and in 19 of 30 districts in West Bengal (Table 4). In Andhra Pradesh, Kerala, Mizoram, National Capital Territory of Delhi, Tamil Nadu and Telangana, there is no district where the human development inequality or the disparity in progress in different dimensions of human development in found to be either high or very high. Kerala is the only state in the country where the disparity in the progress in different dimensions of human

development is found to be very low in all districts. In Haryana, human development inequality is found to be very low in 16 of the 22 districts. In Punjab, human development inequality is found to be very low in 15 of 22 districts. Similarly, the human development inequality is found to be very low in 25 of 32 districts in Tamil Nadu. A low or very low human development inequality or the disparity in progress in different dimensions of human development, as measured by the difference between the arithmetic mean and the geometric mean of indexes H, E and I, indicates nearly balance human development irrespective of the level of human development. The human development inequality, however, varies across the districts having the same human development profile and the surface measure of human development (HDS) also varies across districts.

Table 4: Distribution of 707 districts across states and Union Territories by human development inequality or the disparity in progress in different dimensions of human development.

	No inequality	Very low	Low	Medium	High	Very high	Total
Andaman & Nicobar Islands	0	1	0	0	2	0	3
Andhra Pradesh	0	10	1	2	0	0	13
Arunachal Pradesh	0	2	1	3	5	9	20
Assam	0	1	0	2	12	18	33
Bihar	0	1	2	6	22	7	38
Chandigarh	0	1	0	0	0	0	1
Chhattisgarh	0	2	1	7	9	8	27
Dadra & Nagar Haveli and Danan & Diu	0	2	0	1	0	0	3
Goa	0	2	0	0	0	0	2
Gujarat	0	4	5	14	7	3	33
Haryana	0	16	2	2	2	0	22
Himachal Pradesh	0	7	3	1	1	0	12
Jammu & Kashmir	0	9	3	5	2	1	20
Jharkhand	0	0	2	3	5	14	24
Karnataka	0	20	2	7	1	0	30
Kerala	0	14	0	0	0	0	14
Ladakh	0	1	0	0	0	1	2
Lakshadweep	0	1	0	0	0	0	1
Madhya Pradesh	0	16	6	9	17	3	51
Maharashtra	0	17	12	6	0	1	36
Manipur	0	0	2	0	4	3	9
Meghalaya	0	0	0	0	5	6	11
Mizoram	0	5	3	0	0	0	8
Nagaland	0	1	1	1	2	6	11
National Capital Territory of Delhi	0	8	1	2	0	0	11
Odisha	0	1	2	8	13	6	30
Puducherry	1	2	1	0	0	0	4
Punjab	0	15	4	2	1	0	22
Rajasthan	0	17	7	4	4	1	33
Sikkim	0	1	1	2	0	0	4
Tamil Nadu	0	25	4	3	0	0	32
Telangana	0	15	9	7	0	0	31
Tripura	0	0	0	1	3	4	8
Uttar Pradesh	0	16	13	26	17	3	75
Uttarakhand	0	3	2	5	3	0	13
West Bengal	0	2	2	2	6	8	20
India	1	238	92	131	143	102	707

Source: Author

Discussions and Conclusions

Since its introduction in 1990, the HDI and its different variants have been the mainstay of measuring and monitoring human development, although the conceptual and operational framework of HDI has been subject to frequent criticism. We have emphasised in this paper that HDI or its different variants by its very construction contributes little to planning and programming for human development and for prioritising investment in human development. The construction and estimation of HDI or its different variants has, therefore, largely remained an academic exercise and for ranking populations – the higher the HDI the more advanced human development. The HDI has rarely been used as the basis for prioritising investment in human development. Since 1990, United Nations ranks countries based on HDI. An improvement in HDI rank is a matter of aggrandisement for the country whereas a decrease in HDI is a matter of development concern. The HDI, however, informs little about how to prioritise investment in human development to maximise the impact of investment in advancing human development. There is, therefore, a need to go beyond the HDI or its many variants to facilitate the evidence-based planning and programming for human development and for maximising the impact of investment in human development. To the best of our knowledge, however, there has been little effort to develop an analytical framework using the conceptual basis of HDI to characterise human development in a population in a manner that helps in understanding the dynamics of human development that facilitates evidence-based planning and programming for advancing human development.

The analytical framework for capturing the dynamics of human development presented in this paper is an attempt in this direction. The framework characterises human development in terms of the profiles of human development profile by ordering the progress in the three dimensions that constitute human development and measuring the human development inequality or the disparity in progress in the three dimensions of human development. The analytical framework proposed here serves as the basis for the understanding the dynamics of human development in a systematic and articulate manner and may also serve as the basis for monitoring the progress in human development. Characterising human development following the analytical framework proposed here can also be a useful support to prioritising investment in human development as priorities for investment are different in different profiles of human development. By providing an understanding of the dynamics of human development, the analytical framework facilitates evidence-based planning and programming for human development activities to address the diversity in human development.

Application of the analytical framework to India and its constituent states/Union Territories and districts highlights the diversity in the dynamics of human development within the country. The states and Union Territories of the country can be characterised in only three of the 12 possible human development profiles and the human development inequality within states and Union Territories is different in different states/Union Territories. On the other hand, 707 districts of the country can be categorised in 8 human development categories and in more than two-third districts, the dynamics of human development is characterised by relatively the slowest progress in the individual standard of living dimension of human development. There are, however, districts where investment in human development needs to be directed towards expanding individual capacity and expanding individual knowledge. The variation in the dynamics of human development across the districts suggests that a decentralised district-based approach should be adopted in the country for advancing human development. in the country as reflected through the variation across districts in both human development profile and human development inequality or the disparity in development or progress in the three dimensions of human development. Human development movement in India has never been strong in India despite repeated commitments at the highest level of development policy. The country has produced only two official human development reports, one in 2001 and the other in 2011 (Government of India, 2002, 2011) but there is no institutionalised system within the development administration system of the country that measures and monitors human development on an annual basis either at national level or at sub-national and district level. Recently, a working paper has been issued by the

Government of India that provides estimates of HDI for selected states of the country for the period 2017-2018 (Government of India, *no date*). The Government of India had also launched two projects, one in 2010 and the other in 2015 to shift the orientation of the development planning process in the country towards human development (Government of India, 2010; 2015). However, human development has never been a priority in the development planning processes in the country. One reason probably and so obviously has been the limitation of HDI in characterising human development. The present paper is expected to address this limitation.

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Appendix Table: Characterisation of human development in 707 districts of India, 2019-2021.

State	District	H	E	I	Human development		HDS
					Profile	Inequality	
Andaman & Nicobar Islands	Nicobars	0.723	1.000	0.523	E>H>I	0.026	0.730
	North & Middle Andaman	0.956	0.860	0.526	H>E>I	0.024	0.763
	South Andaman	0.861	0.927	0.919	E>I>H	0.000	0.902
Andhra Pradesh	Srikakulam	0.863	0.923	0.676	E>H>I	0.007	0.815
	Vizianagaram	0.734	0.910	0.583	E>H>I	0.012	0.733
	Visakhapatnam	0.742	0.800	0.735	E>H>I	0.001	0.759
	East Godavari	0.849	0.810	0.762	H>E>I	0.001	0.807
	West Godavari	0.875	0.801	0.867	H>I>E	0.001	0.847
	Krishna	0.722	0.731	0.755	I>E>H	0.000	0.736
	Guntur	0.841	0.719	0.811	H>I>E	0.002	0.789
	Prakasam	0.687	0.799	0.788	E>I>H	0.002	0.757
	Sri Potti Sriramulu Nellore	0.668	0.650	0.785	I>H>E	0.002	0.699
	Y.S.R.	0.522	0.802	0.864	I>E>H	0.017	0.717
	Kurnool	0.695	0.699	0.649	E>H>I	0.000	0.681
	Anantapur	0.792	0.812	0.711	E>H>I	0.001	0.771
	Chittoor	0.802	0.841	0.768	E>H>I	0.001	0.803
Arunachal Pradesh	Tawang	0.992	1.000	0.824	E>H>I	0.004	0.936
	West Kameng	0.818	0.780	0.850	I>H>E	0.000	0.815
	East Kameng	0.710	0.780	0.358	E>H>I	0.033	0.592
	Papum Pare	0.990	0.829	0.686	H>E>I	0.009	0.828
	Upper Subansiri	0.968	0.692	0.192	H>E>I	0.112	0.538
	Upper Siang	1.000	1.000	0.367	E=H>I	0.073	0.737
	Changlang	1.000	0.890	0.350	H>E>I	0.069	0.698
	Lower Subansiri	0.918	0.780	0.534	H>E>I	0.018	0.731
	Dibang Valley	0.881	1.000	0.412	E>H>I	0.051	0.728
	Lower Dibang Valley	1.000	1.000	0.550	E=H>I	0.031	0.828
	Anjaw	0.880	1.000	0.179	E>H>I	0.146	0.586
	East Siang	1.000	0.808	0.584	H>E>I	0.019	0.783
	Kra Daadi	0.829	1.000	0.443	E>H>I	0.041	0.727
	Kurung Kumey	0.943	0.744	0.239	H>E>I	0.090	0.578
	Lohit	1.000	0.692	0.553	H>E>I	0.022	0.731
	Longding	1.000	0.615	0.162	H>E>I	0.129	0.501
	Namsai	0.902	0.615	0.233	H>E>I	0.078	0.527
	Siang	0.914	1.000	0.279	E>H>I	0.097	0.663
	Tirap	0.761	0.692	0.394	H>E>I	0.024	0.599
	West Siang	0.844	0.808	0.540	H>E>I	0.014	0.720
Assam	Kokrajhar	0.740	0.794	0.308	E>H>I	0.048	0.580
	Goalpara	0.796	0.692	0.251	H>E>I	0.063	0.535
	Barpeta	0.815	0.753	0.252	H>E>I	0.070	0.557
	Morigaon	0.653	0.668	0.214	E>H>I	0.058	0.471
	Lakhimpur	0.840	0.753	0.283	H>E>I	0.062	0.582
	Dhemaji	0.841	0.865	0.181	E>H>I	0.120	0.547
	Tinsukia	0.583	0.663	0.354	E>H>I	0.018	0.520
	Dibrugarh	0.846	0.595	0.413	H>E>I	0.026	0.599
	Golaghat	0.805	0.669	0.261	H>E>I	0.059	0.537
	Dima Hasao	0.937	0.732	0.392	H>E>I	0.042	0.657
	Cachar	0.833	0.622	0.259	H>E>I	0.059	0.529
	Karimganj	0.691	0.601	0.216	H>E>I	0.055	0.464

State	District	H	E	I	Human development		HDS
					Profile	Inequality	
	Hailakandi	0.318	0.644	0.203	E>H>I	0.042	0.356
	Bongaigaon	0.839	0.793	0.349	H>E>I	0.046	0.628
	Chirang	0.754	0.772	0.230	E>H>I	0.074	0.534
	Kamrup	0.881	0.739	0.411	H>E>I	0.033	0.653
	Kamrup Metropolitan	0.814	0.821	0.776	E>H>I	0.000	0.804
	Nalbari	0.915	0.765	0.329	H>E>I	0.057	0.629
	Baksa	0.810	0.753	0.190	H>E>I	0.097	0.517
	Darrang	0.825	0.673	0.232	H>E>I	0.072	0.526
	Udalguri	0.661	0.698	0.218	E>H>I	0.060	0.483
	Biswanath	0.525	0.704	0.251	E>H>I	0.041	0.464
	Charaideo	0.673	0.552	0.246	H>E>I	0.040	0.462
	Dhubri	0.750	0.696	0.214	H>E>I	0.072	0.503
	Hojai	0.807	0.772	0.361	H>E>I	0.039	0.619
	Jorhat	0.621	0.796	0.466	E>H>I	0.015	0.617
	Karbi Anglong	0.790	0.796	0.294	E>H>I	0.057	0.586
	Majuli	0.722	0.838	0.183	E>H>I	0.101	0.511
	Nagaon	0.574	0.593	0.243	E>H>I	0.034	0.445
	Sivasagar	0.861	0.692	0.463	H>E>I	0.021	0.657
	Sonitpur	0.725	0.604	0.320	H>E>I	0.030	0.528
	South Salmara Mancachar	0.873	0.615	0.113	H>E>I	0.141	0.437
	West Karbi Anglong	0.794	0.792	0.121	H>E>I	0.145	0.471
Bihar	Pashchim Champaran	0.374	0.473	0.220	E>H>I	0.017	0.343
	Purba Champaran	0.606	0.548	0.277	H>E>I	0.025	0.459
	Sheohar	0.570	0.627	0.207	E>H>I	0.048	0.434
	Sitamarhi	0.452	0.541	0.212	E>H>I	0.029	0.381
	Madhubani	0.702	0.600	0.220	H>E>I	0.055	0.468
	Supaul	0.712	0.445	0.081	H>E>I	0.118	0.331
	Araria	0.627	0.445	0.135	H>E>I	0.067	0.355
	Kishanganj	0.636	0.344	0.172	H>E>I	0.049	0.347
	Purnia	0.481	0.403	0.179	H>E>I	0.028	0.334
	Katihar	0.695	0.479	0.155	H>E>I	0.071	0.393
	Madhepura	0.650	0.450	0.101	H>E>I	0.091	0.337
	Saharsa	0.505	0.497	0.153	H>E>I	0.048	0.351
	Darbhanga	0.658	0.560	0.272	H>E>I	0.032	0.474
	Muzaffarpur	0.740	0.770	0.315	E>H>I	0.044	0.577
	Gopalganj	0.728	0.663	0.367	H>E>I	0.024	0.568
	Siwan	0.597	0.772	0.442	E>H>I	0.015	0.592
	Saran	0.603	0.692	0.358	E>H>I	0.020	0.536
	Vaishali	0.522	0.709	0.329	E>H>I	0.024	0.502
	Samastipur	0.611	0.643	0.174	E>H>I	0.067	0.429
	Begusarai	0.669	0.688	0.304	E>H>I	0.035	0.529
	Khagaria	0.666	0.578	0.247	H>E>I	0.041	0.468
	Bhagalpur	0.576	0.730	0.462	E>H>I	0.010	0.581
	Banka	0.731	0.672	0.239	H>E>I	0.058	0.507
	Munger	0.784	0.712	0.516	H>E>I	0.010	0.663
	Lakhisarai	0.750	0.666	0.377	H>E>I	0.024	0.580
	Sheikhpura	0.511	0.736	0.392	E>H>I	0.018	0.533
	Nalanda	0.669	0.608	0.446	H>E>I	0.008	0.568
	Patna	0.698	0.619	0.608	H>E>I	0.001	0.641

State	District	H	E	I	Human development		HDS
					Profile	Inequality	
	Bhojpur	0.755	0.756	0.456	E>H>I	0.017	0.643
	Buxar	0.601	0.727	0.466	E>H>I	0.010	0.591
	Kaimur (Bhabua)	0.490	0.714	0.300	E>H>I	0.030	0.479
	Rohtas	0.371	0.823	0.518	E>I>H	0.030	0.548
	Aurangabad	0.686	0.756	0.390	E>H>I	0.024	0.594
	Gaya	0.748	0.640	0.328	H>E>I	0.032	0.549
	Nawada	0.807	0.716	0.404	H>E>I	0.027	0.623
	Jamui	0.509	0.617	0.258	E>H>I	0.029	0.440
	Jehanabad	0.681	0.819	0.358	E>H>I	0.035	0.594
	Arwal	0.497	0.777	0.301	E>H>I	0.037	0.497
Chandigarh	Chandigarh	0.886	0.805	0.967	I>H>E	0.002	0.884
Chhattisgarh	Koriya	0.217	0.831	0.352	E>I>H	0.068	0.414
	Jashpur	0.675	0.684	0.146	E>H>I	0.094	0.437
	Raigarh	0.390	0.775	0.425	E>I>H	0.025	0.510
	Korba	0.484	0.641	0.463	E>H>I	0.006	0.525
	Janjgir - Champa	0.799	0.861	0.460	E>H>I	0.025	0.688
	Kabeerdham	0.833	0.824	0.504	H>E>I	0.018	0.707
	Rajnandgaon	0.648	0.871	0.550	E>H>I	0.012	0.680
	Mahasamund	0.760	0.678	0.404	H>E>I	0.021	0.598
	Dhamtari	0.906	0.859	0.618	H>E>I	0.011	0.786
	Uttar Bastar Kanker	0.853	0.895	0.342	E>H>I	0.058	0.655
	Narayanpur	0.744	0.457	0.217	H>E>I	0.053	0.433
	Bijapur	0.450	0.310	0.148	H>E>I	0.028	0.282
	Balod	0.944	0.945	0.573	E>H>I	0.021	0.805
	Baloda Bazar	0.677	0.711	0.467	E>H>I	0.010	0.611
	Balrampur	0.582	0.612	0.146	E>H>I	0.073	0.396
	Bastar	0.501	0.417	0.269	H>E>I	0.013	0.386
	Bemetara	0.768	0.797	0.527	E>H>I	0.012	0.689
	Bilaspur	0.696	0.712	0.474	E>H>I	0.010	0.620
	Dantewada	0.683	0.571	0.252	H>E>I	0.041	0.472
	Durg	0.858	0.796	0.867	I>H>E	0.001	0.840
	Gariyaband	0.682	0.730	0.348	E>H>I	0.029	0.565
	Kodagaon	0.583	0.595	0.169	E>H>I	0.061	0.406
	Mungeli	0.624	0.738	0.370	E>H>I	0.023	0.561
	Raipur	0.854	0.758	0.757	H>E>I	0.001	0.789
	Sukma	0.524	0.423	0.092	H>E>I	0.073	0.296
	Surajpur	0.771	0.752	0.228	H>E>I	0.074	0.531
	Surguja	0.565	0.703	0.254	E>H>I	0.042	0.477
Dadra & Nagar Haveli and	Diu	0.899	0.823	0.963	I>H>E	0.019	0.894
Daman and Diu	Daman	0.729	0.868	0.961	I>E>H	0.004	0.849
	Dadra & Nagar Haveli	0.857	0.849	0.960	I>H>E	0.004	0.888
Goa	North Goa	0.792	0.735	0.928	I>H>E	0.000	0.815
	South Goa	0.797	0.841	0.990	I>E>H	0.001	0.873
Gujarat	Kachchh	0.893	0.895	0.987	I>E>H	0.029	0.924
	Banas Kantha	0.673	0.798	0.987	I>E>H	0.016	0.812
	Patan	0.651	0.896	0.989	I>E>H	0.011	0.836
	Mahesana	0.897	0.888	0.972	I>H>E	0.003	0.919
	Gandhinagar	0.934	0.898	0.981	I>H>E	0.002	0.937
	Porbandar	0.754	0.825	0.969	I>E>H	0.016	0.846

State	District	H	E	I	Human development		HDS
					Profile	Inequality	
	Amreli	1.000	0.615	0.955	H>I>E	0.034	0.843
	Anand	0.717	0.692	0.867	I>H>E	0.006	0.756
	Dohad	0.669	0.530	0.520	H>E>I	0.076	0.570
	Narmada	1.000	0.946	0.966	H>I>E	0.026	0.971
	Bharuch	0.893	0.908	0.971	I>E>H	0.007	0.923
	The Dangs	0.745	0.405	0.821	I>H>E	0.067	0.636
	Navsari	0.663	0.355	0.479	H>I>E	0.010	0.487
	Valsad	0.401	0.447	0.648	I>E>H	0.003	0.491
	Surat	0.579	0.526	0.665	I>H>E	0.010	0.588
	Tapi	0.715	0.670	0.816	I>H>E	0.018	0.732
	Ahmadabad	0.880	0.567	0.896	I>H>E	0.013	0.769
	Aravali	0.868	0.410	0.781	H>I>E	0.012	0.662
	Bhavnagar	0.564	0.501	0.697	I>H>E	0.021	0.583
	Botad	0.823	0.376	0.184	H>E>I	0.042	0.403
	Chhota Udaipur	0.691	0.487	0.305	H>E>I	0.010	0.475
	Devbhumi Dwarka	0.649	0.497	0.711	I>H>E	0.121	0.614
	Gir Somnath	0.835	0.341	0.227	H>E>I	0.010	0.415
	Jamnagar	0.879	0.580	0.729	H>I>E	0.017	0.722
	Junagadh	0.847	0.700	0.725	H>I>E	0.008	0.755
	Kheda	0.827	0.598	0.870	I>H>E	0.011	0.758
	Mahisagar	0.728	0.444	0.404	H>E>I	0.025	0.512
	Morbi	0.743	0.590	0.934	I>H>E	0.033	0.746
	Panch Mahals	0.741	0.518	0.458	H>E>I	0.006	0.563
	Rajkot	0.865	0.471	0.717	H>I>E	0.004	0.669
	Sabar Kantha	0.867	0.378	0.810	H>I>E	0.018	0.654
	Surendranagar	0.508	0.306	0.329	H>I>E	0.017	0.373
	Vadodara	0.807	0.154	0.776	H>I>E	0.015	0.497
Haryana	Panchkula	0.839	0.557	0.751	H>I>E	0.005	0.708
	Ambala	0.859	0.559	0.915	I>H>E	0.019	0.765
	Yamunanagar	0.743	0.575	0.817	I>H>E	0.002	0.706
	Kurukshetra	0.561	0.350	0.555	H>I>E	0.004	0.480
	Kaithal	0.803	0.483	0.394	H>E>I	0.006	0.540
	Karnal	0.928	0.466	0.868	H>I>E	0.001	0.730
	Panipat	0.592	0.409	0.474	H>I>E	0.004	0.488
	Sonipat	0.864	0.734	0.934	I>H>E	0.003	0.841
	Jind	0.785	0.425	0.587	H>I>E	0.012	0.585
	Fatehabad	0.779	0.455	0.721	H>I>E	0.003	0.639
	Sirsa	0.844	0.537	0.831	H>I>E	0.003	0.726
	Hisar	0.735	0.870	0.968	I>E>H	0.001	0.854
	Rohtak	0.546	0.829	0.939	I>E>H	0.001	0.757
	Jhajjar	0.781	0.816	0.918	I>E>H	0.000	0.837
	Mahendragarh	0.719	0.793	0.914	I>E>H	0.004	0.806
	Rewari	0.693	0.900	0.914	I>E>H	0.002	0.831
	Gurgaon	0.814	0.834	0.912	I>E>H	0.003	0.853
	Mewat	0.730	0.887	0.897	I>E>H	0.028	0.835
	Faridabad	0.765	0.903	0.940	I>E>H	0.003	0.867
	Palwal	0.629	0.916	0.906	E>I>H	0.001	0.808
	Bhiwani	0.738	0.894	0.885	E>I>H	0.022	0.837
	Charkhi Dadri	0.722	0.800	0.879	I>E>H	0.004	0.799

State	District	H	E	I	Human development		HDS
					Profile	Inequality	
Himachal Pradesh	Chamba	0.810	0.862	0.910	I>E>H	0.006	0.860
	Kangra	0.833	0.881	0.927	I>E>H	0.003	0.880
	Lahul & Spiti	0.943	0.955	0.954	E>I>H	0.041	0.951
	Kullu	0.764	0.954	0.851	E>I>H	0.009	0.853
	Mandi	0.796	0.902	0.926	I>E>H	0.001	0.873
	Hamirpur	0.771	0.863	0.940	I>E>H	0.000	0.856
	Una	0.606	0.271	0.561	H>I>E	0.001	0.459
	Bilaspur	0.778	0.804	0.949	I>E>H	0.001	0.841
	Solan	0.874	0.755	0.805	H>I>E	0.012	0.810
	Sirmaur	0.527	0.889	0.891	I>E>H	0.000	0.753
	Shimla	0.782	0.975	0.935	E>I>H	0.002	0.894
	Kinnaur	0.802	0.911	0.673	E>H>I	0.009	0.791
Jammu & Kashmir	Kupwara	0.702	0.829	0.855	I>E>H	0.010	0.793
	Badgam	0.970	1.000	0.481	E>H>I	0.004	0.787
	Punch	0.890	0.933	0.661	E>H>I	0.014	0.821
	Rajouri	0.857	0.919	0.820	E>H>I	0.010	0.865
	Kathua	0.814	0.846	0.872	I>E>H	0.001	0.844
	Baramula	0.868	0.819	0.900	I>H>E	0.004	0.862
	Bandipore	0.948	0.825	0.899	H>I>E	0.006	0.890
	Srinagar	0.604	0.846	0.902	I>E>H	0.000	0.775
	Ganderbal	0.867	0.860	0.824	H>E>I	0.006	0.850
	Pulwama	0.768	0.911	0.837	E>I>H	0.001	0.837
	Shupiyan	0.789	1.000	0.695	E>H>I	0.004	0.821
	Anantnag	0.743	0.868	0.581	E>H>I	0.003	0.723
	Kulgam	0.969	0.884	0.773	H>E>I	0.019	0.873
	Doda	0.795	0.846	0.742	E>H>I	0.020	0.794
	Ramban	0.837	1.000	0.388	E>H>I	0.052	0.703
	Kishtwar	0.817	0.922	0.581	E>H>I	0.023	0.763
	Udhampur	0.926	0.808	0.621	H>E>I	0.013	0.777
	Reasi	0.874	0.939	0.847	E>H>I	0.023	0.886
	Jammu	0.837	0.700	0.648	H>E>I	0.000	0.725
	Samba	0.792	0.766	0.584	H>E>I	0.000	0.709
Jharkhand	Garhwa	0.921	0.968	0.947	E>I>H	0.087	0.946
	Chatra	0.915	0.752	0.687	H>E>I	0.066	0.780
	Kodarma	0.827	0.923	0.869	E>I>H	0.034	0.872
	Giridih	1.000	0.860	0.803	H>E>I	0.032	0.885
	Deoghar	1.000	0.928	0.830	H>E>I	0.073	0.917
	Godda	0.885	0.886	0.542	E>H>I	0.037	0.757
	Sahibganj	0.870	0.841	0.514	H>E>I	0.082	0.727
	Pakur	0.956	0.792	0.370	H>E>I	0.092	0.669
	Dhanbad	0.930	0.856	0.522	H>E>I	0.011	0.753
	Bokaro	0.870	0.923	0.606	E>H>I	0.009	0.790
	Lohardaga	0.905	0.842	0.506	H>E>I	0.071	0.734
	Purbi Singhbhum	0.902	0.971	0.952	E>I>H	0.008	0.941
	Palamu	0.938	0.917	0.876	H>E>I	0.053	0.910
	Latehar	0.682	0.734	0.173	E>H>I	0.141	0.469
	Hazaribagh	0.680	0.649	0.196	H>E>I	0.022	0.462
	Ramgarh	0.754	0.864	0.399	E>H>I	0.014	0.648
	Dumka	0.708	0.702	0.331	H>E>I	0.070	0.557

State	District	H	E	I	Human development		HDS
					Profile	Inequality	
	Jamtara	0.782	0.574	0.194	H>E>I	0.086	0.465
	Ranchi	0.530	0.573	0.213	E>H>I	0.010	0.412
	Khunti	0.790	0.458	0.161	H>E>I	0.113	0.410
	Gumla	0.728	0.420	0.117	H>E>I	0.111	0.356
	Simdega	0.841	0.765	0.555	H>E>I	0.130	0.712
	Pashchimi Singhbhum	0.716	0.805	0.541	E>H>I	0.131	0.680
	Saraikela-Kharsawan	0.724	0.789	0.234	E>H>I	0.036	0.532
Karnataka	Belgaum	0.679	0.801	0.551	E>H>I	0.005	0.671
	Bagalkot	0.624	0.715	0.235	E>H>I	0.012	0.487
	Bijapur	0.753	0.655	0.094	H>E>I	0.015	0.406
	Bidar	0.694	0.819	0.434	E>H>I	0.012	0.633
	Raichur	0.728	0.786	0.484	E>H>I	0.003	0.656
	Koppal	0.605	0.670	0.173	E>H>I	0.013	0.434
	Gadag	0.810	0.683	0.197	H>E>I	0.015	0.504
	Dharwad	0.718	0.832	0.546	E>H>I	0.003	0.691
	Uttara Kannada	0.740	0.576	0.112	H>E>I	0.001	0.398
	Haveri	0.556	0.726	0.108	E>H>I	0.005	0.387
	Bellary	0.760	0.712	0.119	H>E>I	0.007	0.442
	Chitradurga	0.699	0.631	0.091	H>E>I	0.002	0.386
	Davanagere	0.528	0.759	0.298	E>H>I	0.001	0.502
	Shimoga	0.831	0.857	0.670	E>H>I	0.000	0.783
	Udupi	0.817	0.779	0.533	H>E>I	0.001	0.701
	Chikmagalur	0.872	0.714	0.520	H>E>I	0.001	0.690
	Tumkur	0.793	0.818	0.539	E>H>I	0.029	0.708
	Bangalore	0.638	0.598	0.497	H>E>I	0.001	0.575
	Mandya	0.715	0.680	0.448	H>E>I	0.002	0.605
	Hassan	0.891	0.848	0.567	H>E>I	0.002	0.758
	Dakshina Kannada	0.730	0.888	0.762	E>I>H	0.000	0.791
	Kodagu	0.757	0.833	0.786	E>I>H	0.000	0.791
	Mysore	0.768	0.734	0.582	H>E>I	0.001	0.691
	Chamarajanagar	0.549	0.788	0.643	E>I>H	0.001	0.655
	Gulbarga	0.716	0.826	0.700	E>H>I	0.011	0.746
	Yadgir	0.845	0.786	0.743	H>E>I	0.010	0.790
	Kolar	0.857	0.880	0.833	E>H>I	0.000	0.857
	Chikkaballapura	0.900	0.942	0.837	E>H>I	0.001	0.892
	Bangalore Rural	0.797	0.908	0.826	E>I>H	0.001	0.842
	Ramanagara	0.503	0.986	0.823	E>I>H	0.011	0.750
Kerala	Kasaragod	0.878	0.921	0.969	I>E>H	0.000	0.922
	Kannur	1.000	0.926	0.864	H>E>I	0.000	0.929
	Wayanad	0.930	0.915	0.812	H>E>I	0.002	0.885
	Kozhikode	0.947	0.924	0.903	H>E>I	0.000	0.924
	Malappuram	0.829	0.887	0.868	E>I>H	0.000	0.861
	Palakkad	0.910	0.830	0.858	H>I>E	0.001	0.866
	Thrissur	0.777	0.826	0.748	E>H>I	0.000	0.783
	Ernakulam	0.854	0.658	0.554	H>E>I	0.000	0.680
	Idukki	0.719	0.592	0.458	H>E>I	0.001	0.582
	Kottayam	0.917	0.911	0.892	H>E>I	0.000	0.907
	Alappuzha	0.851	0.778	0.849	H>I>E	0.000	0.826
	Pathanamthitta	0.791	0.894	0.891	E>I>H	0.000	0.858

State	District	H	E	I	Human development		HDS
					Profile	Inequality	
	Kollam	0.609	0.848	0.901	I>E>H	0.000	0.778
	Thiruvananthapuram	0.965	0.960	0.916	H>E>I	0.001	0.947
Ladakh	Leh (Ladakh)	1.000	0.950	0.968	H>I>E	0.001	0.972
	Kargil	0.916	0.929	0.815	E>H>I	0.054	0.886
Lakshadweep	Lakshadweep	1.000	1.000	0.980	E=H>I	0.000	0.993
Madhya Pradesh	Sheopur	0.969	1.000	0.966	E>H>I	0.011	0.978
	Morena	1.000	0.981	0.888	H>E>I	0.002	0.955
	Bhind	1.000	0.976	0.971	H>E>I	0.005	0.982
	Gwalior	0.927	0.985	0.982	E>I>H	0.000	0.964
	Datia	0.926	0.950	0.832	E>H>I	0.004	0.902
	Shivpuri	1.000	0.954	0.956	H>I>E	0.007	0.970
	Tikamgarh	1.000	0.980	0.968	H>E>I	0.011	0.983
	Chhatarpur	1.000	0.984	0.934	H>E>I	0.005	0.972
	Panna	1.000	0.989	0.943	H>E>I	0.026	0.977
	Sagar	1.000	0.989	0.925	H>E>I	0.020	0.971
	Damoh	1.000	1.000	0.981	E=H>I	0.025	0.993
	Satna	0.559	0.474	0.323	H>E>I	0.012	0.444
	Rewa	0.573	0.664	0.545	E>H>I	0.022	0.592
	Umaria	0.714	0.775	0.573	E>H>I	0.016	0.683
	Neemuch	0.814	0.770	0.828	I>H>E	0.001	0.804
	Mandsaur	0.612	0.695	0.516	E>H>I	0.003	0.605
	Ratlam	0.569	0.567	0.394	H>E>I	0.002	0.505
	Ujjain	0.737	0.689	0.476	H>E>I	0.003	0.626
	Dewas	0.559	0.574	0.413	E>H>I	0.002	0.511
	Dhar	0.338	0.577	0.234	E>H>I	0.016	0.363
	Indore	0.737	0.738	0.421	E>H>I	0.002	0.617
	Khargone (West Nimar)	0.605	0.628	0.307	E>H>I	0.004	0.495
	Barwani	0.637	0.602	0.391	H>E>I	0.036	0.534
	Rajgarh	0.519	0.498	0.246	H>E>I	0.028	0.405
	Vidisha	0.526	0.573	0.310	E>H>I	0.004	0.458
	Bhopal	0.752	0.728	0.657	H>E>I	0.005	0.711
	Sehore	0.599	0.729	0.576	E>H>I	0.009	0.632
	Raisen	0.686	0.559	0.592	H>I>E	0.011	0.611
	Betul	0.841	0.720	0.667	H>E>I	0.024	0.740
	Harda	0.682	0.695	0.575	E>H>I	0.003	0.649
	Hoshangabad	0.820	0.586	0.478	H>E>I	0.003	0.616
	Katni	0.804	0.768	0.895	I>H>E	0.016	0.821
	Jabalpur	0.724	0.551	0.647	H>I>E	0.046	0.638
	Narsimhapur	0.788	0.342	0.371	H>I>E	0.022	0.472
	Dindori	0.715	0.683	0.350	H>E>I	0.086	0.563
	Mandla	0.615	0.515	0.460	H>E>I	0.042	0.527
	Chhindwara	0.893	0.691	0.850	H>I>E	0.008	0.808
	Seoni	0.601	0.746	0.495	E>H>I	0.029	0.608
	Balaghat	0.700	0.706	0.466	E>H>I	0.052	0.616
	Guna	0.763	0.688	0.391	H>E>I	0.009	0.596
	Ashoknagar	0.752	0.660	0.597	H>E>I	0.026	0.667
	Shahdol	0.679	0.639	0.531	H>E>I	0.027	0.614
	Anuppur	0.309	0.584	0.348	E>I>H	0.037	0.401
	Sidhi	1.000	0.606	0.395	H>E>I	0.033	0.632

State	District	H	E	I	Human development		HDS
					Profile	Inequality	
	Singrauli	0.841	0.593	0.438	H>E>I	0.020	0.607
	Jhabua	0.634	0.660	0.146	E>H>I	0.041	0.421
	Alirajpur	0.708	0.720	0.297	E>H>I	0.079	0.545
	Khandwa (East Nimar)	0.675	0.641	0.462	H>E>I	0.011	0.587
	Burhanpur	0.668	0.623	0.305	H>E>I	0.002	0.511
	Agar Malwa	0.698	0.790	0.285	E>H>I	0.015	0.554
	Shajapur	0.663	0.531	0.428	H>E>I	0.004	0.535
Maharashtra	Nandurbar	0.714	0.581	0.331	H>E>I	0.012	0.523
	Dhule	0.393	0.658	0.280	E>H>I	0.012	0.423
	Jalgaon	0.645	0.689	0.286	E>H>I	0.003	0.513
	Buldana	0.539	0.574	0.232	E>H>I	0.006	0.425
	Akola	0.586	0.613	0.320	E>H>I	0.000	0.492
	Washim	0.555	0.472	0.181	H>E>I	0.006	0.374
	Amravati	0.801	0.293	0.171	H>E>I	0.002	0.359
	Wardha	0.823	0.697	0.533	H>E>I	0.000	0.677
	Nagpur	0.641	0.518	0.612	H>I>E	0.000	0.589
	Bhandara	0.870	0.672	0.522	H>E>I	0.005	0.677
	Gondiya	0.602	0.695	0.526	E>H>I	0.014	0.605
	Gadchiroli	0.614	0.543	0.362	H>E>I	0.014	0.497
	Chandrapur	0.896	0.637	0.594	H>E>I	0.006	0.700
	Yavatmal	0.868	0.727	0.711	H>E>I	0.004	0.766
	Nanded	0.792	0.902	0.667	E>H>I	0.004	0.783
	Hingoli	0.792	0.819	0.776	E>H>I	0.005	0.795
	Parbhani	0.724	0.812	0.590	E>H>I	0.009	0.704
	Jalna	0.873	0.870	0.754	H>E>I	0.005	0.831
	Aurangabad	0.896	0.837	0.836	H>E>I	0.002	0.856
	Nashik	0.931	0.925	0.932	I>H>E	0.001	0.929
	Mumbai Suburban	0.714	0.876	0.677	E>H>I	0.118	0.752
	Mumbai	0.642	0.936	0.607	E>H>I	0.001	0.718
	Raigarh	0.760	0.812	0.507	E>H>I	0.001	0.683
	Pune	0.687	0.928	0.760	E>I>H	0.005	0.787
	Ahmadnagar	0.668	0.819	0.644	E>H>I	0.002	0.707
	Bid	0.760	0.719	0.597	H>E>I	0.011	0.689
	Latur	0.768	0.804	0.608	E>H>I	0.002	0.723
	Osmanabad	0.799	0.767	0.559	H>E>I	0.010	0.702
	Solapur	0.732	0.767	0.577	E>H>I	0.005	0.688
	Satara	0.845	0.850	0.740	E>H>I	0.006	0.810
	Ratnagiri	0.654	0.715	0.640	E>H>I	0.013	0.669
	Sindhudurg	0.237	0.947	0.979	I>E>H	0.008	0.640
	Kolhapur	0.887	0.932	0.968	I>E>H	0.003	0.929
	Sangli	0.867	0.767	0.814	H>I>E	0.002	0.815
	Palghar	1.000	0.769	0.882	H>I>E	0.008	0.880
	Thane	0.827	0.838	0.724	E>H>I	0.000	0.795
Manipur	Senapati	0.864	0.817	0.577	H>E>I	0.073	0.744
	Tamenglong	0.814	0.808	0.686	H>E>I	0.093	0.768
	Churachandpur	0.965	0.862	0.667	H>E>I	0.030	0.824
	Bishnupur	0.873	0.794	0.661	H>E>I	0.032	0.772
	Thoubal	1.000	0.820	0.755	H>E>I	0.031	0.854
	Imphal West	0.742	0.928	0.586	E>H>I	0.007	0.742

State	District	H	E	I	Human development		HDS
					Profile	Inequality	
	Imphal East	0.844	0.961	0.687	E>H>I	0.008	0.825
	Ukhrul	0.777	0.935	0.817	E>I>H	0.119	0.841
	Chandel	0.804	0.930	0.813	E>I>H	0.025	0.848
Meghalaya	South Garo Hills	0.919	0.682	0.675	H>E>I	0.097	0.753
	Ribhoi	0.862	0.882	0.896	I>E>H	0.048	0.880
	East Khasi Hills	0.904	0.872	0.302	H>E>I	0.033	0.641
	East Garo Hills	0.666	0.846	0.189	E>H>I	0.061	0.502
	East Jantia Hills	0.837	0.799	0.422	H>E>I	0.029	0.665
	North Garo Hills	0.816	0.872	0.430	E>H>I	0.075	0.683
	South West Garo Hills	0.809	0.836	0.422	E>H>I	0.053	0.667
	South West Khasi Hills	0.940	0.897	0.697	H>E>I	0.064	0.840
	West Garo Hills	0.716	0.858	0.597	E>H>I	0.034	0.718
	West Jaintia Hills	0.773	0.846	0.164	E>H>I	0.037	0.512
	West Khasi Hills	0.745	0.780	0.410	E>H>I	0.066	0.627
Mizoram	Mamit	0.963	0.910	0.268	H>E>I	0.005	0.646
	Kolasib	0.759	0.599	0.261	H>E>I	0.002	0.505
	Aizawl	1.000	0.661	0.472	H>E>I	0.002	0.686
	Champhai	0.938	0.795	0.330	H>E>I	0.002	0.644
	Serchhip	0.648	0.532	0.274	H>E>I	0.001	0.463
	Lunglei	0.825	0.882	0.277	E>H>I	0.008	0.608
	Lawngtlai	0.822	0.732	0.301	H>E>I	0.008	0.581
	Saiha	0.623	0.712	0.203	E>H>I	0.008	0.467
Nagaland	Mon	0.951	0.908	0.480	H>E>I	0.142	0.755
	Mokokchung	0.670	0.365	0.236	H>E>I	0.019	0.395
	Zunheboto	0.529	0.465	0.112	H>E>I	0.072	0.322
	Wokha	0.863	0.780	0.655	H>E>I	0.034	0.763
	Dimapur	0.943	0.846	0.820	H>E>I	0.002	0.868
	Phek	0.800	0.840	0.935	I>E>H	0.082	0.857
	Tuensang	0.936	0.846	0.813	H>E>I	0.079	0.864
	Longleng	0.870	0.780	0.840	H>I>E	0.098	0.829
	Kiphire	1.000	0.744	0.754	H>I>E	0.066	0.826
	Kohima	0.704	0.615	0.472	H>E>I	0.008	0.591
	Peren	0.857	1.000	0.707	E>H>I	0.026	0.848
NCT of Delhi	Central	0.878	0.692	0.124	H>E>I	0.002	0.468
	East	0.891	0.860	0.534	H>E>I	0.005	0.748
	New Delhi	0.840	0.692	0.240	H>E>I	0.001	0.540
	North	0.719	1.000	0.467	E>H>I	0.004	0.704
	North East	0.908	0.907	0.794	H>E>I	0.004	0.868
	North West	0.832	0.744	0.225	H>E>I	0.001	0.543
	Shahdara	0.783	0.599	0.187	H>E>I	0.010	0.467
	South	0.689	0.615	0.130	H>E>I	0.013	0.411
	South East	0.445	0.692	0.159	E>H>I	0.001	0.384
	South West	0.894	0.897	0.655	E>H>I	0.001	0.809
	West	0.336	0.692	0.345	E>I>H	0.005	0.437
Odisha	Bargarh	0.814	0.730	0.370	H>E>I	0.034	0.613
	Jharsuguda	0.597	0.863	0.511	E>H>I	0.016	0.645
	Sambalpur	0.776	0.744	0.380	H>E>I	0.030	0.611
	Debagarh	0.718	0.704	0.247	H>E>I	0.057	0.516
	Sundargarh	0.503	0.661	0.411	E>H>I	0.010	0.517

State	District	H	E	I	Human development		HDS
					Profile	Inequality	
	Kendujhar	0.636	0.611	0.290	H>E>I	0.029	0.491
	Mayurbhanj	0.685	0.536	0.154	H>E>I	0.074	0.406
	Baleshwar	0.809	0.817	0.362	E>H>I	0.042	0.633
	Bhadrak	0.712	0.850	0.343	E>H>I	0.043	0.604
	Kendrapara	0.592	0.855	0.430	E>H>I	0.024	0.607
	Jagatsinghapur	0.810	0.822	0.515	E>H>I	0.016	0.704
	Cuttack	0.886	0.671	0.583	H>E>I	0.011	0.705
	Jajapur	0.606	0.689	0.412	E>H>I	0.013	0.559
	Dhenkanal	0.766	0.704	0.383	H>E>I	0.026	0.599
	Anugul	0.897	0.534	0.418	H>E>I	0.031	0.592
	Nayagarh	0.957	0.826	0.452	H>E>I	0.035	0.719
	Khordha	0.926	0.832	0.699	H>E>I	0.005	0.815
	Puri	0.861	0.886	0.570	E>H>I	0.015	0.761
	Ganjam	0.835	0.695	0.639	H>E>I	0.005	0.719
	Gajapati	0.574	0.441	0.283	H>E>I	0.017	0.420
	Kandhamal	0.682	0.607	0.206	H>E>I	0.058	0.457
	Baudh	0.659	0.565	0.329	H>E>I	0.021	0.502
	Subarnapur	0.608	0.714	0.433	E>H>I	0.012	0.576
	Balangir	0.729	0.666	0.362	H>E>I	0.025	0.567
	Nuapada	0.680	0.660	0.220	H>E>I	0.058	0.479
	Kalahandi	0.589	0.454	0.247	H>E>I	0.026	0.411
	Rayagada	0.744	0.391	0.260	H>E>I	0.042	0.433
	Nabarangapur	0.715	0.289	0.132	H>E>I	0.077	0.319
	Koraput	0.766	0.438	0.220	H>E>I	0.055	0.434
	Malkangiri	0.258	0.435	0.189	E>H>I	0.017	0.281
Puducherry	Yanam	0.730	0.692	0.972	I>H>E	0.009	0.791
	Puducherry	1.000	0.863	0.914	H>I>E	0.002	0.925
	Mahe	1.000	1.000	1.000	H=E=I	0.000	1.000
	Karaikal	0.908	0.835	0.839	H>I>E	0.001	0.860
Punjab	Kapurthala	0.795	0.853	0.949	I>E>H	0.002	0.864
	Jalandhar	0.785	0.863	0.985	I>E>H	0.004	0.875
	Hoshiarpur	0.929	0.956	0.964	I>E>H	0.000	0.950
	Shahid Bhagat Singh Nagar	0.977	0.922	0.965	H>I>E	0.000	0.954
	Fatehgarh Sahib	0.903	0.838	0.970	I>H>E	0.002	0.903
	Ludhiana	0.732	0.816	0.955	I>E>H	0.005	0.831
	Moga	0.772	0.758	0.929	I>H>E	0.004	0.817
	Muktsar	0.569	0.753	0.894	I>E>H	0.012	0.730
	Faridkot	0.703	0.666	0.901	I>H>E	0.007	0.751
	Bathinda	0.762	0.672	0.907	I>H>E	0.006	0.776
	Mansa	0.734	0.817	0.878	I>E>H	0.002	0.808
	Patiala	0.781	0.814	0.963	I>E>H	0.004	0.850
	Amritsar	0.835	0.795	0.956	I>H>E	0.003	0.860
	Tarn Taran	0.913	0.723	0.873	H>I>E	0.004	0.833
	Rupnagar	0.832	0.870	0.957	I>E>H	0.002	0.885
	Sahibzada Ajit Singh Nagar	0.582	0.914	0.967	I>E>H	0.020	0.806
	Sangrur	0.465	0.869	0.960	I>E>H	0.035	0.739
	Barnala	0.667	0.868	0.947	I>E>H	0.009	0.821
	Fazilka	0.672	0.706	0.820	I>E>H	0.003	0.731
	Firozpur	0.735	0.700	0.901	I>H>E	0.005	0.775

State	District	H	E	I	Human development		HDS
					Profile	Inequality	
	Gurdaspur	0.729	0.907	0.937	I>E>H	0.005	0.854
	Pathankot	0.778	0.973	0.962	E>I>H	0.005	0.901
Rajasthan	Ganganagar	0.810	0.767	0.778	H>I>E	0.000	0.785
	Hanumangarh	0.835	0.782	0.786	H>I>E	0.000	0.801
	Bikaner	0.845	0.682	0.754	H>I>E	0.003	0.758
	Churu	0.808	0.807	0.700	H>E>I	0.002	0.770
	Jhunjhunun	0.777	0.854	0.835	E>I>H	0.001	0.821
	Alwar	0.734	0.697	0.675	H>E>I	0.000	0.702
	Bharatpur	0.833	0.657	0.568	H>E>I	0.009	0.680
	Dhaulpur	0.650	0.744	0.479	E>H>I	0.010	0.616
	Karauli	0.818	0.751	0.437	H>E>I	0.024	0.651
	Sawai Madhopur	0.521	0.732	0.525	E>I>H	0.008	0.587
	Dausa	0.785	0.869	0.567	E>H>I	0.012	0.732
	Jaipur	0.773	0.885	0.836	E>I>H	0.001	0.830
	Sikar	0.762	0.816	0.804	E>I>H	0.000	0.794
	Nagaur	0.725	0.772	0.780	I>E>H	0.000	0.759
	Jodhpur	0.825	0.681	0.743	H>I>E	0.002	0.748
	Jaisalmer	0.815	0.562	0.637	H>I>E	0.008	0.665
	Barmer	0.944	0.690	0.588	H>E>I	0.014	0.730
	Jalor	0.848	0.701	0.652	H>E>I	0.005	0.730
	Sirohi	0.731	0.630	0.560	H>E>I	0.004	0.637
	Pali	0.841	0.847	0.839	E>H>I	0.000	0.842
	Ajmer	0.591	0.824	0.821	E>I>H	0.009	0.739
	Tonk	0.685	0.770	0.532	E>H>I	0.008	0.657
	Bundi	0.632	0.775	0.513	E>H>I	0.009	0.633
	Bhilwara	0.736	0.788	0.605	E>H>I	0.004	0.706
	Rajsamand	0.794	0.787	0.652	H>E>I	0.003	0.742
	Dungarpur	0.920	0.824	0.361	H>E>I	0.053	0.664
	Banswara	0.682	0.652	0.282	H>E>I	0.038	0.511
	Chittaurgarh	0.592	0.696	0.592	E>H>I	0.002	0.625
	Kota	0.708	0.849	0.835	E>I>H	0.003	0.795
	Baran	0.724	0.748	0.544	E>H>I	0.007	0.667
	Jhalawar	0.683	0.710	0.441	E>H>I	0.013	0.601
	Udaipur	0.868	0.858	0.507	H>E>I	0.022	0.729
	Pratapgarh	0.690	0.708	0.286	E>H>I	0.042	0.531
Sikkim	North District	0.697	1.000	0.667	E>H>I	0.013	0.778
	West District	0.899	1.000	0.635	E>H>I	0.015	0.834
	South District	1.000	0.872	0.739	H>E>I	0.007	0.865
	East District	0.946	0.846	0.869	H>I>E	0.001	0.886
Tamil Nadu	Thiruvallur	0.875	0.894	0.908	I>E>H	0.000	0.892
	Chennai	1.000	0.959	0.976	H>I>E	0.000	0.978
	Kancheepuram	0.923	0.829	0.862	H>I>E	0.001	0.871
	Vellore	0.868	0.963	0.854	E>H>I	0.001	0.894
	Tiruvannamalai	0.720	0.895	0.698	E>H>I	0.005	0.767
	Viluppuram	0.721	0.879	0.644	E>H>I	0.006	0.743
	Salem	0.802	0.914	0.778	E>H>I	0.002	0.830
	Namakkal	0.806	0.905	0.846	E>I>H	0.001	0.852
	Erode	0.963	0.757	0.852	H>I>E	0.004	0.854
	The Nilgiris	0.903	0.960	0.849	E>H>I	0.001	0.903

State	District	H	E	I	Human development		HDS
					Profile	Inequality	
	Dindigul	0.736	0.856	0.666	E>H>I	0.004	0.750
	Karur	0.851	0.899	0.713	E>H>I	0.004	0.818
	Tiruchirappalli	0.941	0.914	0.739	H>E>I	0.005	0.861
	Perambalur	0.855	0.906	0.734	E>H>I	0.003	0.829
	Ariyalur	0.722	0.902	0.539	E>H>I	0.016	0.710
	Cuddalore	0.699	0.885	0.687	E>H>I	0.005	0.753
	Nagapattinam	0.901	0.848	0.581	H>E>I	0.014	0.767
	Thiruvarur	1.000	0.922	0.616	H>E>I	0.018	0.833
	Thanjavur	0.809	0.917	0.741	E>H>I	0.003	0.820
	Pudukkottai	0.685	0.822	0.560	E>H>I	0.008	0.683
	Sivaganga	0.770	0.882	0.756	E>H>I	0.002	0.801
	Madurai	1.000	0.810	0.876	H>I>E	0.003	0.893
	Theni	0.734	0.908	0.853	E>I>H	0.003	0.829
	Virudhunagar	1.000	0.723	0.763	H>I>E	0.009	0.822
	Ramanathapuram	0.941	0.913	0.751	H>E>I	0.004	0.865
	Thoothukkudi	0.820	0.857	0.871	I>E>H	0.000	0.849
	Tirunelveli	0.951	0.876	0.831	H>E>I	0.001	0.885
	Kanniyakumari	1.000	0.928	0.938	H>I>E	0.001	0.955
	Dharmapuri	0.812	0.946	0.759	E>H>I	0.004	0.836
	Krishnagiri	0.786	0.838	0.808	E>I>H	0.000	0.810
	Coimbatore	0.712	0.887	0.896	I>E>H	0.005	0.828
	Tiruppur	0.958	0.873	0.880	H>I>E	0.001	0.903
Telangana	Adilabad	0.806	0.480	0.579	H>I>E	0.014	0.611
	Bhadradri Kothagudem	0.591	0.705	0.732	I>E>H	0.003	0.674
	Hyderabad	0.833	0.852	0.981	I>E>H	0.002	0.887
	Jagitial	0.738	0.783	0.803	I>E>H	0.000	0.774
	Jangoan	0.846	0.963	0.812	E>H>I	0.002	0.872
	Jayashankar Bhupalapally	0.654	0.838	0.610	E>H>I	0.007	0.696
	Jogulamba Gadwal	0.850	0.607	0.701	H>I>E	0.007	0.714
	Kamareddy	0.808	0.791	0.576	H>E>I	0.008	0.719
	Karimnagar	0.943	0.832	0.859	H>I>E	0.001	0.877
	Khammam	0.927	0.774	0.815	H>I>E	0.002	0.837
	Komaram Bheem Asifabad	0.772	0.542	0.444	H>E>I	0.015	0.574
	Mahabubabad	0.948	0.849	0.634	H>E>I	0.011	0.802
	Mahabubnagar	0.878	0.825	0.719	H>E>I	0.003	0.805
	Mancherial	1.000	0.882	0.717	H>E>I	0.008	0.860
	Medak	0.695	0.885	0.512	E>H>I	0.017	0.684
	Medchal-Malkajgiri	0.873	0.860	0.963	I>H>E	0.001	0.898
	Nagarkurnool	0.806	0.846	0.724	E>H>I	0.002	0.791
	Nalgonda	0.939	0.943	0.816	E>H>I	0.002	0.898
	Nirmal	0.843	0.768	0.648	H>E>I	0.004	0.750
	Nizamabad	0.941	0.730	0.765	H>I>E	0.005	0.808
	Peddapalli	0.930	0.808	0.831	H>I>E	0.002	0.855
	Rajanna Sircilla	0.701	0.928	0.839	E>I>H	0.005	0.819
	Ranga Reddy	0.611	0.832	0.913	I>E>H	0.011	0.777
	Sangareddy	0.772	0.904	0.620	E>H>I	0.009	0.759
	Siddipet	0.829	0.891	0.775	E>H>I	0.001	0.831
	Suryapet	0.703	0.953	0.790	E>I>H	0.006	0.810
	Vikarabad	0.568	0.780	0.609	E>I>H	0.006	0.648

State	District	H	E	I	Human development		HDS
					Profile	Inequality	
	Wanaparthy	0.573	0.924	0.767	E>I>H	0.014	0.744
	Warangal Rural	0.946	0.897	0.629	H>E>I	0.013	0.815
	Warangal Urban	0.820	0.872	0.862	E>I>H	0.000	0.851
	Yadadri Bhuvanagiri	0.654	0.904	0.862	E>I>H	0.008	0.801
Tripura	Dhalai	0.862	0.853	0.217	H>E>I	0.102	0.574
	Gomati	0.551	0.803	0.340	E>H>I	0.033	0.540
	Khowai	0.632	0.780	0.239	E>H>I	0.060	0.508
	North Tripura	0.546	0.744	0.375	E>H>I	0.021	0.539
	Sepahijala	0.762	0.814	0.328	E>H>I	0.047	0.601
	South Tripura	0.686	0.785	0.225	E>H>I	0.070	0.516
	Unakoti	0.718	0.658	0.219	H>E>I	0.062	0.488
	West Tripura	0.798	0.824	0.547	E>H>I	0.012	0.714
Uttar Pradesh	Saharanpur	0.583	0.504	0.783	I>H>E	0.011	0.615
	Bijnor	0.664	0.644	0.732	I>H>E	0.001	0.679
	Rampur	0.566	0.327	0.683	I>H>E	0.024	0.508
	Jyotiba Phule Nagar	0.617	0.548	0.709	I>H>E	0.003	0.622
	Meerut	0.622	0.598	0.886	I>H>E	0.011	0.693
	Baghpat	0.672	0.713	0.824	I>E>H	0.003	0.734
	Gautam Buddha Nagar	0.646	0.769	0.929	I>E>H	0.009	0.775
	Bulandshahr	0.595	0.671	0.765	I>E>H	0.004	0.674
	Aligarh	0.492	0.593	0.690	I>E>H	0.006	0.587
	Mahamaya Nagar	0.484	0.658	0.567	E>I>H	0.004	0.566
	Mathura	0.618	0.552	0.729	I>H>E	0.004	0.630
	Agra	0.590	0.567	0.812	I>H>E	0.009	0.650
	Firozabad	0.410	0.644	0.634	E>I>H	0.012	0.554
	Mainpuri	0.257	0.753	0.487	E>I>H	0.044	0.467
	Bareilly	0.743	0.331	0.679	H>I>E	0.034	0.560
	Pilibhit	0.536	0.379	0.472	H>I>E	0.005	0.459
	Shahjahanpur	0.336	0.490	0.481	E>I>H	0.006	0.431
	Kheri	0.363	0.450	0.288	E>H>I	0.006	0.362
	Sitapur	0.446	0.276	0.240	H>E>I	0.012	0.312
	Hardoi	0.539	0.352	0.252	H>E>I	0.018	0.367
	Unnao	0.633	0.475	0.382	H>E>I	0.011	0.489
	Lucknow	0.749	0.684	0.748	H>I>E	0.001	0.727
	Farrukhabad	0.515	0.579	0.524	E>I>H	0.001	0.539
	Kannauj	0.485	0.578	0.382	E>H>I	0.007	0.477
	Etawah	0.607	0.760	0.641	E>I>H	0.003	0.667
	Auraiya	0.540	0.686	0.410	E>H>I	0.012	0.536
	Kanpur Dehat	0.656	0.633	0.379	H>E>I	0.016	0.544
	Kanpur Nagar	0.643	0.734	0.714	E>I>H	0.001	0.696
	Jalaun	0.704	0.669	0.466	H>E>I	0.010	0.606
	Jhansi	0.773	0.803	0.574	E>H>I	0.008	0.711
	Lalitpur	0.527	0.676	0.323	E>H>I	0.022	0.492
	Hamirpur	0.638	0.734	0.393	E>H>I	0.020	0.574
	Mahoba	0.677	0.727	0.386	E>H>I	0.022	0.581
	Banda	0.543	0.491	0.234	H>E>I	0.026	0.404
	Chitrakoot	0.681	0.507	0.261	H>E>I	0.035	0.458
	Fatehpur	0.540	0.519	0.320	H>E>I	0.012	0.451
	Pratapgarh	0.704	0.745	0.430	E>H>I	0.018	0.613

State	District	H	E	I	Human development		HDS
					Profile	Inequality	
	Kaushambi	0.550	0.502	0.305	H>E>I	0.014	0.442
	Allahabad	0.567	0.648	0.468	E>H>I	0.005	0.557
	Bara Banki	0.532	0.318	0.333	H>I>E	0.011	0.386
	Faizabad	0.777	0.701	0.482	H>E>I	0.013	0.644
	Ambedkar Nagar	0.751	0.733	0.347	H>E>I	0.035	0.586
	Bahraich	0.575	0.069	0.192	H>I>E	0.082	0.215
	Shrawasti	0.697	0.153	0.195	H>I>E	0.073	0.289
	Balrampur	0.550	0.265	0.325	H>I>E	0.018	0.366
	Gonda	0.671	0.512	0.397	H>E>I	0.012	0.518
	Siddharthnagar	0.906	0.368	0.370	H>I>E	0.050	0.509
	Basti	0.660	0.622	0.457	H>E>I	0.007	0.574
	Sant Kabir Nagar	0.768	0.597	0.369	H>E>I	0.025	0.560
	Mahrajganj	0.676	0.636	0.472	H>E>I	0.007	0.590
	Gorakhpur	0.614	0.712	0.550	E>H>I	0.003	0.623
	Kushinagar	0.768	0.609	0.435	H>E>I	0.016	0.592
	Deoria	0.899	0.791	0.570	H>E>I	0.013	0.743
	Azamgarh	0.555	0.807	0.448	E>H>I	0.018	0.590
	Mau	0.799	0.668	0.516	H>E>I	0.010	0.653
	Ballia	0.765	0.758	0.471	H>E>I	0.016	0.653
	Jaunpur	0.843	0.853	0.502	E>H>I	0.021	0.718
	Ghazipur	0.812	0.795	0.403	H>E>I	0.032	0.647
	Chandauli	0.628	0.772	0.468	E>H>I	0.013	0.613
	Varanasi	0.928	0.678	0.679	H>I>E	0.009	0.755
	Sant Ravidas Nagar	0.512	0.801	0.488	E>H>I	0.015	0.589
	Mirzapur	0.644	0.770	0.466	E>H>I	0.013	0.617
	Sonbhadra	0.737	0.548	0.254	H>E>I	0.045	0.481
	Etah	0.612	0.610	0.439	H>E>I	0.006	0.549
	Kanshiram Nagar	0.472	0.380	0.463	H>I>E	0.002	0.437
	Amethi	0.236	0.558	0.353	E>I>H	0.023	0.365
	Budaun	0.646	0.229	0.401	H>I>E	0.035	0.399
	Ghaziabad	0.800	0.760	0.968	I>H>E	0.005	0.839
	Hapur	0.531	0.657	0.856	I>E>H	0.013	0.671
	Moradabad	0.552	0.581	0.709	I>E>H	0.004	0.611
	Muzaffarnagar	0.872	0.530	0.822	H>I>E	0.017	0.729
	Rae Bareli	0.696	0.628	0.347	H>E>I	0.024	0.540
	Sambhal	0.539	0.381	0.540	I>H>E	0.006	0.482
	Shamli	0.628	0.375	0.779	I>H>E	0.026	0.575
	Sultanpur	0.664	0.718	0.362	E>H>I	0.024	0.564
Uttarakhand	Uttarkashi	0.682	0.957	0.604	E>H>I	0.014	0.737
	Chamoli	0.616	0.969	0.659	E>I>H	0.015	0.736
	Rudraprayag	0.792	0.945	0.654	E>H>I	0.009	0.791
	Tehri Garhwal	0.916	0.978	0.698	E>H>I	0.009	0.857
	Dehradun	0.781	0.833	0.950	I>E>H	0.003	0.853
	Garhwal	0.864	0.968	0.652	E>H>I	0.011	0.820
	Pithoragarh	0.591	0.955	0.624	E>I>H	0.017	0.710
	Bageshwar	0.885	0.952	0.564	E>H>I	0.020	0.786
	Almora	0.857	0.960	0.481	E>H>I	0.032	0.743
	Champawat	0.705	0.923	0.562	E>H>I	0.015	0.719
	Nainital	0.860	0.792	0.793	H>I>E	0.001	0.814

State	District	H	E	I	Human development		HDS
					Profile	Inequality	
	Udham Singh Nagar	0.600	0.685	0.803	I>E>H	0.005	0.692
	Hardwar	1.000	0.471	0.812	H>I>E	0.035	0.735
West Bengal	Darjiling	0.938	0.858	0.589	H>E>I	0.015	0.784
	Jalpaiguri	0.773	0.772	0.405	H>E>I	0.027	0.630
	Koch Bihar	0.710	0.807	0.201	E>H>I	0.086	0.513
	Uttar Dinajpur	0.737	0.666	0.239	H>E>I	0.058	0.506
	Dakshin Dinajpur	0.904	0.768	0.252	H>E>I	0.082	0.584
	Maldah	0.799	0.691	0.306	H>E>I	0.046	0.566
	Murshidabad	0.702	0.732	0.287	E>H>I	0.045	0.541
	Birbhum	0.828	0.646	0.287	H>E>I	0.051	0.550
	Nadia	0.845	0.863	0.386	E>H>I	0.043	0.667
	North Twenty Four Parganas	0.931	0.834	0.653	H>E>I	0.009	0.800
	Hugli	0.842	0.816	0.536	H>E>I	0.015	0.720
	Bankura	0.767	0.851	0.238	E>H>I	0.081	0.562
	Puruliya	0.792	0.792	0.227	H>E>I	0.082	0.547
	Haora	0.934	0.724	0.655	H>E>I	0.009	0.765
	Kolkata	0.916	0.822	0.882	H>I>E	0.001	0.873
	South Twenty Four Parganas	0.820	0.709	0.383	H>E>I	0.031	0.614
	Paschim Medinipur	0.851	0.806	0.210	H>E>I	0.098	0.554
	Purba Medinipur	0.894	0.818	0.209	H>E>I	0.106	0.567
	Paschim Barddhaman	0.632	0.707	0.636	E>I>H	0.001	0.658
	Purba Barddhaman	0.830	0.794	0.377	H>E>I	0.038	0.639

Source: Author's calculations based on data from National Family Health Survey, 2019-2021.
Remarks: HDS – Surface measure of human development.