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Human Development in the Distressed Marathwada Region

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Abstract:
The concept of human development emphasizes the enlargement of people's choices and capabilities rather than mere economic growth. This study examines the level and pattern of human development in the socially and economically distressed Marathwada region of Maharashtra. Using the Human Development Index (HDI) framework developed by the United Nations Development Programme (UNDP), the paper evaluates inter-district variations in human development across eight districts of Marathwada for the years 1991 and 2001. The study relies on both secondary data from official sources such as Census reports, Sample Registration System, Human Development Reports, and primary survey data collected from a sample of 300 respondents. HDI is computed using three core dimensions—health (life expectancy), education (literacy and enrolment), and income (per capita district domestic product in PPP terms). The findings reveal significant disparities in human development within the region, with notable improvements in health indicators over the decade, while education and income dimensions continue to lag behind. Despite some progress, Marathwada remains relatively backward compared to other regions of Maharashtra. The study highlights the need for region-specific and people-centred development policies that prioritize education, health, gender equity, and empowerment to achieve sustainable human development.

Keywords: Human Development, Human Development Index (HDI), Marathwada Region, Regional Disparities, Life Expectancy, Literacy, Socio-Economic Backwardness, Maharashtra.

The United Nations Development Programme (UNDP) is historically an unique effort at international co-operation to improve comprehensively the economic, social, and educational well being of nearly three fourth of humanity living in developing countries, with five decades of experience in development co-operation with the international community. UNDP has emerged as the world's largest multilateral grant development co-operation organization working from 113 field offices serving 166 countries and territories. In May, 1990 the United Nations Development Programme (UNDP) launched the first Human Development Report (HDR). It was pioneered by Mahbub-Ul-haq and Amartya Sen. These human development reports have stimulated discussions worldwide leading to what is now called the "Human Development Movement" which includes international and national governments, policy makers, planners, opinion leaders, parliamentarians, media, NGO's and various members of the civil society.
Human development reports propose composite indices that go beyond income-based measures. The Human Development Index (HDI), Gender Development Index (GDI), Gender Empowerment Measure (GEM), and Human Poverty Index (HPI) have been introduced in various HDRs since 1990.
WHAT IS HUMAN DEVELOPMENT?

United Nations Development Programme has defined human development as the process of enlarging people choices. The most critical ones are to lead a long and healthy life, to be educated and to enjoy a decent standard of living. Additional choices include political freedom, human rights and various

ingredients of self respect. These are among the essential choices the absence of which can block many other opportunities. According to Mahbub-Ul-haq, the defining difference between the economic growth and the human development schools is that the first "focuses exclusively on the expansion of only one choice: income, while the second embraces the enlargement of all human choices whether economic, social, cultural, or political."

WHY HUMAN DEVELOPMENT?

According to *Paul Streeten*[1], human development is necessary on account of the following reasons:

1) Human development is the end while economic growth is only a means to this end. The ultimate purpose of the entire exercise of development is to treat men, women and children present and future generations as ends to improve the human conditions to enlarge people choices.
2) Human development is a means to higher productivity. A well nourished, healthy, educated, skilled, alert labour force is the most important productive asset.
3) It helps in lowering the family size by slowing human reproduction.
4) Human development is good for physical environment.
5) Reduced poverty contributes to a healthy civil society and not just the economy. The political, cultural and social factors are given as much importance as the economic factors.

ESSENTIAL COMPONENTS OF HUMAN DEVELOPMENT:-

According to *Mahbub-Ul-Haq*[2], there are four essential components in the human development paradigm:
Equity: If development is to enlarge people choices, people must enjoy equitable access to opportunities. This demands a fundamental restructuring of power in many societies.
Sustainability: The next generation deserves the opportunity to enjoy the same well being that we now enjoy and this right makes sustainability essential. In other words, what must be sustained are worthwhile life opportunities, not human deprivation.
Productivity: An essential part of the human development paradigm is productivity which requires investments in people and an enabling macroeconomic environment for them to achieve their maximum potential.
Empowerment: Human development paradigm envisages full empowerment people are in a position to exercise choices of their maximum potential.
The empowerment of people requires action on various fronts.

1) It requires investing in the education and health of the people so that they can take advantage of market opportunities.
2) It requires ensuring an enabling environment that gives everyone access to credit and productive assets so that the playing fields of life are more even and.
3) It implies empowering both women and men, so that they can compete on equal footing.

SELECTION AND BACKGROUND OF TOPIC:

Marathwada, in Maharashtra, includes eight districts and was part of the Nizam's Hyderabad state until 1948. In 1956, it joined the bilingual Bombay state and has been an administrative division of Maharashtra since 1960. The region experienced poor socio-economic conditions under Nizam's autocratic rule, with minimal public involvement in governance. Educationally, Marathwada lagged significantly, with only one intermediate college and no female students beyond middle school by 1939, alongside a lack of technical education and inadequate teacher training opportunities.
The Marathwada region has historically been economically backward, predominantly agrarian with minimal industrialization and plagued by absentee landlordism and forced labor. This resulted in 99.7% of the population dependent on agriculture, with only 0.30% engaged in industrial work. Indicators like

[1] Streeten Paul in forward to Mahbub ul Haq's book "Reflections on Human development" pp- IX-X
[2] Mahbub-Ul-Haq (1996) " Reflections on Human Development" Oxford University Press, pp.16-20

limited banking, poor transport, neglected irrigation, and inadequate electricity supply highlighted this backwardness. The political landscape began to shift as the Indian National Congress and Mahatma Gandhi's movements penetrated grassroots, raising awareness of the national freedom struggle, yet Marathwada remained isolated under Nizam's rule. The socio-economic issues stemmed from a lack of education, communication, leadership, and political awareness.

Despite Maharashtra's formation in 1960, the region continued to face socio-economic adversity. This sparked demands for development, culminating in the 1974 "Development Movement," which urged action against unemployment and corruption. The Maharashtra government responded with initiatives like the Dandekar Committee in 1983 to assess regional imbalances and later identified six backward districts in Marathwada.

Despite investments, issues such as caste and gender inequality persisted, as development movements focused more on funding than addressing fundamental societal needs like health and education, which are essential for human development. An understanding of Marathwada's socio-economic conditions necessitates a historical and structural analysis beyond traditional HDI indicators, given that deep-rooted problems like early marriage and educational barriers for girls continue to plague the region.

OBJECTIVES OF THE RESEARCH:

- First, to understand the concept of human development and the philosophy underlying it.
- Secondly, to apply the concept of human development in the context of Marathwada.
- Thirdly, to outline the situation regarding the level of human development achieved in the Marathwada region and to calculate a Human Development Index for Marathwada.

HYPOTHESES:

- The concept of human development and the methodology of the Human Development Reports provide a powerful method to understand the nature and causes of socio-economic backwardness in Marathwada.

RESEARCH METHODOLOGY:

The research study is based on secondary. The secondary data has been collected from various sources : eg the Sample Registration System, Registrar General of India's database has been used for health indicator; for literacy I have used census data; school enrolment data is taken from the 2002 HDR for Maharashtra; and age wise structure is taken from www.indiastat.com, For profile of districts I have used official socio-economic surveys of the particular districts. For calculating HDI I mostly use UNDP's methodology – like the UNDP I calculate HDI on the basis of the three main components mentioned above.

Life Expectancy: The first of these is Life Expectancy at Birth. For this measurement, the UNDP's Life Expectancy Index is –

$$\text{Life Expectancy Index} = \frac{\text{Actual Value} - \text{Minimum Value}}{\text{Maximum Value} - \text{Minimum Value}}$$

For this index we use calculated life expectancy rate. Because district level data on death at different ages was not available , we used regression method for calculation of life expectancy rate for district level from

Infant Mortality Rate (IMR) of particular district.[3] We have used the regression method adopted by the IIPS, Mumbai.[4] The estimation of life expectancy at birth is usually provided by the Registrar General of India (RGI) using the data of Sample Registration System for major states of India. However, the estimates of life expectancy at birth are usually not available for smaller states of India, as well as the districts of India. They attempt to provide some methods to estimate life expectancy at birth for smaller states of India. They also attempt to provide the estimates of IMR and Life Expectancy for the districts of India. They attempted to provide the estimates for the smaller states and districts of India using indirect techniques. The regression equation is mainly used for providing such estimates. In deriving the estimates, it is assumed that the IMR is closely linked to life expectancy at birth. Accordingly, the relationship of IMR and life expectancy is established by taking the SRS data for the major state of India. Accordingly, regression equation have been attempted by taking life expectancy at birth as the dependent variable and IMR as the independent variable over three different time periods(2000,1995,1991). These variables are actually observed values for the major states of India.

Regression equation:

$$LEB_{2000} = \alpha + \beta * IMR_{2000}$$

$$LEB_{1991} = \alpha + \beta * IMR_{1991}$$

Where, α and 'β' are the regression coefficients.[5]

We have used the above regression equations for obtaining life expectancy for districts of Marathwada region.

Educational Attainment: HDI's second component is Educational Attainment. It is a combination of two parts: one is adult literacy and second is combined primary, secondary and tertiary enrolment ratio.

$$\text{Adult Literacy Index} = \frac{\text{Actual Value - Minimum Value}}{\text{Maximum value - Minimum value}}$$

We were not able to find district-level data for population in the age groups relevant to primary, secondary, tertiary enrolment. We had only the numbers of boys and girls enrolled. So, we used only 6-14 (1st STD to 8th STD) age enrolment ratio for as gross enrolment ratio in our calculation.

$$\text{Literacy Index} = \frac{1}{3}(\text{Adult Literacy Index}) + \frac{2}{3}(\text{6-14 Age Enrolment Ratio})$$

Income: The third component of the HDI is real GDP per capita (PPP in $). For this indicator we are use Per Capita District Domestic Gross Product (PCDDGP) in Purchasing Power Parity in US $ from Per Capita Gross Domestic Product of India's relative years.

$$\text{Income Index}[6] = \frac{\log(\text{Actual Value}) - \log(\text{Minimum Value})}{\log(\text{Maximum Value}) - \log(\text{Minimum Value})}$$

SOURCES:

For the research study we are use various human development reports like Global Human Development Reports, National, Sub-National Human Development Reports, State Human Development Reports, and

[3] The life expectancy at birth is the single most preferred health indicator for the state/district. Moreover, it is an indicator used to reflect the health dimension of the Human Development Index (HDI). Since the direct estimates of these indicators are either scanty or suffer from many limitations, indirect estimates are probably best suited.

[4] See Appendix I - E

[5] See Appendix I - F

[6] See Appendix I- G

District Human Development Reports, various books, journals, workshop's reading materials on human development and concern, Economic Survey of India's and Maharashtra's, NSSO's various rounds data, Third National Family Health Survey's data, District Socio- Economic Surveys, UNDP and Planning Commission's Maharashtra Human Development Action Research Studies data and various government published data.

RESEARCH PERIOD:

We are taking 1991 and 2001years for point estimation of the research study. Because most of the socio-economic data is available for only these years, the years of the decennial census.

DEMOGRAPHIC STRUCTURE OF MARATHWADA REGION:

Before we look at the picture of human development in the Marathwada region, we must know something about the demographic structure of Marathwada region in Maharashtra. Marathwada region comprises eight districts viz. Aurangabad, Beed, Hingoli, Jalna, Latur, Nanded, Osmanabad and Parbhani. First, we will compare Marathwada region's demographic structures to the other regions of Maharashtra state. In Maharashtra 969 lakhs persons live (census, 2001) 504 lakhs are male and 465 females. In Marathwada region (Aurangabad Division) 157 (16.2%) lakh person live, (see table no. 5.01) with in 81(51.59%) lakhs are males and 76(48.41%) lakhs are females. In Marathwada region 118(75.16) lakh persons live in rural area and 38 (24.84%) lakhs persons live in urban area. Also, in total population of Marathwada region 22 (14.3%) persons are belongs to scheduled castes and 6(3.9%) lakhs persons are belongs to scheduled tribes. On the literacy front Marathwada region on last position with 68.8% literacy rate (see table no.5.01) campers to other region of Maharashtra state. On the literacy front, males 81.4% and 55.4% females are literate. Sex- ratio[7] of Marathwada region is 939 its good compare to state level (922) and also at country level (933). In Maharashtra, population density is low (241) in Marathwada region compare to state level (315). In Kokan region it is very high (810), and low in Amravati region (208).

PICTURE OF HUMAN DEVELOPMENT OF MARATHWADA REGION:

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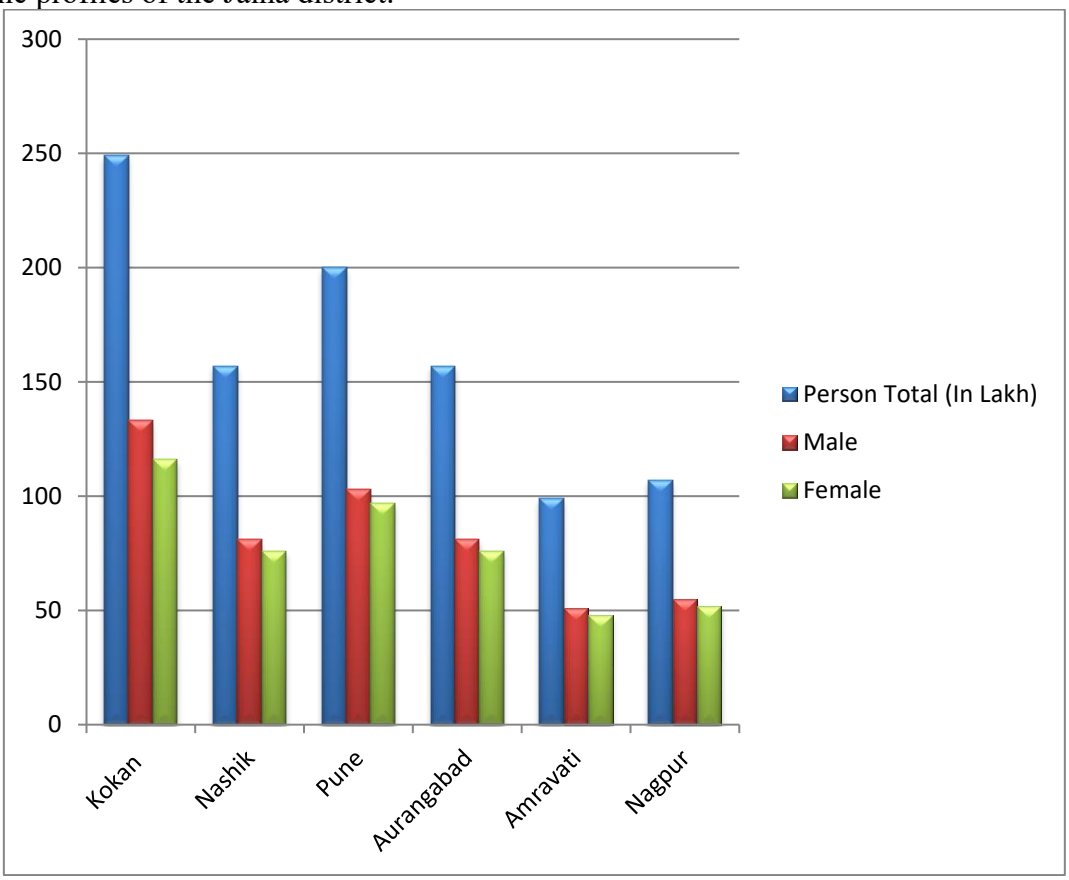
[7] Number of female to 1000 male
[8] Number of female to 1000 male

FIG. NO.1: REGION WISE POPULATION IN MAHARASHTRA, 2001.

After, looked the over demographic region-wise profile of Maharashtra state. Now, describing demographic profiles of the Jalna district.



Source: RGI, Delhi

After, looked the over demographic region-wise profile of Maharashtra state. Now, describing demographic profiles of the Jalna district.

HUMAN DEVELOPMENT PICTURE OF MARATHWADA REGION:

We are calculating human development indicators for districts of Marathwada region for 1991 and 2001. We are calculating life expectancy index, literacy index and income index (in $PPP).The life expectancy index calculating for districts of Marathwada region from life expectancy regression line of major states of India. The second indicator is literacy index for this index, we have calculated two separate indices---one is adult literacy index, second is combined enrolment ratio. But some data on enrolment is not available so we are compromise with data availability. The given below table and chart shows district's condition of infant mortality rate and life expectancy in 1991 and 2001.

HUMAN DEVELOPMENT INDICES OF MARATHWADA REGION IN 1991 AND 2001

Now we are going to calculate district wise human development index for Marathwada region at point 1991 and 2001.

In 1991, human development level in Aurangabad district was on top, index was 0.534 (Shows below table no. 5.18) , after that decreasing order districts human development index was Latur (0.507), Beed (0.493), Parbhani (0.481), Hingoli (0.478), Nanded (0.480), Osmanabad (0.478), and Jalna (0.438). Aurangabad on top level due to greater district domestic product at per capita (0.207) compare to other remaining districts. Latur on second position due to good education index, also Beed district , at last position Jalna

district due to low level on three front education, health means low life expectancy and income at per capita.

After, decade means in 2001, human development level as per below table no. 5.19 – shows position was change in human development level for districts. Hingoli got top rank with 0.560 human development index after that, second position got Parbhani district with (0.564), Latur (0.564), Aurangabad (0.560), Jalna (0.558), Osmanabad (0.551), Beed (0.542) and Nanded (0.539).
In 1990, Aurangabad district's rank declined due to lower life expectancy. Hingoli and Parbhani district human development index increased
due to good life expectancy (means low infant mortality rate). Also, Jalna district's rank increased from 8th position to 5th due to improvement in health indicator (decline Infant Mortality Rate). At, the position Nanded district's low level human development due to less life expectancy rate.

TABLE NO. - DISTRICT WISE HUMAN DEVELOPMENT INDEX IN MARATHWADA 1991.

Sr. No.	Districts	HDI	Rank	Le Index	Education Index	Adult Literacy Index	Enrolment (Ratio) Index	Per Capita Index
	1	2	3	4	5	6	7	8
1	Aurangabad	0.534	1	0.621	0.773	0.589	1.14	0.207
2	Beed	0.493	3	0.634	0.702	0.498	1.110	0.142
3	Hingoli*	0.481	5	0.640	0.642	0.475	0.977	0.161
4	Jalna	0.438	8	0.558	0.628	0.462	0.959	0.129
5	Latur	0.507	2	0.618	0.780	0.555	1.229	0.125
6	Nanded	0.480	6	0.583	0.724	0.481	1.209	0.134
7	Osmanabad	0.478	7	0.577	0.713	0.542	1.055	0.146
8	Parbhani	0.481	4	0.640	0.642	0.475	0.977	0.161
9	Marathwada	0.484		0.600	0.699	0.507	1.082	0.152

Table No. 5.19 - District-wise Human Development Index in Marathwada 2001

Sr. No.	Districts	HDI	Rank	Le Index	Education Index	Adult Literacy Index	Enrolment (Ratio) Index	Per Capita Index
	1	2	3	4	5	6	7	8
1	Aurangabad	0.560	4	0.616	0.490	0.736	0.811	0.575
2	Beed	0.542	7	0.666	0.430	0.645	0.877	0.531
3	Hingoli	0.578	1	0.750	0.446	0.670	0.793	0.537
4	Jalna	0.558	5	0.700	0.445	0.668	0.798	0.530
5	Latur	0.564	3	0.716	0.456	0.684	0.880	0.520
6	Nanded	0.539	8	0.650	0.456	0.685	0.760	0.510
7	Osmanabad	0.551	6	0.666	0.468	0.702	0.798	0.519
8	Parbhani	0.566	2	0.683	0.482	0.723	0.812	0.533
9	Marathwada	0.557		0.683	0.456	0.685	0.816	0.533

Sr. No.	Districts	HDI	Rank	Le Index	Education Index	Adult Literacy Index	Enrolment (Ratio) Index	Per Capita Index

MAJOR FINDINGS:

- In 1991 sex ratio (FMR) of Aurangabad, Jalna, Nanded, districts 914, 951, and 942 to increased 919, 952, and 943 respectively in 2001. But, in Beed, Latur, Osmanabad, Parbhani district's sex ratio decline 936, 935, 932, 958, to 927, 934, 930, and 957 respectively in 2001, only Hingoli district's sex ratio remained constant at 953 in 1991 to 2001. In fact, the ratios were almost constant except in Aurangabad, where the FMR increased by 5 points and Beed, where it declined by9 points. These changes can perhaps be attributed to patterns of migration , whether for education (in the case of Aurangabad city) or, more importantly, outward migration for work from Beed district. In Beed, health conditions of women are also very poor.
- In 1991, human development level in Aurangabad district was on top, index was 0.534, after that decreasing order districts human development index was Latur (0.507), Beed (0.493), Parbhani (0.481), Hingoli (0.478), Nanded (0.480), Osmanabad (0.478), and Jalna (0.438). Aurangabad on top level due to greater district domestic product at per capita (0.207) compare to other remaining districts. Latur on second position due to good education index, also Beed district , at last position Jalna district due to low level on three front education, health means low life expectancy and income at per capita.
- In 2001, human development level position was changed for districts of Marathwada. Hingoli got top rank with 0.560 human development index after that, second position got Parbhani district with (0.564), Latur (0.564), Aurangabad (0.560), Jalna (0.558), Osmanabad (0.551), Beed (0.542) and Nanded (0.539). Aurangabad district which had first position in 1991 declined in rank due to less life expectancy. Hingoli and Parbhani district human development index increased due to good life expectancy (which means a decline in the infant mortality rate). Also, Jalna district's rank increased from 8th position to 5th due to improvement in health indicators (decline Infant Mortality Rate). At, the position, Nanded district's low level human development due to less life expectancy rate.

CONCLUSION:

The present study demonstrates that the human development approach provides a comprehensive and meaningful framework for understanding socio-economic backwardness in the Marathwada region. The analysis of district-level Human Development Indices for 1991 and 2001 reveals that although there has been an overall improvement in human development, progress has been uneven across districts and across different dimensions of development. Improvements in health indicators, particularly life expectancy and infant mortality rates, contributed positively to HDI growth during the decade. However, education and income levels remain relatively low, limiting the overall development potential of the region.

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