ABSTRACT OF THE Ph. D THESIS
TOPIC
DISPARITIES IN HUMAN DEVELOPMENT – AN
ANALYSIS OF ANDHRA PRADESH STATE

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DISPARITIES IN HUMAN DEVELOPMENT AN ANALYSIS OF ANDHRA PRADESH STATE

Introduction:

Human Development implies all-round well being and freedom of the people to make choices. Income alone is not Human Development even though it helps to procure some of the basic requisites of material life. It is not a new invention in the science of economics as early leaders of political and economic thought gave prominence to this concept. Aristotle (384 – 322 BC), Immanuel Kant (1724 – 1804 AD), Adam smith “Father of Economics” (1723 – 1790 AD), Robert Malthus, Karl Marx, J.S. Mill and many more kept man and his welfare at the centre in their writings.

After the Second World War with the availability of National Income accounts, economists would over, went on measuring economic performance of the nations with GNP and well being with per capita income by treating GNP as multi dimensional. Income of a country seldom reflects all other achievements as it cannot be translated into all the facts of the lives of the people in society as observed by Mahaboob – Ul – Haq here under.

A. Saudi Arabia has a per capita income which is 16 times to that of Srilanka but a much lower literacy rate.

B. Infant Mortality Rate (IMR) in Brazil is 4 times higher than Jamaica though Brazil enjoys twice the per capita income of Jamaica.
C. Oman has three times the per capita income of Costarica but about one third of its literacy rate and fewer years of life expectancy and it lacks most political and economical freedom.

Effect on finding of the trickle down of growth in terms of GNP or per capita income, to be weak, focus has been shifted to development since 1970’s as development is understood as growth plus progressive changes. In this connection D.Goulet stated that development encompasses life substances, self-esteem and freedom. Basic needs like food, clothing, housing and minimal comforts constitute life substance; self esteem involves the feeling of self-respect in the society and freedom refers to the removal of the three evils of ‘want, ignorance and squalor’. Economic development as viewed by C.P.Kindleberger and Bruce Herrick implies improvements in material welfare, eradication of mass poverty changes in the structure of production shift from agriculture to industrialization, generation of productive employment among the working age population and greater participation of broad based groups in making decisions about the directions economic or otherwise. The objective of economic development is human development leading to human welfare in all spheres of existence.

**Human Development: Definitions.**

Human development is of the people, for the people and by the people. Nutrition, health and education of the people in the form of human capital stand for the “of”; “for” the people gives imSportance to transfer the benefits of growth to influence the people’s lives; “By” the people to initiated a process that affects their lives.
HDI is based on only three important factors; income per head, life expectancy and basic education. In fact human well being and freedom are influenced by so many factors like, social, economical, political, legal, cultural and ecological and others. HDI neglects other factors. HDI is calculated with equal and constant weightages to all the three factors to keep it very simple. The three factors are to be different from each other. Human Development is deeper and richer and it cannot be expressed by any index. So HDI can not reflect the real contours of Human Development in a country, as political strategies, democratic freedoms and national priorities influence Human Development. The criterion of Human Development is not how much a nation produces, but how its people are faring. Exclusion of political freedom and participation always affects the concept of HDI. Implicit tradeoff between life expectancy and income is a problem with HDI if per capita income increases in a country it can compensate the decline in life expectancy and the HDI remains constant.

Human Development refers to the expansion of people’s choices by enhancing their capabilities and functioning.

As the very nature of HDI is flexible and open for refinement Human Poverty Index (HPI) was developed in 1997. HPI concentrates on deprivation by taking the same dimensions of HDI. Human Poverty goes beyond income poverty in HDI as it includes deprivation in education and life span. If it is accepted that Human Development is enlarging choices HPI indicates the denial of the most basic choices.

Human Development, in a wider sense is concerned with the public and private, economic, political and spiritual well being. Human development is an
approach to overall development which put the well-being of the people first which regards human beings simultaneously as both means and ends.

Criticisms and controversies are to be viewed in the context of application of an idea or instrument. HDI has stood the test of time and it has become popular in comparing the levels of Human Development of the Nations so as to enable the National Governments to initiate policy measures to come up in rankings.

Human development has two sides; one is the formation of capabilities such as improved health, knowledge, and skill while other is the people to make use of the acquired capabilities for employment productive activities, political affairs or leisure. A Nation is to build up Human capabilities as well as opportunities.

According to UNDP “Human Development is a development paradigm about creating an environment in which people can develop to their full potential and lead productive, creative lives in accordance with their needs and interests. People are the real wealth of nations and HD is more important than economic growth. HD not only generates economic growth but distributes its benefits equitably, regenerates the environments rather than destroying it and empowers people rather than marginalizing them.

He further added that HDI was a broad framework and any one could come with new ideas to be included by explaining what and why. He assured that the people at UNDP would listen to any one to refine HDI.

Amartya Kumar Sen took the concept human capital developed by T.W. Schultz and argued that the objective of development should be enhancement of
human capabilities. Human Capital treats human beings as agents of production while human capabilities focus on the abilities and freedom.

A committee of the United Nations brought the above two strands together and advocated human capabilities approach in 1988. The ideas elaborated in the report were picked up by the United Nations development programmes and under the brilliant leadership of Mahaboob-Ul-Haq ably assisted by Amartya Kumar Sen developed Human Development Indices. Since 1990 UNDP has been issuing HDRs every year and the member countries have been encouraged and assisted for the publication of HD reports.

**Human Development Measurements - Human Development Index (H.D.I)**

Gross National Product as a measure of human welfare has not been accepted as a suitable device. Search for a measure as a better yard stick of the socio-economic progress of the nations has resulted in the HDRs of the UNDP since 1990 UNDP. Sponsored search was guided by several principles and the HDI (Human Development Index) was evolved. The first principle is that the HDI measures the basic concept of Human Development to enlarge people’s choices. The second one is to include only a limited number of variables to keep it simple. The third one is to construct a composite index instead of separate indices. The fourth principle is to cover both social and economic choices of the people. The fifth one is to keep the HDI flexible for further refinement in coverage and methodology and the last one is to persuade and put pressure on the policy makers to invest amounts in producing relevant data and to encourage international institutions to prepare comparable statistical data system.

The first Human Development Report (H.D.R) in 1990 introduced HDI by combining indicators of life expectancy, educational attainment and per
capita income of a nation into a composite index. The components are measured by four variables; GDP per capita (Purchasing Power of Parity in US Dollars), literacy rates (percentage) combined with gross enrollment ratio (percentage) and life expectancy at birth (years). The composite index of a country may be in a figure between 0 and 1. One indicates high level of Human Development while zero stands for no level of human development. Countries are given specific ranks based on their HDI’s. This process has been continuing in the HDR’s since 1990.

In 1995 Gender-related Development Index (GDI) and Gender Empowerment Measure (GEM) were added to HDR’s. This change took place to capture Gender Inequalities. G.D.I takes the same variables of H.D.I but the components are worked out separately for women. GDI depends on the disparities between men and women in the achievements. The greater the gender disparity the lowest a country’s GDI. It is HDI adjusted downwards. GEM measures women’s empowerments in public life. It takes the women MPS and female legislators senior officials and managers, female professional and technical workers and gender disparities in the earned incomes into consideration while computing GEM. GDI focuses on the capabilities of the women where as GEM points out the use of those capabilities to take advantage.

Human Development is a constantly evolving concept depending on the dynamics of socio-economic, political and cultural conditions. HD measurements in the form of indices also undergo refinements for which the HDI construction has been made flexible since 1990. Regular and constant debates discussions and reviews take place at the Global level to make improvements in Human Development Indices.
Mahbub-Ul-Haq addressed the criticisms by stating;” In economic science, nothing is ever new and nothing is permanent. Ideas emerge, flourish, wither and die to be born again a few decades later. Such is the case for ideas about HD”.

He further added that HDI was a broad frame work and any one could come with new ideas to be included by explaining what and why. He assured that the people at UNDP would listen to any one to refine HDI.

Criticisms and controversies are to be viewed in the context of application of an idea or instrument. HDI has stood the test of time and it has become popular in comparing the levels of Human Development of the Nations so as to enable the National Governments to initiate policy measures to come up in rankings.

**Human Development in India**

Jawaharlal Nehru the first Prime Minister of the country realised the need of ending poverty, ignorance, disease and inequality of opportunities, soon after, India became independent in 1947. The first five year plan (1951 – 56) was ad-hoc in nature and no specific strategies of investments were conceived. In second five year plan (1956 – 61) under the impact of socialistic pattern emphasized social goals. Rapid industrialization with emphasis on basic and heavy industries was initiated with the fond hope of “trickle down” effect to benefit the poor and also by generating more employment. The plan gave importance to village planning to benefit the more vulnerable sections like land less farmers and artisans. Decentralized planning was also initiated. Falling in line with the other developing countries Indian Government gave importance to
accelerating economic growth, savings and investments during 1960s, 1970s and 1980s. The inadequacy of this strategy was accepted by the Government of India in the eighth five year plan by stating; “The problem of poverty could not be tackled through growth, which itself was slow over a long period of time”.

During the 1990s India introduced economic reforms giving importance to liberalisation. The first Global HDR was published in 1990. It was thought that the liberalization efforts should be combined with focus on Human Development. The Government of India accepted in the VIIIth plan to keep Human Development as the ultimate goal. “It is towards this goal that employment generation, health, drinking water and provision of adequate food and basic infrastructure are listed as the priorities”. Human Development is of vital importance in India since large portion of the population is below poverty line and income inequalities are on the rise. Poor among Scheduled Castes and Scheduled Tribes are high. 60 per cent of the women are chronically poor. Access to basic services is not available to many. More than 307 million people are illiterate. Malnutrition, Maternity deaths and Infant Mortality rate (IMR) are high. Focus on Human Development is the urgent need in India.

As per the Human Development report 2011 India is among the medium Human Development Countries. Its HDI has increased from 0.412 in 1975 to 0.619 in 2004 and then decreased to 0.612 in 2007 and to 0.547 in 2011. India’s rank has been 134 among 186 countries of the world. It is just above Pakistan and Bangladesh but below Sri Lanka and China.

National Human Development Report 2001 was prepared by the Planning Commission$^{31}$ for the years of 1981, 1991 and 2001. The same dimensions of
UNDP were used by the NHDR with modification scaling norms are consumption expenditure per capita per month – minimum Rs. 65/- maximum is Rs.325/-. Literacy for 7+ years minimum 0 and maximum 100. Intensity of formal education minimum is 0 and maximum is 100. Life expectancy at age 1 minimum 50 maximum 80. Infant Mortality Rate – minimum 20 per 1000 and maximum – 100

Weights have been assigned to the indicators. Life expectancy is given 65 percent and infant mortality 35, literacy 65 and intensity of formal education 35 percent.

However, the three indicators of longevity, educational attainment and economic development are given equal weights in the final calculation of HDI.

According to the National Human Development Report 2001 Kerala has been at the top all through the years under reckoning while the rank of Andhra Pradesh has been slipped to 10 in 2001 against 9 in 1981 and 1991. HDI of A.P has been 0.298 (1981); 0.377 in 1991 and 0.411 in 2001 against the all India HDIs of 0.302; 0.381 and 0.472 in the years under the reference. It implies that the HDI of AP has always been below the National Average.

Planning Commission released the second National Human Development Report 2011 on October 2011 Human Development Index has increased by 21 per cent as per the report. It is stated in the report that absolute poor people constitute 27 per cent of the population. The HDI increased from 0.387 in 1999-2000 to 0.467 in 2007 – 08 the terminal year of the report. The top five positions have been held by Kerala, Himachal Pradesh, Delhi, Goa and Punjab as in the earlier NHDR of 2000. Bihar Andhra Pradesh, Chhattisgarh, Madhya
Pradesh, Odisha and Assam have HDI values which are less than the National Averages of 0.467. The HDR maintains that health, Nutrition and sanitation are still challenges confronting the Human Development efforts of the Nation.

Center for Economic and Social Studies (CESS) prepared Human Development Report for the state of Andhra Pradesh in 2007. HDI’s for the districts have been computed for two periods district wise. Period I refers to early 1990s while period II refers to early years of the last decade i.e. 2000’s.

Ranks are assigned to the districts based on HDI values. HDI’s for the state of Andhra Pradesh in period I and II are 0.402 and 0.537 respectively. Hyderabad, Krishna, Guntur, Nellore and Ranagareddi are the top five districts in both periods. Antapur, Kurnool, Srikakulam, Mahaboobnagar and Vizianagaram are at the bottom in the two periods of study. East Godavari, West Godavari Krishna, Guntur, Prakasam, Nellore, Chittoor, Kadapa, Rangareddi, Hyderabad, Karimnagar and Khammam districts have more than the state average HDI values in both periods. However, Prakasam has slipped to less than the state average HDI value in period II while Medak district could improve its HDI at more than the state average.

**Review of Literature**

In the array of research studies on the subject of inter regional disparities two opposite school of thought are observed. First one, those that have found that there was marked reduction in income differentials or that they have seen a noticeable tendency for convergence of long – term State Domestic Product (SDP) growth rates. The second one is those that have noted a widening of regional disparities amongst states or have depicted a picture of interstate divergence. The studies that have been a positive sign of convergence are Dholakia (1994), I Cashin and Sahy (1996), Sarkar (1996), and Ahluwalia

The above mentioned studies have examined the different facts of Human Development Indices in general and some studies have analysed HDI in India and the state of Andhra Pradesh. Conceptual issues processes, state of HDIs, overall factors of linkage are critically focused in the studies. They have enabled the researcher to develop an insight into the concept, methodology, analysis and interpretation besides research tools and techniques.

The gaps in the above studies are addressed in the present study with specific references to the micro units (districts) in the state of Andhra Pradesh. The researcher has made an effort to fit in this research study and results into the existing body of literature on the subject with the help of the reviews

**Significance of the Study:**

Most of the existing studies on Human Development are either at the National level or state level whereas this research study takes the districts of A.P. for comparison and to identify the disparities in Human Development with the Indices as computed for all the 23 districts of A.P.

Regions of the state, Telangana Coastal Andhra and Rayalaseema are also compared to point out the disparities in HDI in this study as regional disparities assume importance for the separatist tendencies. The state of A.P is divided into 5 regions to bring all the districts on equal footing. Hyderabad and Rangareddy districts are treated as separate region to eliminate their impact on the rest of the Telangana. Similarly North Coastal districts; Srikakulam, Vizianagaram and
Visakhapatnam are treated as separate region, Uttarandhra, to avoid the impact of the developed south Coastal Andhra. Thus the five regions are – Hyderabad and Rangareddy; rest of the Telangana, Uttarandhra; South Coastal Andhra and Rayalaseema. As such this study focuses more effectively on the regional disparities in Human Development in A.P.

Intra regional and inter regional comparisons facilitate regional and district level plans for development and this study attempts to bring out both disparities.

This research study goes beyond a single point of time. Census years; 1981, 1991, 2001 and 2011 are taken as four terminal points of study to find out the trends in Human development, district wise and region wise. In other words trends and comparisons are for three decades.

Instead of a single measure in the form of HDI this study takes Women Status Indices and Quality of Life Indices to examine the levels of correlation among the three measures.

Same formulae are followed for the computation of the three indices at the four points of study to bring in uniformity and to avoid computational bias and to make comparisons effectively.

This research study is both micro and macro in nature. Micro as the districts are taken and macro as the regions and the state of A.P. are taken for analysis.
Objectives of the Study:

1. To ascertain the levels of adult literacy region-wise and district-wise over the period of study for computing education index.
2. To evaluate the inter regional and intra regional standards of living by working out income index.
3. To examine Infant Mortality Rate and delve into health services available to the people at regional and district levels as a proxy indicator for health index.
4. To analyze the gender related development levels in the regions for Women Status Index.
5. To identify the top and bottom districts in Human Development region wise.
6. To compare the levels of inter and intra regional human development indices to establish disparities.
7. To compute the quality of life indices for the regions and the districts by taking the availability of basic amenities like safe drinking water, toilet facilities non-traditional fuel, permanent houses and domestic electricity connections.
8. To suggest strategies and measures to improve human development.
Hypotheses of the Study:

1. Human Development is reflecting the levels of education, health care and incomes varies from region to region in the form of regional disparities in Andhra Pradesh (AP).

2. Even in a particular region Human Development is not uniform across the geographical areas/districts implying intra regional disparities in Human Development.

3. Quality of Life with the availability of basic amenities like safe drinking water, toilet facilities, non-traditional fuel, Pucca houses and electricity; women status as measured with female literacy and sex ratios are closely related to Human Development and the three thrive in a pattern that one reinforces the other and vice versa.

4. Over the period of time developed regions/districts go on improving the levels of Human Development with the initial spurt while the lag behinds remain at the bottom.

Testing of Hypotheses:

Date as processed and tabulated in chapter IV for the four years of study viz 1981, 1991, 2001 and 2011 is converted into indices for all the 23 districts divided and shown region wise. The first hypothesis is tested to assess its validity or otherwise. In the same chapter in the same manner indices are worked out for the related strands of human welfare i.e. women status and the second hypotheses is put to test to ascertain its validity. Testing of two hypotheses has been in a two way one in the researcher’s method and the other in the UNDP method with slight change in the variables taken for HDI and with no change in UNDP formula as explained in this chapter.
The third and fourth hypotheses are tested with the data in the Vth chapter; where in the state of Andhra Pradesh is divided into five regions to facilitate analysis. The districts with higher indices of Human Development are identified in comparison to the lag behind ones, region wise to establish intra regional disparities, similarly Human Development indices of the base year (1981) are compared with the indices of the terminal year of 2011 along with trends, region and district wise to examine the impact of the initial spurt in this chapter and thus the fourth hypothesis of the study is tested. The results of the tests are given in the chapters concerned with regard to each hypothesis.

**Methodology:**

For the calculation of Human Development Index values the basic indicators of UNDP NHDR and AP HDR 2007 are kept in view. Dr. Bhiswajith Guha (2003) has taken five parameters to estimate the QLI i.e. I – Safe drinking water, II – Electricity connection, III – Two square meals a day throughout the year, IV – Permanent houses available and V – Beds in public hospitals to estimate the quality of life. These points are also kept in view in choosing the development indicators for this research study. For the study the researcher has taken the following development indicators

1. Literacy
2. Standard of living – Per Capita Income
3. Work participation – Non Agricultural Workers
4. Extent of urbanization
5. Density of the Population (DP)
6. Infant Mortalitiy Rates (IMR) 

7. Availability of health services - Government Hospitals 

8. Gender related development parameters - Female literacy and sex ratio 

9. Domestic Electricity connections 

10. Safe drinking water 

11. Pucca Houses 

12. Non-traditional fuel 

13. Toilet facilities 

The formula used by UNDP under the guidance of Mahbub- Ul- Haq is used for HDI calculation of a particular indicator. The formula is given bellow. 

\[
\frac{\text{Actual ‘N’ Value} - \text{Minimum ‘N’ Value}}{\text{Maximum ‘N’ Value} - \text{Minimum ‘N’ Value}} = \text{N – Index}
\]

Where ‘N’ = Indicator 
Actual Value ‘N’ = Value of ‘N’ in a Region 
Minimum Value ‘N’ = Minimum as Assigned 
Maximum Value ‘N’ = Maximum as Assigned.
<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Development Indicator</th>
<th>Maximum Value</th>
<th>Minimum Value</th>
<th>Dimension</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nan Agricultural Workers (NAW)</td>
<td>100</td>
<td>0</td>
<td>Income Dimension</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Density of Population (DP)</td>
<td>Highest of the District in the State</td>
<td>Lowest of the District in the State</td>
<td></td>
<td>In the Researcher Method Dimensions are worked out with the NAW, DP and URB in all the years of study; 1981; 1991; 2001 and 2011</td>
</tr>
<tr>
<td>3</td>
<td>Urbanization (URB)</td>
<td>100</td>
<td>0</td>
<td>Education Dimension</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Literacy</td>
<td>100</td>
<td>0</td>
<td>Education Dimension</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Government Medical Facilities (GMF)</td>
<td>Average Lowest Population per Government Hospital</td>
<td>Average Highest Population per Government Hospital</td>
<td>Health Dimension</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Houseless Population (HP)</td>
<td>Lowest % of the District in the State</td>
<td>Highest % of the District in the State</td>
<td>Quality of Life Dimension</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Domestic Electricity Connections (DEC)</td>
<td>100</td>
<td>0</td>
<td>Women Status Dimension</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Female Literacy (FL)</td>
<td>100</td>
<td>0</td>
<td>Women Status Dimension</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Sex Ratio (S R)</td>
<td>1000</td>
<td>800</td>
<td>Women Status Dimension</td>
<td></td>
</tr>
</tbody>
</table>

Source: Adopted by the Researcher
### Statement of the Indicator wise Maximum and the Minimum Values in 1991 to 2011 (UNDP)

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Development Indicator</th>
<th>Maximum Value</th>
<th>Minimum Value</th>
<th>Dimension</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Per Capita Income (PCI)</td>
<td>Highest Value of the District in the State</td>
<td>Lowest Value of the District in the State</td>
<td>Income Dimension</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Literacy</td>
<td>100</td>
<td>0</td>
<td>Education Dimension</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Infant Mortality Rate (IMR)</td>
<td>Lowest Value of the District in the State</td>
<td>Highest Value of the District in the State</td>
<td>Health Dimension</td>
<td>The same indicators have been taken to construct HDI, QLI and WSI in 1991; 2001 and 2011 also.</td>
</tr>
<tr>
<td>4</td>
<td>Government Medical Facilities (GMF)</td>
<td>Average Lowest Population per Government Hospital</td>
<td>Average Highest Population per Government Hospital</td>
<td>Health Dimension</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Dwelling</td>
<td>100</td>
<td>0</td>
<td>Quality of Life Dimensions</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Domestic Electricity Connections (DEC)</td>
<td>100</td>
<td>0</td>
<td>Quality of Life Dimensions</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Safe Drinking Water (SDW)</td>
<td>100</td>
<td>0</td>
<td>Quality of Life Dimensions</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Non Traditional Fuel (NTF)</td>
<td>100</td>
<td>0</td>
<td>Quality of Life Dimensions</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Toilet Facilities (TF)</td>
<td>100</td>
<td>0</td>
<td>Quality of Life Dimensions</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Female Literacy (FL)</td>
<td>100</td>
<td>0</td>
<td>Women Status Dimension</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Sex Ratio (SR)</td>
<td>1000</td>
<td>800</td>
<td>Women Status Dimension</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Adopted by the Researcher

For the indicators maximum and minimum values are assigned and they are analyzed by including them in the value of Human Development Index. Since the study extends from 1981 to 2011 same procedure of assigning values and method of computation is followed. In view of the data constraint 9 parameters are taken in 1981. However data on per capita income and IMR has not been available for 1981 and the researcher is constrained to take Non-agricultural workers, urbanization and density of population of the districts as pseudo indicators of income dimension to work out HDIs of 1981. This
procedure is referred to as a Researcher’s Method (RM) in this study and it is continued in 1991, 2001 and 2011 to facilitate comparison. As data on per capita incomes are available from 1991 onwards, income dimension is worked out with them and this is referred to as UNDP method. Thus two HDI’s are computed from 1991 onwards, while only one HDI for 1981. Similarly only Government medical facilities are taken under the health dimension in 1981 in the absence of district wise data on IMR. From 1991 both IMR and Government medical facilities are included in the health dimension with weightages.

Against the backdrop discussed so far this research study makes an attempt to analyse Human Development and the disparities in the Human Development in the state of Andhra Pradesh. Human Development Indices (HDIs) shall be worked out for each district for the Census years of 1981, 1991, 2001 and 2011 years of the study. Indicator wise district level indices are added and the total is divided by the number of indicators. That gives the Human Development Index pertaining to a particular indicator. All the Human Development Index values of the parameters in a region are added first and the total is divided by the number of indicators to arrive at the Human Development Index of the region. The same process is applied for all the four study points of all the regions. The resultant Human Development Indices (HDIs) at the state level region-wise, district-wise for all the four study points are analyzed to establish the trend and to identify disparities.

The composite index of a district or region may be in a figure between 0 and 1. One indicates high level of Human Development while zero stands for no level of human development. According to UNDP HDI Groups are as follows:

**UNDP Grouping**

I = Very High HDI Group (HDI Value 0.8+)

II = High HDI Group (HDI Value 0.7 – 0.8)
III = Medium HDI Group  (HDI Value 0.7 – 0.5)
IV =  Low HDI Group     (HDI Value < 0.5)

**Area of Study:**

The study covers the entire state of Andhra Pradesh which came into existence in 1956 on 1st November. Geographically the state is divided into three regions viz. Telangana, Coastal Andhra and Rayalaseema, Telangana comprises 10 districts, Coastal Andhra 9 districts and the Rayalaseema 4 districts, All together 23 districts of the state of Andhra Pradesh are analyzed in this study. The census years of 1981, 1991, 2001 and 2011 are taken as the points of study. In other words the study extends to three decades of time span.

**Data sources:**

This research work is purely based on secondary data. The secondary data is collected from census reports, statistical abstracts, publications, districts hand books, Human Development Reports and browsing through internet. Data is carefully noted down to the extent of relevance from the secondary sources. UNDP annual reports on HDR and the NHDR human development reports of 2001 and 2011 are also used. Centre for Economic and Social Studies, Hyderabad’s report of 2007 has also been used to gather data.

**Tools of Analysis:**

Simple averages, percentages, Human Development Indices by applying the formula as stated earlier shall be used for analyzing the data and bar diagrams are also used.

**Limitations of the Study:**
This research work has the following limitations

I. It takes 1981 as the starting point instead of 1956, the formation of the state of Andhra Pradesh. It implies that the analysis does not refer to the trends since the formation of the state.

II. Only secondary data is taken and the weak points of the secondary data such as form and authenticity may be reflected in the analysis.

III. District level information on important indicators like span of life, infant mortality for all years are not available and as such there is a deviation in the selection of indicators for Human Development Index.

IV. Information for all the indicators of Human Development Index are not available in the four study years continuously. As such some indicators may not have indices at all points of study.

V. The period of study is quite long giving scope for so many changes. Hence the comparison may not be totally effective.

VI. Certain liberal schemes aiming at social welfare have been initiated in the state of Andhra Pradesh (Electricity to all rural areas, free ambulance facilities in case of emergencies, Rajeev Aurogya Sri cards for medical treatment, subsidized rice and Indiramma Housing etc). Computation of Human Development Indices ignores these services in the study.

However, this research study encourages more and more micro level studies on Human Development at the regional and district levels. It estimates the relative HDIs in the three regions. It also identifies the backward districts in a particular region. This study discourages the trend of creating islands of prosperity in the ocean of poverty.
Plan of the Study:

This research study is divided into six chapters as follows

Chapter – I deals with the introduction, nature, scope and methodology of the study.

Chapter – II is on review of literature wherein earlier studies on regional disparities and Human Development computations are examined in detail.

Chapter – III examines the profile of the state of Andhra Pradesh, Region wise and district wise in brief.


Chapter – V explains Inter- regional and Intra-regional disparities in Human Development in the state of Andhra Pradesh.

Chapter – VI is the final chapter, wherein summary, conclusions and suggestions are given.

Chapter wise sum-up:

Meaning, definitions, concepts of Human Development, Views of the earlier economists on HD, evolutions of UNDP HDI by Haq modifications in the HDI and additions from time to time are all elaborated in the first chapter. Countries of the world in the UNDP grouping, the rank of India therein, trends over the years, National Human Development Report in India and the ranks of the states, especially Andhra Pradesh. Centre for Economic and Social Studies Report (CESS 2007) for the state of Andhra Pradesh, wherein HDIs are worked out for the districts and regions for 1991 and 2001 have all been discussed. Methodology adopted for this study, data source, objectives, hypotheses,
significance of the study, tools of analysis, limitations of the study and chapterisation are detailed in this chapter. In a way, this chapter introduces the research problem and depicts the plan of work contemplated by the researcher.

The reviews of earlier studies have examined the different feats of Human Development Indices in general and some studies have analyzed HDI in India and the state of Andhra Pradesh. Conceptual issues, processes, state of HDIs, overall factors of linkage are critically focused in the studies. They have enabled the researcher to develop an insight into the concept, methodology, analysis and interpretation besides research tools and techniques. The gaps in the above studies are addressed in the present study with specific references to the micro units (districts) in the state of Andhra Pradesh. The researcher has made an effort to fit in this research study and results into the existing body of literature on the subject with the help of the reviews in the second chapter.

Profiles of the state, its regions and the districts are elaborated in the third chapter. Historical background and cultural aspects of the state, region and district wise are briefly analyzed. The physical features of Andhra Pradesh such as climate, rainfall, forests, minerals, geological variations, rivers and the industries, power generation, irrigation sources and the like are presented. The diversities of the three regions are pointed out as the base for human activities which lead to Human Development and to identify the disparities there in and the fact that the demand for separation of Telangana in view of the disparities has started on the very first day of the formation of Andhra Pradesh has also been stated.

Human Development in Andhra Pradesh in 1981; 1991; 2001 and 2011 has been examined in chapter four. Literacy, Health and incomes are taken to construct Human Development Indices for the districts, regions and the state.
Basic amenities like dwelling, domestic electricity connections, safe drinking water, toilets and non-traditional fuel for cooking, in total, five are taken to assess Quality of Life Indices. Female literacy and sex ratios are taken to work out women status indices. Three aspects of human well being viz human development, quality of life and women status have been analyzed for all the study years.

The study has progressed in the fourth chapter by keeping the objectives in view. Human Development, Quality of Life and Women Status in the regions and the state are analysed in depth. District level indices are constructed for aggregation and indicator wise indices have been worked out. This chapter, thus, becomes the base for probing into the basic hypothesis one and two of this study and they have been validated.

Inter regional and intra regional disparities in Human Development in Andhra Pradesh are examined in depth in chapter fifth and for this purpose the state is divided into five regions; Uttrandhra, South Coastal Andhra, Rayalaseema, Metropolis and the Rest of Telangana. HDIs, QLIs and WSIs of these five regions are analysed to find out precise intra regional and inter regional disparities by eliminating the higher impact of Metropolis districts on Telangana and South Coastal and Uttrandhra. It is noted that Metropolis unit has higher levels of Human Development with Coastal Andhra as a close follower. Uttrandhra, Rayalaseema and the rest of Telangana districts are on the same footing with relatively lower HDIs within marginal variations Srikakulam, Vizianagaram and Prakasam districts in Coastal Andhra; Kurnool and Ananthapur in Rayalaseema and Mahabubnagar, Adilabad and Nizamabad in Telangana are at the bottom in Human Development in all the years of study. Hypotheses three and four are tested and found to be valid in this chapter.
The objectives conceived for the study have been kept in view. Levels of literacy region and district wise have been ascertained. Income indices of the regions and districts have been worked out. Government Medical Facilities and Infant Mortality Rates (IMR) have been computed for the regions and the districts. Gender related development levels have been assigned by using Women Status Indices. Top and bottom districts in Human Development, region wise, are identified. Disparities in Human Development have been established region wise, sub-division wise besides intra-regional disparities. Availability of basic amenities like drinking water, toilet facilities, domestic electricity connections, permanent houses and non-traditional fuel has been examined and quality of life indices are worked out.

To sum up the study is confined to the hypotheses and objectives in total. All the four hypotheses are found to be valid. Analysis has taken place in the light of the objectives.

Srikakulam, Vizainagaram and Prakasam districts lag behind on all counts in Coastal Andhra while Krishna, Guntur and West Godavari are at the top in Human Development. Antapur and Kurnool districts are at the bottom in Rayalaseema while Chittoor and Kadapa are at the top on many counts during the period of study. Hyderabad and Rangareddi are at the top while the third place goes on changing among Medak, Karimnagar and Khammam. All through in Telangana Mahabubnagar is at the bottom. Adilabad and Nizamabad can be included in the bottom group as their names have appeared more number of times.

Inter regional disparities have been analysed in this study. Within the regions variations in Human Development are noted. Top three and bottom three districts in Human Development in the three regions are identified.
Main Findings & Conclusions:

1. HDI in Andhra Pradesh has increased from 0.500 in 1991 to 0.516 in 2001 and then decreased marginally to 0.501 in 2011 as per the UNDP method while it has increased from 0.351 in 1981 to 0.472 in 2001 and decreased negligibly to 0.471 in 2011.

2. HDIs of the Coastal Andhra increased up to 2001 and then decreased in 2011 from 0.533 to 0.519 in UNDP method. However it has increased all through in between 1981 – 2011 in the Researcher Method from 0.382 to 0.489.

3. HDI in Rayalaseema decreased up to 2001 and then increased from 0.426 to 0.452 in 2011 in UNDP Method. However in Researcher Method it has increased all through from 0.342 to 0.452.

4. HDI in Telangana has increased up to 2001 and then decreased from 0.544 to 0.495 in 2011 in UNDP Method. The same trend is noted in Researcher’s Method also, decrease from 0.499 to 0.452 in between 2001 and 2011.

5. Applying the UNDP report’s criterion of grouping it is noted that Hyderabad district alone is in the very high HDI group (0.8+) in the state in 2011 with no other district in the high HDI (0.7 – 0.8) group. Ranga Reddy and Medak in Telangana and all the Coastal Andhra districts except Srikakulam and Vizianagaram are in the medium HDI group (0.5 – 0.7) while the remaining 13 districts are in low HDI (< 0.5) group. The state and Coastal Andhra are in the medium HDI group while Telangana and Rayalaseema are in the low HDI groups as revealed by UNDP method. In the researcher’s method also Hyderabad is in the very high HDI group in 2011 with no other district in the high HDI group. In contrast to the UNDP method only six districts are in the medium HDI
group of which one (Ranga Reddy) is from Telangana, one (Chittoor) is from Rayalaseema and the remaining four (Krishna, West Godavari, Guntur and Nellore) are from Coastal Andhra. The remaining 16 districts are in the low HDI group.

6. Public health expenditure in A.P had decreased from 8.74 percent of the budget in 1970 – 71 to 4.99 percent in 1995 – 96 over the years. Hospital: Population ratio had increased from one hospital for 3.9 lakhs people to one hospital for 4.68 laks people. IMR had increased in between 2001 and 2011 from 43 to 46. Social sector expenditure too, decreased from 11 percent of the budget in 1986 – 87 to 6 percent during 2002 – 06. Over the years expenditure on health and education has been relatively low when compared to the all India averages. Unemployment had increased both in rural and urban areas in A.P between 1993 – 94 and 2004 – 05 as observed from NSSO surveys. Agriculture has been in distress and crop holidays have been reported. All these factors have pulled down the income and health dimensions of HDI as otherwise it should have been higher under the impetus of growing literacy rates

7. Quality of Life in the state as well as the regions has increased during the study period. State from 0.350 in 1981 to 0.670 in 2011, Coastal Andhra 0.405 to 0.680, Rayalaseema 0.365 to 0.690 and Telangana from 0.311 to 0.660.

8. Women Status has continuously increased in the state and in the regions as sex ratios and female literacy rates have increased, State from 0.530 to 0.774; Coastal Andhra from 0.590 to 0.774; Rayalaseema from 0.490 to 0.749 and Telangana from 0.520 to 0.764.
9. Regional disparities are evident in the state of Andhra Pradesh; Coastal Andhra has more than the state average values in all dimensions of Human Development in all the years of study.

10. Intra-regional disparities are considerable; Metropolises (Hyderabad and Rangareddy districts) and South Coastal Andhra have higher index values all through.

11. Lag behind districts in the regions have been the same in the base and the terminal years of the study. Srikakulam, Vizianagaram, Ananthapur, Kurnool, Mahabubnagar and Adilabad have been the lag behind districts.

12. South Coastal Andhra is in the second position after Metropolis districts in all dimensions of Human Development.

13. Top two or three districts in a region have remained at the top while bottom districts are at the bottom in the base and terminal years.

14. There are variations in the basic development indicators like literacy, female literacy, DEC, safe drinking water and toilet facilities among the regions and among the districts in a region which lead to disparities in Human Development.

15. Human Development trends of different dimensions are close between the state and the regions during the years of study.

16. Sex ratios in the state, regions and districts are higher than the national averages. Sex ratios in A.P, Coastal Andhra, Rayalaseema and Telangana in 2011 are 992; 1001; 987 and 989 respectively against the all India ration of 940.

17. Sex ratio is not related to Human Development/Economic Development alone. It is noted in the study that lag behind districts in HDI have higher sex ratios. It can be inferred that sex ratio depends on so many extraneous factors.
18. IMR in the state, Rayalaseema and Telangana has increased between 2001 and 2011, whereas it is constant at 42 in Coastal Andhra, State from 43 to 46, Rayalaseema from 45 to 47 and Telangana from 40 to 49.

19. Factors conducive to economic development have their impact on Human Development as observed in the study. It implies that there is positive relationship between economic development and Human Development.

Suggestions

1. Human Development is to be given more priority in Andhra Pradesh so as to improve the overall welfare of the people.

2. Uttrandhra, Rest of Telangana districts and lag behind districts in Rayalaseema be given special treatment to increase Human welfare.

3. Regional disparities and intra regional disparities encourage dissatisfaction and divisive tendencies. Development is to percolate to the backward regions and districts.

4. Literacy, more so female literacy in the districts is to be given more importance. Education of girl child is to be given more thrust through incentives. Government educational institutions in the rural Andhra Pradesh are to be strengthened.

5. Basic amenities like safe drinking water, toilet facilities permanent houses, electricity for domestic use are to be provided in the lag behind districts extensively. Public investment for providing these amenities need to augmented.

6. Infant Mortality Rate (IMR) is to be checked. Medical facilities by the Government including child and maternity care should reach the rural people. Corporate Hospitals and private medical facilities are not within the reach of the rural people in view of poverty. Mobile medical facilities with doctors be arranged in the villages.
7. Viable agriculture, agro-based industries, small and cottage industries be encouraged in rural areas to promote economic development which in its turn, promote Human Development.

8. Economic development, for that matter Human Development, should reach the people in the in the hinter land. It should not concentrate in the Metropolises, urban centers and a few districts in the regions.

9. Employment can generate income and income is the source for a comfortable living and Human welfare, through, not the only source. Employment generation in the rural areas can go a long way in improving Human Development. Programmes like MGNREGS to be made effective to increase employment and wage incomes in rural Andhra Pradesh.

10. Transport and communications facilities in the rural areas can create economic buzz by encouraging demonstrative effect which enhances Human Development.

11. Lag behind districts are to be identified in the regions for development by providing special packages failing which people in these districts remain spectators of Human Development of other areas.

The development of Andhra Pradesh does not mean the development of Hyderabad, Ranga Reddy districts along with the six South Coastal Andhra districts. The engine of Human Development has been surging ahead in Andhra Pradesh, but most of the districts are on the platform only, being unable to catch the train of the Human Development. The end of the waiting should begin in the right earnest.