

## **INTER-REGIONAL, INTER-STATE AND INTRA-STATE DISPARITIES IN INDIA-CAUSES, CONSEQUENCES AND SOLUTIONS**

Nagaraja K.<sup>1</sup>, Dr. B. P. Veerabhadrapa<sup>2</sup>

<sup>1</sup>Research Scholar, Dept. of Studies in Economics, Davangere University, Shivagangothri- 577002.

<sup>2</sup>Professor, Dept. of Studies in Economics, Davangere University, Shivagangothri- 577002.

### **ABSTRACT**

Regional imbalances have become global phenomenon. Disparities in the world have occurred among different continents, countries and regions, like geographical, political and manmade, etc. In the context of India, there has been huge imbalances among inter-regions, inter-states and intra-states. As a result, there has been lopsided development in the country. As many as 29 states in India, each of these states has its own disparities regarding socio-economic indicators with other states; among them few states or regions have already attained rapid economic development (Punjab, Gujarat ,Maharashtra and Tamil Nadu, etc.) Whereas, other regions or states have attained less development (Bihar, Odisha and Jharkhand, etc.) Interestingly, in the state of Karnataka, it has reflected major imbalances among Mumbai, North, South and Hyderabad regions. In the state, there are 30 districts, few of them have achieved rapid socio-economic development (Bangalore, Mysore, Hassan and Udupi, etc.) comparatively to some other districts (Kalaburgi, Yadgir, Raichur and Koppal); it is bifurcated as southern Karnataka and Northern Karnataka. In this context, this paper examines partly the disparities in terms of aforementioned issues with special reference to state of Karnataka.

**Keywords:** Causes; Consequences of disparities, Inter-regional, Inter-state, Intra-state.

### **1. INTRODUCTION**

Regional disparities are existed across the world. Even in developed nations, disparities are widening and in the context of developing countries are having huge imbalances in socio-economic indicators. In the context of India, disparities are varying across regions, inter-state and intra-state on account of geographical, political and manmade causes. The economy of India is positioned 5<sup>th</sup> rank by nominal GDP in the year 2017. India is geographically a largest country, where in, there are regions, viz. North region, South region, East region and West region. Each of these regions is bestowed with their varieties of natural resources and contributing to GDP of

India substantially. Similarly, there are 30 states in the country, every state has its own disparities depend upon availability of resources, viz. natural, finance and human resources etc.. In support of this, a few states are called as forward states like, Maharashtra, Gujarat, Punjab and Tamil nadu, etc. On the other hand, a few states are called as backward, like Bihar, Uttar Pradesh, Jharkhand, and Odisha. The disparities of every state is characterized by differences in social and economic parameters, viz. state gross domestic product, per-capita income, literacy, infant mortality rate, life expectancy, etc. Therefore, this type of disparities is identified as inter-state disparities. In the same way, within the states, disparities are considered as intra-state disparities. Interestingly, one of the states of India is Karnataka; where in, there is lot more differences in social-economic indicators even among districts in the state. In Karnataka, regions are divided from administrative and dynasty rule point of view. Imbalances among regions (Hyderabad Karnataka, Bombay Karnataka, and South Karnataka) have drawn the attention of state government and central government. Through which, seeking financial assistance to reduce disparities in the state. In this regard, this paper examines the disparities between regions, inter-state and intra-state associated with causes and consequences in the country.

## **2. REVIEW OF LITERATURE**

1. Govind Bhattacharya (June 27,2009): This paper describes the intra-state disparities in six states, Bihar, Uttar Pradesh, Jharkhand, Chhattisgarh, Madhya Pradesh and West Bengal. In this regard, it studies about disparities in these states in terms of government expenditure made in social sectors of education, health and supply of drinking water in aforementioned states.
2. Yuko Tsujita, Hisaya Oda, Prabhat Ghosh (Dec 11,2010): The research paper examines one of the important challenges in Bihar, accelerating development and redressing intra-state disparity in terms of economic and social development.
3. Shiddalingaswami H and Raghavendra V.K (Dec, 2010): This study attempts to investigate the trends and pattern of per-capita income of Karnataka regarding district and division level disparities. Moreover, this study explicates the relationship among and between per-capita incomes, human development, and workforce from 1991 to 2007-08. Above all, this study suggested that social over head capital is major factor in reducing the regional disparities.
4. Dr. S. Saravanan and Dr. A. Joseph Durai (2012): This paper discusses the pattern and determinants of economic growth of major Indian states during period of 1960-2008. Besides, this paper analyzed inter-state and intra-state differentials with paper comparison growth of per-capita state domestic product (SDP) and per-capita district domestic product (PDP) for the period of 1960-2008.

5. Shobha K and Ambuja Devi (Oct 13, 2014): The study examines the differences in fifteen states in India. Very importantly, this paper focuses on disparities in level of development among the states with respect to economic and social indicators, viz. per-capita gross domestic product, people below poverty line, literacy rate, infant mortality rate and life expectancy at birth.
6. Dr. Parul Mittal and Jyothi Devi (Dec, 2015): This study highlighted about regional imbalances among various states of the country. In addition, the study offered some suggestions to bring down these disparities.
7. P. Ponmuthsaravanan and G. Ravi (7 July, 2016): This article considers disparities from multi dimensional aspect in India. Some dimensions are, the level of economic growth, level of education, level of health services, level of nutrition, status of women, etc.

### **3. NEED FOR THE STUDY**

Regional disparities are prevailing across inter-regional, inter-state and intra-state in India. Over number of years, it has been attracted and discussed by government, policy makers, and politicians. Although, government allocated huge amount of funds, still, it has not been possible to reduce imbalances in the country. Importantly, this paper attempts to identify disparities with social and economic indicators, viz. gross state domestic product, per-capita income, literacy, infant mortality rate, life expectancy, etc. Even after economic reforms, there have been imbalances in aforementioned indicators; therefore, this study tries to throw light on inter-regional, inter-state, and intra-state disparities (disparities in Karnataka state) for drawing much attention by government to bring balanced regional development in the country.

### **4. METHODOLOGY**

This paper is descriptive only. For this study, objectives are fulfilled with help of data which has been collected from secondary sources, viz. research papers, books, news papers, reports and different websites. This paper discusses about disparities in respect of inter-regional, inter-state and intra-state Causes, Consequences and Solutions in India.

### **5. OBJECTIVES**

1. To know the causes and consequences of disparities in inter-regions, inter-state and intra-regions in India
2. To study about inter-regions, inter-state and intra-regions disparities in the country with special reference to Karnataka state
3. To give suggestions to reduce the disparities in Indian context

❖ **Causes and Consequences of Disparities**

Regional disparities are widespread in India due to some causes. They are,

• *Causes*

1. Historical factor:

India was ruled by British over three decades. During their rule, they concentrated only on a few places viz., Maharashtra, Tamilnadu including capitals Kolkata, Mumbai and Chennai, etc. which were bestowed with plenty of natural resources and suitable for establishment of industries. Thus, they mostly neglected other places which led to disparities among regions, states and intra-states. Moreover, land reforms were implemented by British was not favorable to farmers and created imbalances among different classes like, Zamindar and money launders and poor farmers. It also became cause for disparities across the country.

2. Geographical factor:

In India, geographical factors play a significant role in economic development. Some regions in the county have developed progressively because of their potentiality of natural resources and other states have been backward due to poor resources availability.

3. Inadequacy of economic overheads:

Economic overheads play pivotal role in economic development and growth. Some regions have adequate transport, communication, power, technology, banking and insurance, etc. So that, they are getting special favour in terms of projects sanctioned. On the other hand, some other regions don't have these economic overheads. Therefore, they lag behind in developmental process.

4. Failure of planning mechanism:

Five year plans in India, caused wide disparities. Some states viz., Punjab, Haryana, Maharashtra and Madhya Pradesh received a huge amount of plan outlay under various developmental projects. Whereas, backward states like, Bihar, Assam, Orissa, Rajasthan and Uttar- Pradesh have been receiving less amount of plan outlay due to infrastructure constraints. Needless to say, planning mechanisms has been ineffective in reducing disparities.

5. Lack of motivation on the part of background states:

Regional imbalances resulted on account of lack of motivation in terms of economic development among states in the country. In India, developed states like, Tamil Nadu, Maharashtra, Punjab, Haryana, Gujarat are possessed with lot of potentiality for achieving economic development. Whereas, backward states show interest only towards political conspiracy instead of economic development.

6. Political instability:

Political instability is also responsible for regional imbalance in India. Some backward regions seem to be confronting the unstable government, failure of law and order, etc. Which retards on the flow of investment into backward regions.

- *Consequences*

1. Inter-states and intra-state agitations:

Across India, number of agitations carried out within states and between states for balanced regional development. For example, Andhra Pradesh was bifurcated into two states viz., Andhra Pradesh and Telangana over inequality in socio-economic development.

2. Migration:

Regional imbalances caused for migration India. Masses usually migrate to developed urban areas in search of employment and urban provides them better quality life.

3. Social unrest:

Regional disparities have been responsible for social unrest across India and social unrest are seen in backward areas in general. For example, Naxalism has been in Odisha, Chattisgarh, and Bihar for having neglected these states regarding economic development.

4. Underdeveloped infrastructure:

Regional imbalances have been accountable for unimproved infrastructure in the country. In rural and backward areas, there are inadequate facilities like power, housing, safe drinking water and sanitation, etc.

5. Aggregation of the imbalance:

Once any region is developed, then it attracts further investment by neglecting other regions. obviously, metropolitan cities already prosperous and they are developing further viz., Mumbai, Delhi, Kolkata, Chennai, Bangalore and Hyderabad are more prosperous compared to other cities of the country.

6. Frustration among rural youth:

In rural and backward areas, masses are frustrated because of less employment opportunities.

❖ **Inter-regions, Inter-state and Intra-regions Disparities in India**

• *Inter-regional disparities*

Inter-regional disparities are existed in India. Inter-regional implies that geographical area, like East region, West region, North region and South region. In other words, each region in the country has had disparities because of climatic condition, geographical and manmade. When matter comes to regions, it may be interstate and even within states. The inter-region imbalances have been prevailing in the country over more than two centuries. As mentioned above, there are some states which are progressively developed and other states in some regions are not developing owing to aforementioned factors. Furthermore, disparities among the regions can be found through socio-economic indicators viz., education, health, standard of living, etc. Therefore, these are indicators very useful in finding out the extent of disparities in these regions. In addition, a few states have abundant natural and mineral resources like, West Bengal, Jharkhand, Orissa, Chhattisgarh, Andhra Pradesh, Karnataka and Madhya Pradesh, etc. Whereas, other states in north region have better irrigation facilities viz., Punjab and Haryana. However, every region in the country has been contributing to GDP of the economy for instance, North region is predominantly agrarian and its annual economic growth has met around 8%. Besides, few states in this region had highest per-capita income for example, Delhi, Haryana, Uttarkhand and Himachal Pradesh and among them; Chandigarh has the highest per-capita state domestic product. Moreover, birth rate in this region is higher than in other parts of country and obviously leads to poverty and other developmental problems. In case of south India region, it experienced mixed economic growth; especially this region is bestowed with natural and human resources. They are Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and Telangana. Therefore, it attracted labour force from north and other parts of this country. Indeed, this region contributes as of 2013-14; the total gross domestic product of the region is around 27.1 trillion. The state of Tamil Nadu has the second highest GDP next to Maharashtra. In the south region, over 48% is engaged in agriculture sector and it is industrially developed; therefore, it attracted FDI to India. As far as socio-economic indicators are concerned, South India has 80% literacy rate and 32.8 % urban population accompanied by poverty with around 17.4% in this region. One more region of India is West region which consists states like, Goa, Gujarat, Maharashtra and Union territories , Daman –Diu, Dadra and Nagar Haveli, etc. This region is highly relied on industries with a large urban population. Moreover, agricultural sector employs most people in the region, while service sector largely contributes to total GDP. As matter of fact, this region contributes as much as 24% to national GDP and percentage of poverty is around 8%. Further, urban population is about 46.75 % and it has more than 83% literacy rate in this region. Similarly, East India incorporates states like, Bihar, Jharkhand, West Bengal, Odisha and Jharkhand ranked 14<sup>th</sup>, 16<sup>th</sup> and 18<sup>th</sup> in terms of states by GDP. Except all these regions, so called the seven sister states which come in the region of North East India ,they are Arunachal Pradesh, Assam, Manipur, Meghalaya,

Mizoram , Nagaland and Tripura. Basically, this region has compact climatic conditions, geographical areas, which is not favourable to industries and agriculture, etc. So that, it become hurdle for the growth of economy in the region. In addition, this region is having 3.8% of India's population and it contributes about 2.5% of India's GDP.

- *Inter-state disparities*

There are disparities among states in India. When the govt implemented the economic reforms, since then, disparities have been widening due to govt faulty policy, overconcentration on developed areas and neglecting about poorer states. Hence, imbalances among states are emerging after post economic reforms. Inter-state disparities can be found with help of socio-economic indicators. Very importantly, GSDP is key indicator to consider that disparities are existed among states. Few states in India are having higher GSDP and per-capita income and other states has lesser GSDP due to socio-economic issues like, poor social and economic infrastructure, population explosion, etc. In addition to GSDP, there are variations which widening in social indicators (infant mortality rate, maternal mortality rate, life expectancy, access to safe drinking water, adult literacy, gross enrolment ratio at elementary, intermediate and higher education level ) along with infrastructure indicators as well.

**Table -1: GSDP of States in India**

Sl. No	State/UT	GSDP (2015-16)
1	<u>Maharashtra</u>	\$390 billion
2	<u>Tamil Nadu</u>	\$210 billion
3	Karnataka	\$200 billion
4	Uttara Pradesh	\$200 billion
5	Gujarat	\$170 billion
6	West Bengal	\$141 billion
7	Rajasthan	\$115 billion
8	Telangana	\$115 billion
9	Kerala	\$115 billion
10	Madhya Pradesh	\$110 billion
11	Andhra Pradesh	\$105 billion
12	Bihar	\$97 billion
13	Delhi	\$96 billion
14	Haryana	\$85 billion

15	Odisha	\$61 billion
16	Punjab	\$65 billion
17	Chhattisgarh	\$45 billion
18	Assam	\$38 billion
19	Jharkhand	\$37 billion
20	Uttarakhand	\$28 billion
21	Jammu and Kashmir	\$23 billion
22	Himachal Pradesh	\$19 billion
23	Goa	\$11 billion
24	Chandigarh	\$4.6 billion
25	Meghalaya	\$4.5 billion
26	Tripura	\$4.0 billion
27	Puducherry	\$4.5 billion
28	Arunachal Pradesh	\$2.9 billion
29	Nagaland	\$2.6 billion
30	Manipur	\$2.1 billion
31	Sikkim	\$2.5 billion
32	Mizoram	\$2.7 billion

**Source:**[https://en.wikipedia.org/wiki/List\\_of\\_Indian\\_states\\_and\\_union\\_territories\\_by\\_GDP](https://en.wikipedia.org/wiki/List_of_Indian_states_and_union_territories_by_GDP)

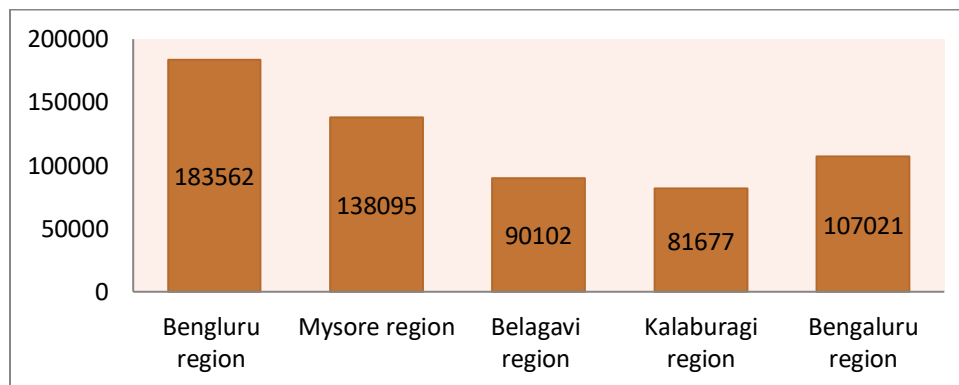
- *Intra-regional disparities*

Regional disparities have been prevailing in the state over long period; it is not new phenomenon in the state. In fact, it has been the issue before and after unification of Karnataka state. In India, this state is located in south India, it is one of the developing economy which ranked 3<sup>rd</sup> in terms of GSDP and socio-economic indicators. Fundamentally, this state was ruled by several dynasties and each dynasty had done to this state according to their discretion. when state was formed with a name Mysore, it continued until 1973, it was ruled by Mysore kings who immensely contributed for the development of this state, after collapsing dynasty rule, in 1973, it was nominated as Karnataka. The state is basically divided into North Karnataka and South Karnataka; further, North Karnataka is bifurcated into as Hyderabad and Mumbai Karnataka. In fact, these two regions are having lot of variations in socio-economic indicators due to geographical, political and manmade causes. In light of disparities in the state, there is need to know how regions and districts are backward and forward in developmental process. In the state, backward districts are Bidar, Kalaburagi, Yadgir, Raichur, Koppal and Bellary; whereas, a few



forward districts are viz., Bangalore, Dakshinakannada, Udupi, Chikkamangaluru, Shivamogga and Bangalore rural. As stated above, most backward and forward districts in different regions are found through district per-capita income as an economic indicator and social indicators are viz. education, health, infrastructure, etc. The figure 1 indicates about per capita income of different regions.

**Figure -1: Per- Capita Income of Different Regions 2015-16 (in Rs)**



**Source:** Economic Survey of Karnataka 2015-16

As the figure reflects that how far there is lot more difference in said indicator among these regions. Obviously, Bangalore region significantly improved in the parameter than any other regions in the state. Actually, there is adequate social-economic infrastructure, govt finance allocation, efficient workforce and excess population too. Now, intra-district needs to be considered with the indicator of district income, which is given in table 2.

**Table-2: District Wise per Capita Income (in Rs) 2015-16**

Sl. No	Name of Districts	Per-Capita Income
1.	Bangalore Urban	286198
2.	Dakshina Kannada	225554
3.	Udupi	185721
4.	Chikkamagaluru	164598
5.	Shivamogga	135582
6.	Bangalore Rural	129984
7.	Ramnagara	123397
8.	Mandya	120621
9.	Tumakuru	117283
10.	Ballari	114138
11.	Bagalkote	113135
12.	Dharwad	111818
13.	Hassan	108970
14.	Uttara Kannada	105767
15.	Kodagu	105063
16.	Chamarajanagar	99080
17.	Kolar	95828
18.	Mysuru	95591
19.	Chickballapur	90966
20.	Gadag	88206
21.	Davangere	86016
22.	Chitradurga	83027
23.	Haveri	81207
24.	Belagavi	77825
25.	Raichur	76498
26.	Vijayapura	75754
27.	Koppal	75598
28.	Kalaburagi	71085
29.	Bidar	70339
30.	Yadagiri	69177

**Source:** Economic Survey of Karnataka 2015-16

The table 2 throws light on per-capita income of various districts, the capital of the state, Bangalore which is ranked 1<sup>st</sup> in the said indicator followed by Dakshina Kannada, Udupi,

Chikkamangaluru, Shivamogga, etc. Bengaluru which is placed first because of higher percentage of literates, enormous allocation of finance for developmental activities, better socio-economic infrastructure, adequate workforce, growth of science and technology, etc.

In the state of Karnataka, intra-regions disparities are varying due to variations in the socio-economic parameters and it is going to create lacunae in human development among different districts in the state. In addition, these top districts not only achieved in the said indicator; but also remarkably improved in social and health indicators too. Of late, Hyderabad Karnataka has received special attention owing to article 371J of the constitution, by which, masses from this particular region are being benefitted for availing education and employment opportunities. From economic parameter point of view, districts (Bidar, Yadgir, Raichur, Koppal, Bellary and Gulbarga) in this region have distinctly achieved lesser growth in per-capita income relatively to top districts in the state. In terms of human development, these districts are having poor performance in education, health and standard of living comparatively to top districts in the state. As a result, govt. shown special interest in allocating finance to this region for economic growth and development; since 2013, the state govt has been allocating around 3000 cr to this region. Likewise, Bombay Karnataka too is part of the state, which partly ignored by the govt; consequently, there has not been much growth in the par-capita income of districts viz., Bagalkot, Belagavi, Vijayapura, Dharwad, Gadag, Haveri and Uttara Kannada. However, in the state, there are still inter-region disparities not only in district percapita, but also in human development indicators. Despite huge government allocation for these regions in the state, there are still rampant corruption, lack of will power of politicians and peoples in backward regions of the state.

#### **❖ Suggestions to Reduce Disparities in Inter-regional, Inter-state and Intra-state in India**

In India, regional disparities have been varying in inter-region, inter-state and intra-state ever since pre and post independence. Though government gave lot of importance for mitigating regional disparities and particularly post economic reforms in 1991, it led few regions developed faster and other regions lagged behind in terms of socio-economic indicators including indicators of human development. In this regard, below some factors seem to be solutions to bring down disparities in the country.

1. Identification of the backward areas and allocation of funds: For balanced regional development, government should attempt to know the areas which are most backward and it should also allot funds to these regions with due care.

2. Need for investment in backward areas: In India, backward regions need to be given priority under special developmental plans and programmes; it can only occur only if public and private show interest for attracting the investment in backward regions.
3. Good governance: Any country in the world must have good governance in order to reduce disparities by distributing development gains to each region. In India, government is extensively utilizing technology for propelling the growth in backward regions.
4. Political will: Above all, political will shall have greater role in minimising imbalances in the economy.
5. Incentives: Fundamentally, for development of any region, incentives should be provided. So, incentives should be given by both central and state government in the form of income tax concession, central investment subsidy scheme, and state government should attract the investors from abroad for backward regions in the country.
6. Setting up of regional boards: The govt in the country needs to establish regional boards to take special interest for backward regions; as a result, as per article 321 D of the constitution, government is setting up regional boards.
7. Devolution of funds: There is a federal government system in India, in which, govt. earmarks huge amount of funds to state and local governments in accordance with recommendations of finance commissions for providing the funds to backward regions.
8. Strengthening of local governments: As mentioned above, central govt should give more freedom so as to empower and strengthen them to take decisions along with people's participation from grass root level.
9. Additional funds for infrastructure: Infrastructure is a vital for socio-economic development in the country. Therefore, government should allocate massive amount of funds to create basic infrastructure for facilitating the growth in backward regions.
10. Provision of infrastructural facilities in backward districts: India is a developing country, it is yet to spot some places to create basic infrastructure like, setting up of schools, colleges, hospitals, roads and railway lines, small and cottage industries to give impetus for removing disparities among regions, inter-state and intra-state in the country.
11. A composite criteria for identifying backward areas (Mandal /block as a unit)  
The govt should identify a few socio-economic indicators including human development indicators (literacy, infant mortality rate, maternal mortality rate, poverty); this should be done by NITI Aayog.

## 6. CONCLUSION

Regional disparities are varying across India. Indeed, it is one of the fastest growing economy, yet, there is need to give due importance in terms of emerging disparities. As the economy is rapidly growing, it attracted investment from across the world. In fact, public and private investments need to be invested; where, disparities are widening. In addition, from social-economic indicators point of view, there is still need to identify the backward areas from gross root level rather than district-wise and state wise disparities. In case of Karnataka state, there is still wide imbalances among regions due to differences in natural resources which led to huge disparities in the state. In the entire country, disparities can be brought down, only if there is less population, poverty and providing social and economic infrastructure, people's participation, good governance, etc. Thus, aforementioned factors should be done at earliest in order to reduce disparities in India to a great extent.

## REFERENCES

1. <http://www.worldatlas.com/articles/indian-states-by-gdp.html>
2. <http://www.yourarticlelibrary.com/india-2/top-9-causes-responsible-for-regional-imbalances-in-india/63001/>
3. <https://www.slideshare.net/vijaykumarsarabu/regional-imbalances>
4. <https://www.quora.com/What-are-the-consequences-of-regional-imbalance>
5. <https://en.wikipedia.org>
6. [http://ficci.in/state/1011/Project\\_docs/ficci-north-east-council.pdf](http://ficci.in/state/1011/Project_docs/ficci-north-east-council.pdf)
7. [https://en.wikipedia.org/wiki/List\\_of\\_Indian\\_states\\_and\\_union\\_territories\\_by\\_GDP#GS\\_DP\\_.28nominal.29](https://en.wikipedia.org/wiki/List_of_Indian_states_and_union_territories_by_GDP#GS_DP_.28nominal.29)
8. <http://www.thehindu.com/news/cities/bangalore/bengaluru-urban-tops-state-in-per-capita-income-kalaburagi-last/article8376124.ece>
9. <http://www.thehindu.com/todays-paper/tp-national/tp-karnataka/cm-justifies-increased-allocation-to-hk-in-budget/article17530701.ece>
10. Bhattacharya Govind (June 27, 2009)-"Inter-state disparity in Government expenditure: An analysis", Economic and political weekly, Vol. XLIV. No-.26-27.
11. Tsujita yuko, Oda Hisaya, Ghash Prabhat (Dec 11, 2010)-"Development and intra-state disparities in Bihar," Economic and political weekly, Vol. xlv No- 50.
12. Dr.Thakur Anilkumar and Singh Chauhan Shyam Sundar (2010)-"Inter-regional disparities in India", retrieved from <https://books.google.co.in/books?hl=en&lr=&id=C6FSdtNNNqwC&oi=fnd&pg=PR11&dq=inter+regional+disparities+in+india&ots=XaJ1g3Dz6E&sig=mymLC55iEHLf3FgqI Z1RfN8kDgY#v=onepage&q=inter%20regional%20disparities%20in%20india&f=false>.

13. Shiddalingaswami H and Raghavendra V.K (Dec, 2010)-“Regional disparities in Karnataka: A district level analysis of growth and development”, CMDR Monograph, Dharwad.
14. Dr. Saravanan S., and Dr. Durai A., Joseph (2012) -“Growth pattern disparities: An inter-state and intra-state analysis”, Atlantic review of economics, Vol.2.
15. Shobha K., Devi P.A (2014)-“Inter State Disparities in India: Linkages between Human Development and Economic Indicators”. J Glob Econ 2: 121. doi:10.4172/2375-4389.1000121.
16. Dr. Mittal Parul and Jyoti Devi (Dec, 2015) -“An inter-state analysis of regional disparity pattern in India”, International journal of management research and social science (IJMRSS), Vol.2, Issue-4.
17. Ponmuthusarvanan P., and Ravi G (7 July, 2016)-“Inter-regional disparities with multi-dimensional aspect in India”, International journal of scientific research and management (IJSRM), Vol-4, Issue-7.