



Sustainable Development and Regional Imbalance: A Review of Inter – relationship

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Abstract

Sustainable economic development is a complex issue. For sustainable economic development balanced regional growth and harmonious development of any country is required. Regional imbalance hindered the goal of sustainable development. Regional imbalance in the growth and human development are quite common in Indian economy. The increasing regional disparities have dampened the speed of further economic activities, and hence may pose a barrier to India's future economic growth. Regional disparities will result in regional stress, which in turn may lead to popular anxiety like militant activities. Regional imbalance may be inter- state or intrastate. Present paper concentrate on the trends and levels in growth rates of inter-state disparities between the different states in term of NSDP poverty rate and unemployment rate of the Indian economy during the period 2012 to 2017. For rising the economic growth rate and sustainable economic development it is necessary to reduce the regional imbalance. To accelerated development of backward areas of different states and region it is necessary to eliminate these disparities.

Keyword:Sustainable Development, Regional Imbalance, Per Capita Net State Domestic Product, Poverty Rate, Unemployment Rate.

Sustainable economic development is a complex issue. For sustainable economic development balanced regional growth and harmonious development of any country is required. Regional imbalance hindered the goal of sustainable development. Regional imbalance in the growth and human development are quite common in Indian economy. The increasing regional disparities have dampened the speed of further economic activities, and hence may pose a barrier to India's future economic growth. Regional disparities will result in regional stress, which in turn may lead to popular anxiety like militant activities. So, balance regional growth is necessary for the harmonious development of any country, but the regional imbalance in the growth and human development are quite common in Indian economy. In India some states are economically advanced while others are relatively backward; even within each states some regions are very progress while others are almost primordial. Regional imbalance may be natural due to unequal natural endowment or man made in the sense of neglect of some regions and preference of others for investment and development efforts. Regional imbalance may be inter- state or intrastate. During the last few years, this issue has become main focus for policy makers. It is relevant to know the regions for the regional imbalances across the states. Regional imbalance poses a serious challenge for implementation of different economic programmes.

Objectives of the Paper

The main objective of this paper is showing the inter-relation between sustainable development and regional imbalance. This paper also highlights the growth rate of India, and evaluates the growth differential (inter –states imbalance) in terms of Gross State Domestic Product (GSDP), Net State Domestic Product (NSDP), and Per Capita Net State Domestic Product (PCNSDP). The main objectives of paper are-



- Study the concept of sustainable development.
- To evaluate the growth rate of India.
- To state-wise evaluation of the growth differential.
- To evaluate the inter-relation between sustainable development and regional imbalance.

Research Methodology and Data Collection

Present paper focus on growth rate of India and also concentrates on the trends and levels of inter-state disparities in India. Present paper is used to measure regional imbalance in India in term of different growth differential. Data on relevant variable like growth rate differential have been used for this purpose. Data are collected from the websites of Reserve Bank of India, and Central Statistical Organization. This paper is important in view of the state-wise measurement of Gross State Domestic Product (GSDP), Net State Domestic Product (NSDP), and Per Capita Net State Domestic Product (PCNSDP) in the Indian economy and it is also show complete picture of the regional imbalance in India.

Concept of Sustainable Development: -

Sustainable development is the concept of the relationship between economic growth and environment. The concept of sustainable development in recent term is still being developed and defined. The main components of sustainable development are economic, social and environmental factors. Economic factors have a crucial role to play this multi-disciplinary endeavor. Sustainable development is important for all society but it is most important for poor ones who mainly depend upon the natural resources such as rivers, forest, and fisheries. Sustainable development deals with the linkage between economic development and environment. It has been observed that the economic development and environment are inseparably connected. This inter-relationship is essential and exists because-

- (i) Economic development affects the environment.
- (ii) Environmental quality affects the economic development

This is because environment provides raw material for production and development. It is argued that environmental problem in developing countries are predominant than in developed countries, due to extreme poverty which may main cause of regional imbalance growth. The World Commission on Environment and Development (WCED) popularly known as Brundtland Commission, 1987 laid down the foundation for a debate on the meaning of "Sustainable Development" in six different ways which were found to be conflicting to each other. The most populous definition is provided by WCED is – "Sustainable development is development that meets and needs of present without compromising the ability of future generations to meet their own needs." Sustainable development is a three dimensional concept featuring the interface between environment, economic and social sustainability. Economic sustainability or economic dimension of sustainable development means economic activities without degradation of environment. Social sustainability means satisfaction of human needs with in society. Equity in resource distribution is integral to social sustainability. Economic and social development should be mutually re-enforcing. Environmental sustainability means protection and conservation of natural resources and depletion of natural resources in reasonable manner.

Objectives of Sustainable Development:-

Sustainable development could be called equitable and balanced if for development to continue indefinitely and interests of different group of people which in the same generation and amongst generations are balanced. This balance is achieved simultaneously in three



major interrelated areas economic, social and environmental. Sustainable development necessarily involves the pursuit of economic efficiency, social equity and environmental protection. As previously mentioned the sustainable development is a tridimensional concept, whose objectives in three main areas are as follows -

Table-1
Objectives of Sustainable Development

Economic objectives	Social objectives	Environmental objectives
- Growth	- Full employment	- Healthy environment for humans
- Efficiency	- Equality	- Rational use of renewable-
- Stability	- Security	natural resources
- Other factors	- Education	- Conservation of non- renewable
	- Health	natural resources
	- Participation	- Other factors
	- Other factors	

Sources: - Soubbotina (2004) and Nurse (2006)

Indicators of Sustainable Development :-

Sustainability links present to future. Achieving progress towards sustainability implies maintaining improvement in both, human and the ecosystem. We need simple indicators to assess economic, social and environmental sustainability of the progress and development. Indicator should point out the progress towards the goal of sustainable development in context of a nation. All the economic, social and environmental changes should be reflected by such indicators. Some important indicators of sustainable development are as follows –GDP – Growth rate, Population stability, Human Resource Development, Employment status, Decrease in poverty incidence, Clean Air Index, Energy Intensive, Transport Intensive, Water use, Soil degradation, Forest cover ratio. These all indicators are also reflect regional balance or imbalance growth. For reducing regional imbalance it is necessary to reduce poverty of backward regions and increase employment to enhance the pace of economic growth. There are very close and positive relationships between environment and development-

- Environment provides raw materials for production process.
- Environment provides life support services such as oxygen, water etc.

Limitation of natural resources and environment of a country imposed limitations on its capacity to achieve sustainable development. For achieving high economic growth, it is necessary to achieve higher level of development, which in turn is necessary to reduce the poverty and improve the living standard of rapidly rising population in India by generating new employment opportunities and also reduce regional imbalance. Sustainable Economic development is a complex phenomenon and to measure economic development is also a complex issue. There are some variable for measurement of economic development. Regional imbalance can be count in terms of such indicators of economic growth as per capita income, proportion of population of population below poverty line, percentage of urban population in total population, working population in agriculture and percentage of workers in manufacturing industries. .

Growth Rate of India

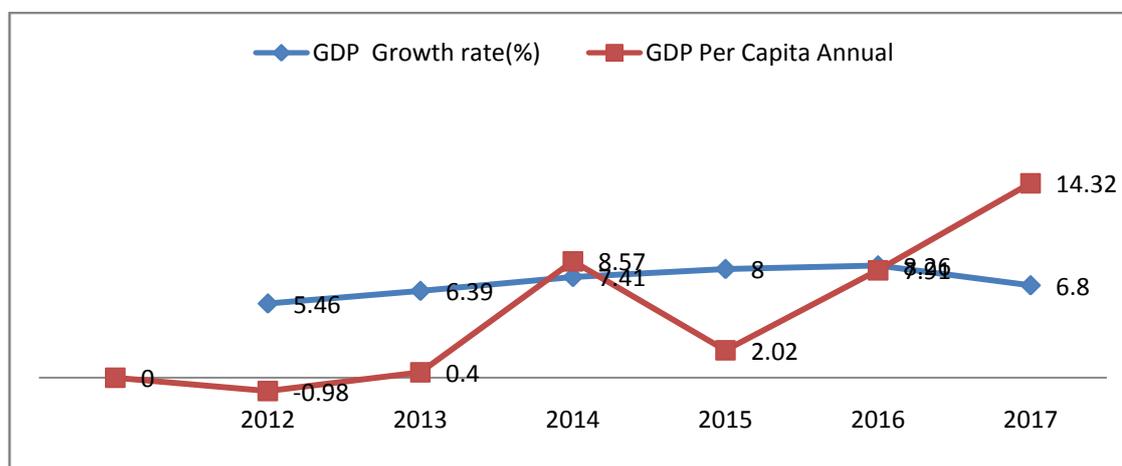
There was a very perceptible improvement in GDP growth rate from 2012 to 2014. Gross Domestic Product (GDP) shows increasing trend annually since 2012 to 2014. In 2012 percent growth rate of GDP is 5.46, in 2013 GDP growth rate 6.39 percent, and in 2014 GDP growth rate 7.41 percent. Annual change in GDP growth rate shows increasing trend 0.22 percent in 2012 to 1.02 percent in 2014. After 2014 annual change in GDP growth rate shows decreasing trend, in 2015 annual change in GDP growth rate is about 0.59 percent, which further decrease 0.26 percent in 2016 and it became negative -1.46 in 2017.

Table-2
GDP Growth Rate and GDP Per Capita of India

Year	GDP Growth Rate		GDP Per Capita	
	GDP Growth (%)	Annual change (%)	GDP Per Capita (US\$)	Annual Growth Rate (%)
2012	5.46	0.22	\$ 1444	-0.98
2013	6.39	0.93	\$ 1450	0.40
2014	7.41	1.02	\$ 1574	8.57
2015	8.00	0.59	\$ 1606	2.02
2016	8.26	0.26	\$ 1733	7.91
2017	6.80	-1.46	\$ 1981	14.32

Source : <https://www.macrotrends.net/countries/IND/india/gdp-gross-domestic-product>

Figure -1
Annual GDP Growth Rate and Annual GDP Per Capita growth rate of India



Source: Compile from table -2

Percent per capita GDP shows annual growth rate negative-0.98 in 2012 which improved on by 0.40 percent in 2013. During 2014 it shows increasing trend became 8.57 percent. It further decrease 2.02 percent in 2015, and further increased in 2016 and 2017 is about 7.91 and 14.32 respectively. Average annum growth rate of GDP was 7.05 percent per annum and per capita GDP was 5.37 percent. There are no more improvement in decade nineties, this is because of regional disparities. The growth rate of some states like Maharashtra, Gujarat, and Kerala are very high but in other hand in Assam, UP, Bihar and Orissa it become lower than above states due to regional imbalance.



Growth Differentials

For study Regional Imbalance the researcher has used Gross State Domestic Product (GSDP), Net State Domestic Product (NSDP), and Per Capita Net State Domestic Product (PCNSDP) as growth differentials. Gross State Domestic Product (GSDP) is a measure of the sum total volume of all finished goods and services produced accounted without duplication in monetary terms with in a financial year and geographical boundaries of the State. Net state domestic product (NSDP) is the equals the gross state domestic product (GSDP) minus depreciation on a state's capital goods it is the state counterpart to a country's Net domestic product (NDP). Per capita Net state domestic product (PCNSDP) is measures a state's economic output per person.

Net state domestic product and per capita net state domestic product are the economic growth differentials. With the help of these growth differentials, growth rate of the states can be measured. To examine the effect of disparities, researcher has considered the value of GSDP, NSDP and PCNSDP as the rate of development, and estimates the trends of growth rates of these differentials in all states of India. Findings are –

Table-3 Trend of Average Growth Rates (percent) of GSDP, NSDP and PCNSDP in India 2012-17 (at constant price Base year 2011-12)

State	Gross State Domestic Product	Net State Domestic Product	Per Capita Net State Domestic Product
Andhra Pradesh	36.98	12.51	6.49
Arunachal Pradesh	31.50	12.44	4.60
Assam	36.12	11.49	5.50
Bihar	26.17	11.14	3.21
Chhattisgarh	31.47	10.49	4.08
Goa	25.84	9.83	4.75
Gujarat	48.91	13.83	8.21
Haryana	44.81	13.38	7.23
Himachal Pradesh	36.12	12.37	6.86
Jammu and Kashmir	26.43	9.41	2.95
Jharkhand	26.45	9.93	3.71
Karnataka	46.27	14.74	7.81
Kerala	29.65	11.72	5.72
Madhya Pradesh	41.89	15.99	6.56
Maharashtra	35.70	11.68	6.08
Manipur	28.99	10.80	3.52
Meghalaya	8.96	6.50	-0.73
Mizoram	67.70	19.49	11.68
Nagaland	25.82	12.76	3.94
Odisha	39.82	11.06	7.05
Punjab	28.80	9.96	4.35
Rajasthan	32.71	11.55	4.53
Sikkim	33.35	13.29	5.52
Tamil Nadu	33.28	11.69	5.77
Telangana	36.02	12.96	5.97
Tripura	49.50	15.49	8.41
Uttar Pradesh	34.75	12.20	5.05
Uttarakhand	38.93	11.45	6.72
West Bengal	23.34	10.96	3.31

Source: National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India.



(i) Inter –State Disparities in GSDP Growth

- Mizoram has registered highest GSDP growth rate about 67.7.
- GSDP growth rate of Tripura, Gujarat, Karnataka, Haryana, and Madhya Pradesh was more than 40.
- GSDP growth rate of Odessa, Uttarakhand, Andhra Pradesh, Himachal Pradesh, Assam, Telangana, Maharashtra, Uttar Pradesh, Sikkim, Tamil Nadu, Rajasthan, Arunachal Pradesh, and Chhattisgarh was medium, its value vary in between 30 to 40.
- GSDP growth rate of Kerala, Manipur, Punjab, Jharkhand, Jammu And Kashmir, Bihar, Goa, Nagaland, and West Bengal was low, its value vary in between 20 to 30.
- Meghalaya has registered lowest GSDP growth rate about 8.96.
- There are wide inter-state disparities in term of Gross State Domestic Product (GSDP) between different states of India. Growth rate GSDP from Mizoram is 67.7 and Meghalaya only 8.96.

(ii) Inter –State Disparities in NSDP Growth

- Mizoram has registered highest NSDP growth rate about 19.49.
- NSDP growth rate of Madhya Pradesh, Tripura, and, Karnataka is near about 15, NSDP Growth rate of Madhya Pradesh, Tripura above 15 and for it was slight below.
- Gujarat, Karnataka, Haryana Sikkim, Telangana, Nagaland, Andhra Pradesh, Arunachal Pradesh, Himachal Pradesh, Uttar Pradesh, Kerala Tamil Nadu, Maharashtra, Rajasthan, Assam, Uttarakhand, Bihar, Odessa, Chhattisgarh and West Bengal have registered two digit medium NSDP growth rate above 10 and below 15.
- The growth rate of, Jharkhand, Goa Jammu And Kashmir, has single digit NSDP growth rate below 10.
- Meghalaya has registered lowest NSDP growth rate about 6.5.
- There are wide inter-state disparities in term of Net State Domestic Product (NSDP) between different states of India. Growth rate NSDP from Mizoram is 19.49 and Meghalaya only 6.5.

(iii) Inter –state Disparities in PCNSDP Growth

- Mizoram has stranded highest position in PCNSDP growth rate about 11.68.
- Tripura, Gujarat, Karnataka, Haryana, Odessa, Himachal Pradesh, Uttarakhand, Madhya Pradesh, Andhra Pradesh, Tamil Nadu, Maharashtra, Telangana, Kerala, Sikkim, Assam and Uttar Pradesh, have registered relatively higher growth rates above 5 compare to Arunachal Pradesh, Goa, Rajasthan, Punjab, Chhattisgarh, Nagaland, Jharkhand, West Bengal, Bihar, Jammu and Kashmir having PCNSDP growth rate below 5.
- Meghalaya has registered negative PCNSDP growth rate about -0.73



Table-4
Trend of Annual Growth Rates PCNSDP in India 2012 to 2017
(at constant price Base year 2011-12)

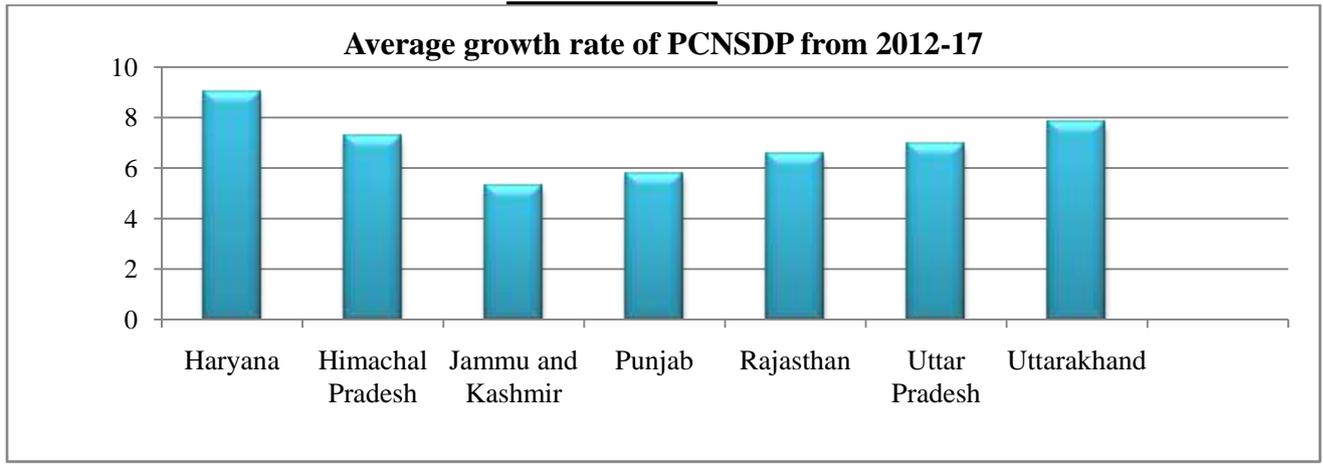
State	2012-13	2013-14	2014-15	2015-16	2016-17	2012-17
Andhra Pradesh	-0.20	4.92	9.58	11.92	6.21	6.49
Arunachal Pradesh	0.57	6.81	15.24	-2.49	2.87	4.60
Assam	1.14	3.35	4.20	13.02	5.79	5.50
Bihar	2.07	2.59	1.96	3.62	5.78	3.20
Chhattisgarh	2.90	8.16	-0.47	0.51	9.29	4.08
Goa	-15.20	-14.39	27.99	15.56	9.79	4.75
Gujarat	10.52	6.11	8.56	8.36	7.50	8.21
Haryana	5.37	7.17	4.38	10.24	9.02	7.24
Himachal Pradesh	5.64	6.63	6.50	7.11	8.41	6.86
Jammu and Kashmir	-1.44	3.21	-6.22	18.22	0.98	2.95
Jharkhand	7.08	-0.90	11.43	-8.73	9.66	3.71
Karnataka	4.56	7.93	3.77	10.52	12.30	7.82
Kerala	5.76	4.15	4.26	7.06	7.36	5.72
Madhya Pradesh	6.87	3.42	3.48	7.55	11.47	6.56
Maharashtra	4.43	5.37	4.98	6.81	8.79	6.08
Manipur	-2.03	6.38	6.42	5.19	1.64	3.52
Meghalaya	-0.52	-1.71	-4.77	0.28	3.06	-0.73
Mizoram	4.52	12.17	25.83	7.98	7.89	11.68
Nagaland	4.66	5.65	2.99	0.48	5.93	3.94
Odisha	5.34	7.19	0.66	6.74	15.32	7.05
Punjab	3.90	4.86	2.76	4.52	5.70	4.35
Rajasthan	2.18	4.47	5.64	6.31	4.02	4.52
Sikkim	1.19	5.20	6.97	7.97	6.30	5.53
Tamil Nadu	4.45	5.07	4.82	8.18	6.33	5.77
Telangana	1.77	3.57	5.61	10.69	8.23	5.97
Tripura	7.10	8.21	17.10	-3.72	13.39	8.42
Uttar Pradesh	2.83	3.45	1.58	6.91	10.48	5.05
Uttarakhand	6.03	6.15	5.38	6.95	9.06	6.71
West Bengal	3.13	1.23	1.32	5.02	5.87	3.31

Source: National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India.

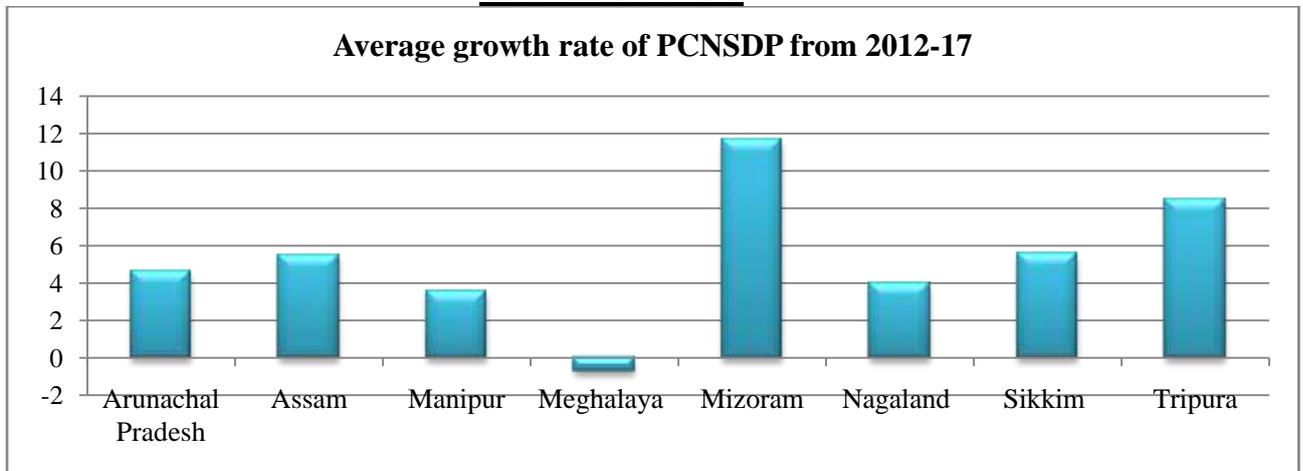
Andhra Pradesh, Goa, Jammu and Kashmir, Meghalaya and Manipur are showing negative annual growth rate in 2012-13. Gujarat is showing highest annual growth rate of PCNSDP about 10.52 and in other hand Goa is showing least growth rate of PCNSDP, it is negative about -15.20, thus the table shows very wide imbalance in between these two states in annual growth rate of PCNSDP in 2012-13. In 2013-14 Goa and Meghalaya continuously showing negative annual growth rate, Goa has improvement in growth rate but growth rate of Meghalaya further decreased and rest other states improved their development conditions and turn towards positive annual growth rate of PCNSDP. Jharkhand are showing down fall in their economies and shows negative annual growth rate. Highest annual growth rate of PCNSDP is shown by Mizoram 12.17 and least shown by Goa -14.39. In 2014-15, Goa not only covers its negative aspect of annual growth rate of PCNSDP but reached highest position with 27.99 and followed by Mizoram with 25.83. Jammu and Kashmir, Meghalaya

are still showing negative growth rate. Economy of Chhattisgarh is also showing down fall with slight negative growth rate. Arunachal Pradesh, Jharkhand and Tripura are showing negative growth rate in 2015-16. Jammu and Kashmir improved their economic position and stand highest position with growth rate 18.22. In 2016-17 all states of India are showing positive growth rate and Odisha is showing highest annual growth rate 15.32. Table -4 showing wide variation in annual growth rate of PCNSDP in different years and also showing regional imbalance. Regional imbalance is also showing figures in term of average growth rate of PCNSDP from 2012-17 in different regions of India.

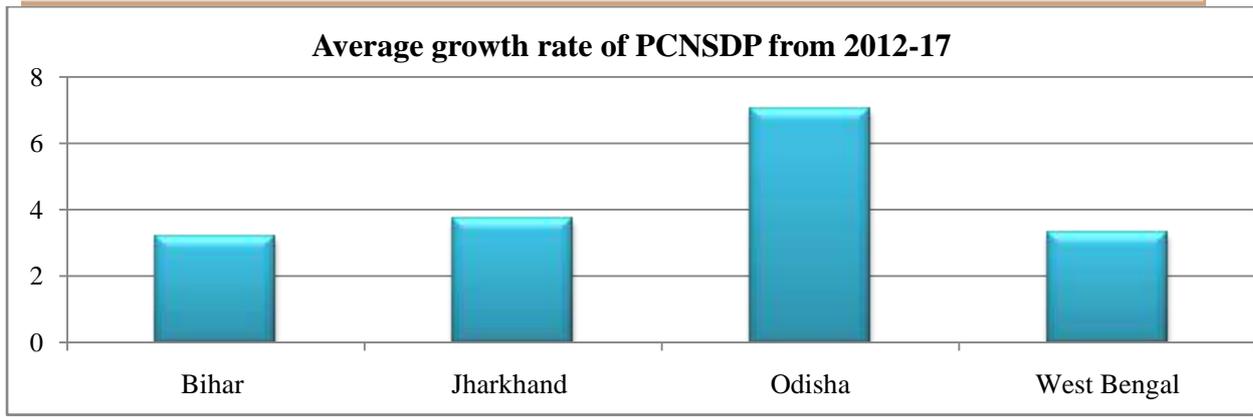
Northern India



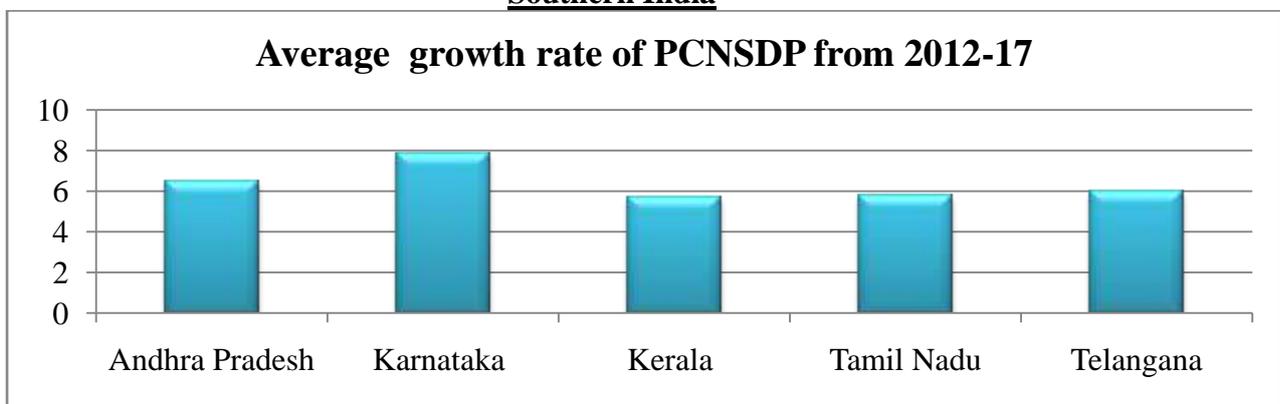
Northeastern India



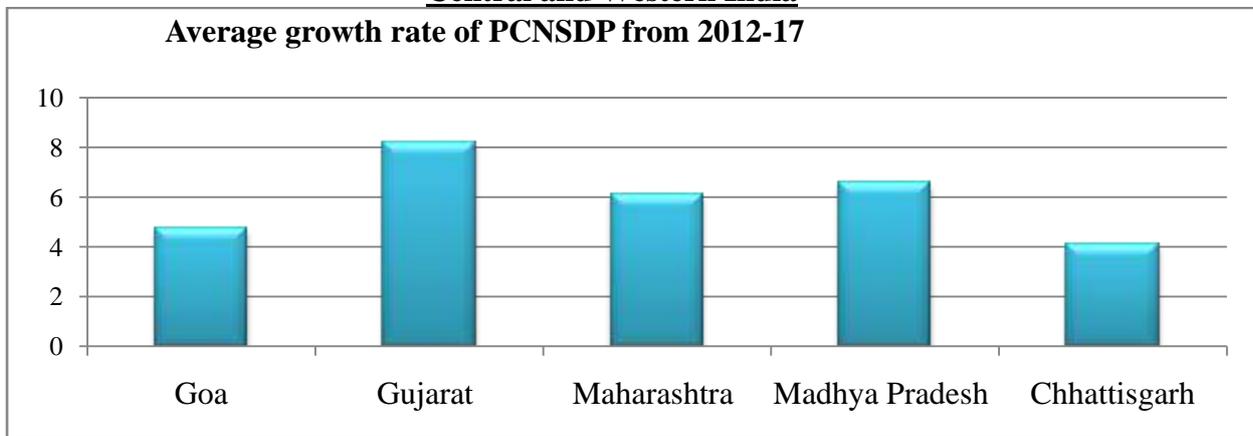
Eastern India



Southern India



Central and Western India



Inter-relation Between regional imbalance and Sustainable Development:-

“The Primary objective of the sustainable development is to reduce the absolute poverty of the world’s poor through providing secure livelihoods that minimize resource depletion environmental degradation cultural disruption and social instability.”E. Barbier.

Poverty is related to unemployment and both poverty and unemployment are related to regional imbalance. Low regional growth rate and regional imbalance trend to aggravate problems of poverty and inequality, which may negate the efforts at sustainable economic development. Poverty and unemployment is present in society due to high population growth



and low productivity level, which is due to lack of capital, poor quality of human resources and lack of work culture and discipline among of workers. Sustainable development is the development which generates employment and reduces poverty and imbalance growth. Sustainable development is not possible without attaining inclusive growth which is possible through employment generation in large scale. A primary aim of sustainable development is achieved reasonable and equitable distribution of resources between population of present generation and eternal for future. This is only possible through generate employment opportunities in between poor's and eliminate poverty, unemployment and regional imbalance. Sustainable economic growth is a key instrument for reducing regional imbalance via reducing poverty in backward areas and improving living standard of people. Economic development in itself is not sufficient without eliminating poverty of less developed region or regional imbalance it is not possible to maintain inclusive growth, because poverty worsened in spite of overall economic growth and development, such economic development cannot be sustainable, leading to social stress, struggle and harmful to future development. The World Bank literature argues that the most critical problem of sustainable development in each country as well as globally- is eradicating extreme poverty and regional imbalance. It is felt that poverty and imbalance economic growth is not only an evil in itself but also stands in the way of achieving most other goals of development from clean environment to personal freedom. Poverty and inequality are destructive all economic as well as social, environmental goal of sustainable development. Large scale poverty and imbalance economic growth is a threat to socio-economic and environmental structure of the nation. For accelerating the growth rate of development it is necessary to tackled poverty and regional imbalance. Thus employment generation has been glory and an integral part of growth and development processes of the country. It is necessary to evolve appropriate strategies for sustainable development. It requires policies and projects to be designed and implemented in such a way that environmental degradation is anticipated and minimized, to provide productive employment for continuously increasing labour force and alleviation regional imbalance is also an integral part of policies and projects for sustainable development.

Process of sustainable development maintain the quality of the life both present and future generation without harming natural resources and environment. Poverty is related with insufficient means to meet minimum needs for food, housing health, education and is increased the gravity of by lack of access employment opportunities and forms discrimination and imbalance economic growth. The goal of stainable development is at meeting the needs of present generation without compromising the ability of future generation to meet their own needs through economy society and environment taken together. Employment opportunity is avenue of healthy prosperous and stable life. This will also ensure continuity of development activity of country. Sustainable development can be availed and poverty eliminated in India through increasing employment opportunities, decreasing inequality in social and regional, facilitating empowerment, and optimum use of natural resources by removing regional imbalance. To achieving sustainable development, it is important that poverty alleviation and employment generating programmes also be redesigned in an integrated manner including with removal of regional imbalance program by including many key elements which will ensure its effectiveness, transparency, reliance and eco-friendly nature. Finally to maintain the sustainable development in India, it is necessary to remove regional imbalance, control poverty, generating employment and restricting environment degradation. They will ensure the optimum utilization of natural resources and leave the future generation in healthy manner.



Conclusion

Region imbalance in economic development is quite common within India; these imbalances not only create inequalities among states but also impacting on economic growth of country. For rising the economic growth rate and development it is necessary to reduce the regional imbalance. To eliminate these disparities should be an accelerated development of backward areas of different states and regions. The process of economic development involves not only uplift in economic wellbeing but also aims at a balanced regional development of the country. In a vast country like India regional imbalance are found in regard to physical geography, culture, resource base and endowment. Some states have achieved rapid economic growth in recent years, while others have languished. Since the implementation of market-oriented policy reform in 1991, India has enjoyed an upsurge in growth. Nevertheless, the Indian Government needs to tackle major economic challenges and maintain the pace of growth if the country is to continue on its path of sustained economic development and make significant headway in regional imbalance, and make a balanced growth. This is far from being the case at the present stage of development, where the most populous and poorest areas of the country are still lagging behind the richest and more dynamic ones in terms of growth performance. Low regional growth rate and regional imbalance trend to increased problems of poverty and inequality, which may neutralized the efforts at sustainable economic development.

Raise the public investment in different economic sector like agriculture and infrastructure has increased the rate of development of rural and backward areas. The private sector can also play an important role in achieving the balanced growth rate of country. Private and foreign investment can influence the economic growth rate, so the Public –Private Partnership concept is a healthy approach to achieving equitable and balance growth of regions. Therefore, a proper coordination of public and private sector can help in reducing the regional imbalance in term of divergence of per capita Net State Domestic Product. Regional imbalance can also be reduced to improving the technology in this manner that make an efficient use of available natural resources. Regional imbalance can be eliminating by improvement in income, employment and living standard of people through human resource development by improving the facilities of health, education. For sustainable economic development it is necessary to remove inter- states and intrastate imbalance and achieve balance growth rate and equitable development of the regions.

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