

Development Economics is witnessing a paradigm shift towards inclusive growth. Development is a wide concept. It involves radical thinking which can bring socio-economic, political and cultural advancement. Thus, it is a synergy of many developmental objectives like promoting literacy, improving nutrition, health, increasing production and productivity, greater equality and other valued qualities. The thinkers in the field of development have used various terminologies such as models, approaches, theories and strategies for development. This paper addresses the issue of inclusive growth in the Indian context. This paper is organized in six sections – section-I describes the research problem. Section-II covers a comprehensive study of the review of the literature on the multiple perspectives of inclusive growth. In section-III, the methodology of the research is presented. Section - IV provides the results and discussion. Finally, section V concludes with policy recommendations, limitations and scope for future studies in this direction.

## **Section – I The Research Problem**

Though there are few cross-country studies which compared the inclusive growth outcomes across different countries, there is little evidence of detailed investigation within a particular country. Further, existing literature does not offer ways and means through which the inclusive growth outcome can be measured. It has thus, remained an unresolved issue. There is adequate literature evidence about the shift in development economics from pro-poor growth to inclusive growth particularly in the developing countries like India, China, Brazil and South Africa, and these countries today are the drivers of global economic growth. However, there is lack of theory building in the conceptual framework of inclusive growth, which gives enough scope for detailed investigation. The evolution of inclusive growth debate in the last couple of decades brought new challenges like the inconclusive definition of the term inclusive growth, complexities in the identification of the key drivers of inclusive growth, lack of systematic approach for construction of inclusive growth frame work as well as lack of measurement of inclusive growth. This paper makes a sincere effort in addressing all these issues.

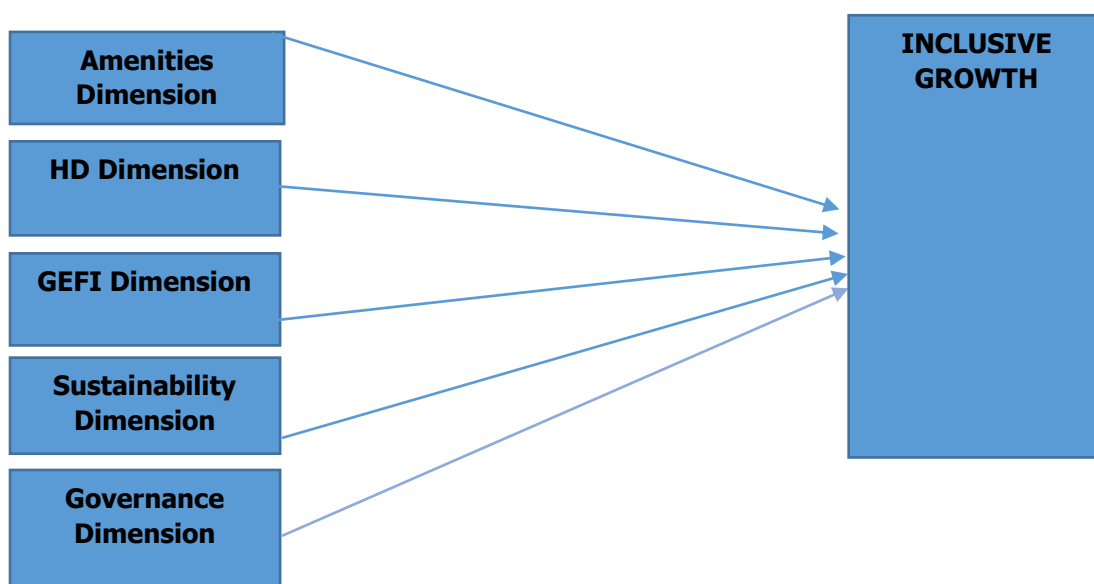
## **Section – II Review of Literature**

Ravallion and Chen (1997) studied at length the changes in the distribution by studying the relationship between poverty and inequality. The distributional changes can be considered as pro-poor if the redistribution is poverty reducing in character (Ravallion, 2004). Kakwani and Pernia (2000) employed the term pro-poor growth (PPG) to highlight the relationship between growth and equity. According to Ali (2007), the key elements in inclusive growth are employment and productivity, development in human capabilities and social safety nets and the targeted intervention. Inclusiveness of economic growth is gross domestic product growth that leads to significant poverty reduction. Ali and Son (2007) define inclusive growth as the growth process that increases the social opportunity function which depends upon the average opportunities available to the population and how these opportunities are shared among the population particularly among the poor. The concept of productive employment as a fundamental element in inclusive growth was stressed by Bhalla (2007). He also considered growth in productivity of existing jobs integral to inclusive growth. To assess the inclusiveness of growth, he proposed combined measures of productive employment and productivity growth in lower income employment. According to Ali and Zhuang (2007), an effective inclusive growth strategy should incorporate the twin objectives of high and sustainable growth to create productive and decent employment opportunities and social inclusion to ensure equal access to opportunities by all. Growth can be accelerated through market integration and exploring the potential market integration as a powerful source of growth is indeed essential. Klasen (2010) pointed out that inclusive growth has become a strategic pillar for guiding the policies of Asian Development Bank in its operational strategy.

### **Conceptual Framework**

Based on the evidence from literature review as cited above, this study has developed a conceptual framework for inclusive growth incorporating the following six different dimensions.

Inclusive Growth cannot be measured in single perspective on poverty reduction or employment generation or on economic dimension alone.



**Figure – 1 Conceptual Framework**

### Section – III Methodology

#### **Selection of Indicators and Identification of Major Indian States**

Inclusive growth is not a one-dimensional concept. It is multi-dimensional and therefore, 20 different socio-economic indicators have been identified based on a comprehensive literature review and are classified under six different dimensions of inclusive growth.

**Table 1 List of Indicators and Data Sources**

| Indicators                                        | Dimension                             | 2001-02                                               | 2011-12                                               |
|---------------------------------------------------|---------------------------------------|-------------------------------------------------------|-------------------------------------------------------|
| Income – MPCE                                     | Economic                              | 2004-05 – NSSO 60 <sup>th</sup> Round                 | NSSO 68 <sup>th</sup> Round July 2011 to June 2012    |
| Poverty                                           |                                       | Planning Commission 2004-05                           | Planning Commission 2011-12                           |
| Employment                                        |                                       | Census 2001                                           | NSSO – 68 <sup>th</sup> Round                         |
| Inequalities (Gini Coefficient)                   |                                       | Planning Commission (2014)                            | Planning Commission (2014)                            |
| Per Capita consumption of Electricity             | Amenities                             | Central Electricity Authority, Ministry of Power, GoI | Central Electricity Authority, Ministry of Power, GoI |
| Access to Drinking Water                          |                                       | Census-2001                                           | Census-2011                                           |
| Access to Toilet                                  |                                       | Census-2001                                           | Census-2011                                           |
| Pucca Houses                                      |                                       | Census-2001                                           | Census-2011                                           |
| Transport – Road Length per 100 Sq.km.            |                                       | Economic Survey of Maharashtra – 2005-06              | Economic Survey of Maharashtra – 2012-13              |
| % of women in LWF                                 | Gender Equity and Financial Inclusion | Census-2001                                           | Census-2011                                           |
| % of Girls in School Ed                           |                                       | Census-2001                                           | Census 2011                                           |
| % of HH with banking                              |                                       | Census-2001                                           | Census-2011                                           |
| Literacy Rate                                     | Human Development                     | Census-2001                                           | Census-2011                                           |
| Life Expectancy                                   |                                       | Census-2001                                           | Census-2011                                           |
| Health – IMR                                      |                                       | SRS Bulletin 2005-06 Home Ministry, GoI.              | SRS Bulletin Oct.2012 Home Ministry, GoI.             |
| % of Development Expenditure to Total Expenditure | Governance                            | Finance Accounts of States and CSO                    | Finance Accounts of States and CSO                    |
| % of Tax Revenue to                               |                                       | Finance Accounts of States                            | Finance Accounts of States                            |

| Indicators | Dimension      | 2001-02                                                       | 2011-12                                                       |
|------------|----------------|---------------------------------------------------------------|---------------------------------------------------------------|
| GSDP       |                | and CSO                                                       | and CSO                                                       |
| Crime Rate | Sustainability | National Crime Records Bureau, Home Ministry, GoI-Report-2001 | National Crime Records Bureau, Home Ministry, GoI-Report-2011 |

### **Identification of Major Indian States**

15 major Indian states are identified. These states constitute 77% of India's geographical area, 89% of total population and 82% of India's Gross Domestic Product (GDP).

### **The Data-base and Reference Period**

The present study uses data from various Government of India reports like Census, several Rounds of National Sample Survey Organisation (NSSO) studies, Planning Commission, Economic Surveys of Government of India, union budgets, Central Statistical Organisation (CSO) and state and union economic surveys and state budgets. The study covers the reference period of 2001 and 2011, considering the Census data availability.

### **The Weightage Scheme**

The weightage scheme is done using the statistical tool of Principal Component Analysis (PCA). SPSS 19 version software has been used.

### **The Normalisation Procedure and Aggregation Method**

The raw data obtained for different socio-economic variables is normalised through Z-score before the component index is prepared by multiplying the Z-score with the weight of the concerned indicator. Linear aggregation method is used.

## **Section – IV Results and Discussion**

Actual data have been converted into z-score for each indicator which is, then multiplied by the concerned weight to get the value of indicator. Then the index value of all the indicators are aggregated to get the index of each dimension and the sum of all dimensions leads to composite score. This exercise has been done for both the reference period of 2001 and 2011.

**Table-2 The weightage obtained from PCA using SPSS software**

| Indicators                             | Dimension                             | 2001 | 2011 |
|----------------------------------------|---------------------------------------|------|------|
| Income – MPCE                          | Economics                             | 0.02 | 0.15 |
| Poverty                                |                                       | 0.34 | 0.24 |
| Employment                             |                                       | 0.21 | 0.20 |
| Gini – Rural                           |                                       | 0.22 | 0.20 |
| Gini – Urban                           |                                       | 0.21 | 0.21 |
|                                        | Total                                 | 100% | 100% |
| Per Capita consumption Of Electricity  | Amenities                             | 0.10 | 0.20 |
| Access to Drinking Water               |                                       | 0.20 | 0.21 |
| Access to Toilet                       |                                       | 0.03 | 0.20 |
| Pucca Houses                           |                                       | 0.46 | 0.21 |
| Transport – Road Length per 100 Sq.km. |                                       | 0.21 | 0.18 |
|                                        | Total                                 | 100% | 100% |
| % of women in LWF                      | Gender Equity and Financial Inclusion | 0.33 | 0.33 |
| % of Girls in School Ed                |                                       | 0.33 | 0.33 |
| % of HH with access to banking         |                                       | 0.33 | 0.33 |
|                                        | Total                                 | 100% | 100% |
| Literacy Rate                          | Human Development                     | 0.37 | 0.36 |
| Life Expectancy                        |                                       | 0.55 | 0.32 |
| Health – IMR                           |                                       | 0.08 | 0.32 |

|                                            |                       |             |             |
|--------------------------------------------|-----------------------|-------------|-------------|
|                                            | <b>Total</b>          | <b>100%</b> | <b>100%</b> |
| <b>% of Development Exp. to Total Exp.</b> | <b>Governance</b>     | <b>0.50</b> | <b>0.50</b> |
| <b>% of Tax Revenue to GSDP</b>            |                       | <b>0.50</b> | <b>0.50</b> |
|                                            | <b>Total</b>          | <b>100%</b> | <b>100%</b> |
| <b>Crime Rate</b>                          | <b>Sustainability</b> | <b>0.50</b> | <b>0.50</b> |
| <b>Air Quality</b>                         |                       | <b>0.50</b> | <b>0.50</b> |
|                                            | <b>Total</b>          | <b>100%</b> | <b>100%</b> |

**Table 3 Composite Index for Inclusive Growth: 2001**

| States      | Economic Dimension |    | Amenities Dimension |    | Human Development Dimension |    | GEFI* Dimension |    | Governance Dimension |    | Sustainability Dimension |    | CI    | R  |
|-------------|--------------------|----|---------------------|----|-----------------------------|----|-----------------|----|----------------------|----|--------------------------|----|-------|----|
|             | Index              | R  | Index               | R  | Index                       | R  | Index           | R  | Index                | R  | Index                    | R  |       |    |
| AP          | 1.07               | 1  | 0.01                | 8  | -0.22                       | 9  | 0.11            | 8  | 0.78                 | 4  | -0.20                    | 7  | 1.55  | 6  |
| Assam       | 0.19               | 6  | -1.26               | 14 | -0.81                       | 12 | -0.63           | 12 | -0.54                | 10 | 1.12                     | 1  | -1.94 | 10 |
| Bihar       | -0.34              | 12 | -0.49               | 10 | -1.07                       | 15 | -0.58           | 11 | -1.46                | 15 | -0.41                    | 12 | -4.35 | 14 |
| Gujarat     | 0.31               | 5  | 0.4                 | 4  | 0.08                        | 8  | 0.18            | 6  | 1.10                 | 2  | -0.39                    | 11 | 1.69  | 5  |
| Haryana     | 0.44               | 3  | 0.44                | 3  | 0.29                        | 5  | 0.4             | 5  | 0.95                 | 3  | 0.38                     | 4  | 2.89  | 3  |
| Karnataka   | 0.31               | 5  | 0.12                | 6  | 0.15                        | 7  | 0.53            | 3  | 1.30                 | 1  | -0.22                    | 8  | 2.18  | 4  |
| Kerala      | -0.51              | 11 | 0.52                | 2  | 2.48                        | 1  | 0.54            | 2  | 0.04                 | 8  | 0.15                     | 5  | 3.23  | 1  |
| MP          | -0.30              | 7  | -0.62               | 12 | -0.93                       | 13 | -0.13           | 10 | 0.18                 | 7  | -0.37                    | 10 | -2.17 | 11 |
| Maharashtra | -0.47              | 10 | 0.2                 | 5  | 0.78                        | 3  | 1.08            | 1  | 0.26                 | 6  | -0.50                    | 13 | 1.35  | 8  |
| Odisha      | -0.43              | 9  | -0.83               | 13 | -0.76                       | 11 | -0.67           | 14 | -0.76                | 12 | 0.76                     | 2  | -2.69 | 13 |
| Punjab      | 0.91               | 2  | 1.42                | 1  | 0.79                        | 2  | 0.15            | 7  | -0.92                | 13 | 0.58                     | 3  | 2.93  | 2  |
| Rajasthan   | 0.43               | 4  | -0.01               | 9  | -0.54                       | 10 | 0.05            | 9  | -0.03                | 9  | -0.59                    | 14 | -0.69 | 9  |
| Tamil Nadu  | -0.51              | 11 | 0.4                 | 4  | 0.53                        | 4  | 0.41            | 4  | 0.70                 | 5  | -0.07                    | 6  | 1.46  | 7  |
| UP          | -0.79              | 13 | 0.02                | 7  | -0.94                       | 14 | -0.83           | 15 | -0.71                | 11 | -1.09                    | 15 | -4.34 | 14 |
| WB          | -0.32              | 8  | -0.3                | 10 | 0.17                        | 6  | -0.63           | 12 | -0.92                | 14 | -0.25                    | 9  | -2.25 | 12 |

(Vellala et al, 2016)

**Table 4 Composite Index for Inclusive Growth: 2011**

| States      | Economic Dimension |    | Amenities Dimension |    | Human Development Dimension |    | GEFI* Dimension |    | Governance Dimension |    | Sustainability Dimension |    | CI    | R  |
|-------------|--------------------|----|---------------------|----|-----------------------------|----|-----------------|----|----------------------|----|--------------------------|----|-------|----|
|             | Index              | R  | Index               | R  | Index                       | R  | Index           | R  | Index                | R  | Index                    | R  |       |    |
| AP          | 0.89               | 1  | 0.32                | 4  | -0.57                       | 12 | 0.35            | 5  | 0.68                 | 3  | -0.22                    | 7  | 1.45  | 6  |
| Assam       | -0.14              | 9  | -0.58               | 13 | -0.77                       | 13 | -0.99           | 15 | -0.47                | 11 | 0.65                     | 3  | -2.30 | 12 |
| Bihar       | 0.14               | 7  | -0.61               | 14 | -0.77                       | 13 | -0.58           | 13 | -0.60                | 13 | -0.36                    | 9  | -2.77 | 13 |
| Gujarat     | 0.37               | 2  | 0.42                | 3  | 0.11                        | 6  | -0.08           | 8  | 0.40                 | 5  | -0.26                    | 8  | 0.96  | 7  |
| Haryana     | -0.08              | 8  | 0.68                | 2  | -0.03                       | 8  | -0.2            | 10 | 0.30                 | 6  | 0.17                     | 4  | 0.84  | 8  |
| Karnataka   | -0.50              | 14 | 0.03                | 8  | 0.05                        | 7  | 0.49            | 4  | 1.55                 | 1  | -0.16                    | 6  | 1.47  | 5  |
| Kerala      | -0.08              | 8  | 0.24                | 5  | 2.63                        | 1  | 0.88            | 2  | -0.48                | 12 | 0.12                     | 5  | 3.31  | 1  |
| MP          | -0.40              | 12 | -0.49               | 11 | -0.87                       | 11 | 0.14            | 6  | 0.71                 | 2  | -0.46                    | 10 | -1.38 | 10 |
| Maharashtra | 0.09               | 6  | 0.15                | 6  | 0.88                        | 2  | 0.68            | 3  | 0.26                 | 7  | -0.55                    | 12 | 1.51  | 4  |
| Odisha      | -0.39              | 11 | -0.59               | 12 | -0.66                       | 10 | -0.6            | 14 | -0.03                | 8  | 0.72                     | 2  | -1.56 | 11 |
| Punjab      | 0.27               | 4  | 1.04                | 1  | 0.39                        | 4  | 0.05            | 7  | -1.05                | 14 | 0.81                     | 1  | 1.51  | 3  |
| Rajasthan   | 0.26               | 5  | -0.3                | 10 | -0.61                       | 9  | -0.09           | 9  | -0.09                | 9  | -0.46                    | 10 | -1.28 | 9  |
| Tamil Nadu  | 0.33               | 3  | 0.14                | 7  | 0.76                        | 3  | 1.03            | 1  | 0.48                 | 4  | -0.22                    | 7  | 2.51  | 2  |
| UP          | -0.44              | 13 | -0.16               | 9  | -0.87                       | 11 | -0.49           | 12 | -0.21                | 10 | -0.88                    | 13 | -3.06 | 14 |
| WB          | -0.36              | 10 | -0.3                | 10 | 0.34                        | 5  | -0.47           | 11 | -1.44                | 15 | -0.54                    | 11 | -2.77 | 13 |

(Vellala et al, 2016)

**Table 5 Composite Index Ranks for Inclusive Growth: 2001 vs. 2011**

| States      | Economic Dimension |      |    | Amenities Dimension |      |    | Human Development Dimension |      |    | Gender Equity and Financial Inclusion Dimension |      |    | Governance Dimension |      |    | Sustainability Dimension |      |    | Inclusive Growth Rank |      |    |
|-------------|--------------------|------|----|---------------------|------|----|-----------------------------|------|----|-------------------------------------------------|------|----|----------------------|------|----|--------------------------|------|----|-----------------------|------|----|
|             | 2001               | 2011 | *D | 2001                | 2011 | *D | 2001                        | 2011 | *D | 2001                                            | 2011 | *D | 2001                 | 2011 | *D | 2001                     | 2011 | *D | 2001                  | 2011 | *D |
| AP          | 1                  | 1    | 0  | 8                   | 4    | +4 | 9                           | 12   | -3 | 8                                               | 5    | +3 | 4                    | 3    | +1 | 7                        | 7    | 0  | 6                     | 6    | 0  |
| Assam       | 6                  | 9    | -3 | 14                  | 13   | +1 | 12                          | 13   | -1 | 12                                              | 15   | -3 | 10                   | 11   | -1 | 1                        | 3    | -2 | 10                    | 12   | -2 |
| Bihar       | 12                 | 7    | +5 | 10                  | 14   | -4 | 15                          | 13   | +2 | 11                                              | 13   | -2 | 15                   | 13   | +2 | 12                       | 9    | +3 | 14                    | 13   | +1 |
| Gujarat     | 5                  | 2    | +3 | 4                   | 3    | +1 | 8                           | 6    | +2 | 6                                               | 8    | -2 | 2                    | 5    | -3 | 11                       | 8    | +3 | 5                     | 7    | -2 |
| Haryana     | 3                  | 8    | -5 | 3                   | 2    | +1 | 5                           | 8    | -3 | 5                                               | 10   | -5 | 3                    | 6    | -3 | 4                        | 4    | 0  | 3                     | 8    | -5 |
| Karnataka   | 5                  | 14   | -9 | 6                   | 8    | -2 | 7                           | 7    | 0  | 3                                               | 4    | -1 | 1                    | 1    | 0  | 8                        | 6    | +2 | 4                     | 5    | -1 |
| Kerala      | 11                 | 8    | +3 | 2                   | 5    | -3 | 1                           | 1    | 0  | 2                                               | 2    | 0  | 8                    | 12   | -4 | 5                        | 5    | 0  | 1                     | 1    | 0  |
| MP          | 7                  | 12   | -5 | 12                  | 11   | +1 | 13                          | 11   | +2 | 10                                              | 6    | +4 | 7                    | 2    | +5 | 10                       | 10   | 0  | 11                    | 10   | +1 |
| Maharashtra | 10                 | 6    | +4 | 5                   | 6    | -1 | 3                           | 2    | +1 | 1                                               | 3    | -2 | 6                    | 7    | -1 | 13                       | 12   | +1 | 8                     | 4    | +4 |
| Odisha      | 9                  | 11   | -2 | 13                  | 12   | +1 | 11                          | 10   | +1 | 14                                              | 14   | 0  | 12                   | 8    | +4 | 2                        | 2    | 0  | 13                    | 11   | +2 |
| Punjab      | 2                  | 4    | -2 | 1                   | 1    | 0  | 2                           | 4    | -2 | 7                                               | 7    | 0  | 13                   | 14   | -1 | 3                        | 1    | +2 | 2                     | 3    | -1 |
| Rajasthan   | 4                  | 5    | -1 | 9                   | 10   | -1 | 10                          | 9    | +1 | 9                                               | 9    | 0  | 9                    | 9    | 0  | 14                       | 10   | +4 | 9                     | 9    | 0  |
| Tamil Nadu  | 11                 | 3    | +8 | 4                   | 7    | -3 | 4                           | 3    | +1 | 4                                               | 1    | +3 | 5                    | 4    | +1 | 6                        | 7    | -1 | 7                     | 2    | +5 |
| UP          | 13                 | 13   | 0  | 7                   | 9    | -2 | 14                          | 11   | +3 | 15                                              | 12   | +3 | 11                   | 10   | +1 | 15                       | 13   | +2 | 14                    | 14   | 0  |
| WB          | 8                  | 10   | -2 | 10                  | 10   | 0  | 6                           | 5    | +1 | 12                                              | 11   | +1 | 14                   | 15   | -1 | 9                        | 11   | -2 | 12                    | 13   | -1 |

|  |                       |            |
|--|-----------------------|------------|
|  | Best Performing       | Rank 1-5   |
|  | Moderately Performing | Rank 6-10  |
|  | Worst Performing      | Rank 11-15 |

Table - Best Performing States

| Underdevelopment Index(GoI, 2013a) | Economic Freedom of States of India(Debrov et al.,2013) | Policy Effectiveness Index – India Public Policy (Malhotra,2014) | Governance Performance Index (Mundle et al., 2016) | India Human Development Report (2011b) | Composite Index for Inclusive Growth** | NITI Aayog's Sustainability Development Index (2018) |
|------------------------------------|---------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------|----------------------------------------|----------------------------------------|------------------------------------------------------|
| Kerala                             | Gujarat                                                 | Punjab                                                           | Gujarat                                            | Delhi*                                 | Kerala                                 | Himachal Pradesh                                     |
| Tamil Nadu                         | Tamil Nadu                                              | HP*                                                              | Tamil Nadu                                         | Kerala                                 | Tamil Nadu                             | Kerala                                               |
| Punjab                             | AP                                                      | Karnataka                                                        | AP                                                 | Goa*                                   | Punjab                                 | Taimil Nadu                                          |
| Maharashtra                        | Haryana                                                 | Haryana                                                          | Kerala                                             | HP*                                    | Maharashtra                            | Chandigarh                                           |
| Karnataka                          | HP*                                                     | Maharashtra                                                      | Punjab                                             | Punjab                                 | Karnataka                              | Pudhucherry                                          |
| Gujarat                            | MP                                                      | Tamil Nadu                                                       | Karnataka                                          | Maharashtra                            | AP                                     | -                                                    |

Table Worst Performing States:

| Underdevelopment Index(GoI, 2013a) | Economic Freedom of States of India(Debrov et al.,2013) | Policy Effectiveness Index – India Public Policy (Malhotra,2014) | Governance Performance Index (Mundle et al., 2016) | India Human Development Report, (GoI,2011b) | Composite Index for Inclusive Growth** | NITI Aayog's Sustainability Development Index (2018) |
|------------------------------------|---------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------|---------------------------------------------|----------------------------------------|------------------------------------------------------|
| Odisha                             | Odisha                                                  | Kerala                                                           | UP                                                 | Jharkhand*                                  | UP                                     | Assam                                                |
| Bihar                              | UP                                                      | West Bengal                                                      | Bihar                                              | Odisha                                      | Bihar                                  | Bihar                                                |
| Madhya Pradesh                     | West Bengal                                             | Assam                                                            | Jharkhand*                                         | Chhattisgarh*                               | West Bengal                            | U[                                                   |
| Assam                              | Jharkhand*                                              | MP                                                               | Odisha                                             | MP                                          | Assam                                  | -                                                    |
| Uttar Pradesh                      | Assam                                                   | Bihar                                                            | West Bengal                                        | Bihar                                       | Odisha                                 | -                                                    |
| Rajasthan                          | Bihar                                                   | Odisha                                                           | Assam                                              | UP                                          | MP                                     | -                                                    |

### Section – V Conclusion

It would be of great interest in advancing the debate on inclusive growth and devise more effective inclusive growth policies in the world in general and India in particular. There is a lack of an ideal definition of inclusive growth and it remains a challenge in measuring inclusive growth. More grounded theories are necessary for further advancing the debate on inclusive growth. There are few issues which remain unresolved like the relationship between fiscal redistribution and inclusive growth, the impact of monetary policies in general and inflation in particular on inclusive growth, the impact of technological advancement on growth inclusiveness, the relationship between structural reforms and inclusive growth and the impact of labour market reforms on inclusive growth. Future studies can address these issues.