INCLUSIVE GROWTH AND SUSTAINABLE DEVELOPMENT IN INDIA

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ABSTRACT

The growth rate of India has been impressive with GDP. The country is also becoming a top global innovator for high-tech products and services. Still, it has facing social and economic problem to achieve more growth. After independent India has take on five year planning policy some time policy maker achieve selected target, some time not. Since 1991 Indian government has adopt LPG policy and industrialization. Indian Economy goes smoothly though this policy but other side it has faced some problem like poverty, inequality in income and states, unemployment, environmental issues etc. several government policy make to reduce social and economic problem but not fruitfully apply. The degradation of the environment due to industrial and other waste discharged into the atmosphere also caused great concern. In 11th five year plan we use inclusive growth policy but not achieved, decided target so in next 12th five year plan put into action inclusive growth and sustainable development. The study is based on the secondary data for ten year from 2009-2010 to 2018-2019. The collected data was analysed by using multiple regression.

Keywords: Inclusive growth, sustainable development, XIIth five year plans, developmental policies, urbanization,

INTRODUCTION

Environment management is most important yet it is most neglected discipline. It is deal with life support system for development and economic growth. At times, the two development management and environmental management become irreconcilable. Today we stand at the turning point in choosing between environment and development. Thus both the industrialised countries and underdeveloped or developing countries, damage, deplete and pollute the environment. The developing countries necessitate growth to accomplish the basic needs of their people, but should they repeat the mistakes of the industrial countries? It is a fact that both the consumption and life style of people have relevance to environment problem therefore living habits and attitudinal and ethical questions have now entered into the environment management area. These issues, sometimes, become controversial and need a deeper study to help us in understanding the environmental problem. The basic question is that, what is the kind of model of development and the business model we should follow so that we don’t ignore the principal underlying sustainability? For this we need changes at local national regional and global together with an economic and social transformation at the levels of individuals and communities.

Sustainable development requires maintaining the current rate of development leaving suitable resources behind for later generation to continue to develop. Sustainable development involves the critical issues of both environment and society. The proposal of Inclusive growth and development came into the public interest in the developmental policies of emerging market economies (EMEs) with higher economic growth rates. The paper explain that inclusive growth more creates an equal opportunities and unequal opportunities start from social segregation associated with market, institutional and failures points of policy.
Another aspect of sustainability is that it is about system analysis, i.e. how economic, social and environment systems interact at various scales of operation in a way that would lead to sustainable development that strikes optimal balance among the three sub-systems. Also sustainable development must lead to reducing poverty of people in developing countries by means that minimize resource depletion environmental damage and social instability.

The programs of eradicating extreme poverty and, at the same time address the development challenge brought about by rising inequalities. With an accelerated economic growth rate, Indian policy makers too shifted their focus on Inclusive growth and sustainable development while formulating the 12th five year plan.

LITERATURE REVIEW

The developed countries and developing countries both have achieved high level of development and decent standard of living at the cost of environment and depletion of natural resources. The neoclassical growth theory (Solow 1956) found that assumption of exogenously given technology predicts that a developing country would grow faster than the developed country the per capita income in least developed country would converge to the level of developed country and the GDP growth rate in any country will eventually be the same as the population growth rate. However with a few exceptions in East Asia most developing countries’ per capita income failed to converge to the level in developed country (Pearson, et al. 1969; Romer 1994), and the economic growth rates in developed country continue to exceed their population growth rates. Unsatisfied with the neoclassical growth theory, Romer (1986) and Lucas (1988) open up the new growth theory, which treats technological innovation as endogenously determined by the accumulation of human capital, research and development (R&D), learning by doing and so on, and argues that the failure of least developed country to converge to developed country is due to their lack of investment in those factors that are important for technological innovations. The argument of that theory is insightful for the continuous growth of per capita income in developed country nevertheless the new growth theory fails to provide a satisfactorily explanation for the extraordinary growth and convergence of the newly industrialized economies in Asia, including South Korea, Taiwan, Hong Kong, Singapore and recently China, during the last three decades of the twentieth century (Pack 1994; Grossman and Helpman 1994). During the catching up process, these newly industrialized economies investments in R&D, human capital, and learning by doing were much lower than those of the developed country.

The developing countries failed to catch up with the developed country because of bad institutions due to the government’s interventions and regulations, including widespread corruption, weak protection to the investors and a high degree of social disputes (Shleifer et al., 1998; Rodrick, 1998; Acemoglu et al., 2001a, 2001b, 2002a, 2002b; Djankov et al., 2003). The system have expected that the increasing growth literature has become clear that property rights appropriate regulatory structure quality and independence of the judiciary and bureaucratic capacity could not be taken for granted in many settings and that they were of utmost important to initiating and sustaining economic growth study by Rodrick (2003)

RESEARCH GAP:- We studied many economists thoughts and found that in both developed and developing countries facing sustainable development and inclusive growth problem. In this paper we try to find out causal factors helps to improvement in economy growth.

RESEARCH METHODOLOGY: The data used in the study are annual data for the period 2010 to 2019 sourced from the various publication of RBI Handbook, Ministry of commerce and Industry Govt. of India, DIPP, Stasticstimes.com and Ministry of Finance Govt. of India, journals, magazines, websites these are based on secondary data.
OBJECTIVES:

(1) To explore different problems present in achieving Inclusive growth and sustainable development in India.
(2) To investigate the future aspect of Inclusive growth and sustainable development with regard to proposed five year plan in India.
(3) To suggest certain measures for the achievement of the Inclusive growth and sustainable development in India.

HYPOTHESES OF THE STUDY:

1. Structure and pattern of variables is remained not same.
2. Causal factors responsible for growth under examine.
3. There is causal relationship between GDP and dependent factors.

INCLUSIVE GROWTH OF ELEMENTS: The factor of inclusive growth plan included a sharp increase in investment in rural areas, rural infrastructure and agriculture spurs in credit for farmers, increase in rural employment this can show social safety and a sharp increase in public spending on education and health care. The interrelated elements of inclusive growth are:

1. Poverty Reduction
2. Employment generation
3. Agriculture Development.
4. Industrial development
5. Social sector Development
6. Reduction in region disparities
7. Environment protection
8. Equal distribution of income

Inclusive Growth and sustainable development Strategies Problems in India

The subsequent problems are the key alarm for developing countries like India to achieve the inclusive growth.

Poverty:- A corresponding large share of poor is come from lower castes. This system has also exploitation of poor because they are less capable than prosperous high ranking groups. In some states in India land is generally held by high ranking, property owner of the leading castes that economically exploit low ranking landless laborers and poor artisans, all the while degrading them with custom emphases on their so called god given them inferior status.

Employment: - The unemployment became the big worry to the development of the country. While data shows poverty is much higher than unemployment. Employment is the only source to eradicate poverty. The country is also facing the problem of employment generation in all sectors, region and for all socio-economic groups mainly for poorer sections of the population, backward regions, lagging sector and SC/ST/OBC/women etc.

Agriculture: - The majority of Indians are engaged in agriculture for employment, the recent development in the other sectors decreased this major’s growth. Some of the problems in Indian agriculture such are Long term factors like steeper decline in per capita land availability, shrinking of farm size, Slow reduction in share of employment, Low productivity of labour in agriculture and the gap between agriculture and non agriculture is widening. Decline in Yield growth due to land and water problems, vulnerability to world commodity prices, farmer’s suicides, Disparities in growth across region and crops i.e., growth rate decline more in rain fed areas.

Problems in Social Development: - Social Development also facing some problems which is making the path critical to Inclusive growth. Some of the problems in social sector are

1. Significant regional, social and gender disparities.
2. Slow growth in public expenditures particularly on health.
3. Poor quality delivery system.
4. Social indicators are much lower for SC and ST caste
5. Malnutrition among children is one major problem.
6. Advancements in India are still at lower growth due to the strong influence of culture and regional disparities.

**Regional Disparities:** The regional disparities raised in India before and after independence. The progress in agriculture and industrial sector some region in India developed fast and some other places still are facing same problem so called scarcity. Some of the regional disparities problems like Per capita income is highest in Punjab and lowest per capita income is at Bihar, Female infant mortality differ from Kerala and Madhya Pradesh, Female literacy differ from Bihar and Kerala, Richer states grew faster than the poorer states.

**MODEL:**

\[ \text{GDP}_t = \beta_0 + \beta_1 (\text{EXPT})_t + \beta_2 (\text{DIS PCI})_t + \beta_3 (\text{IND GRTH})_t + \beta_4 (\text{GOVT EXP})_t + \epsilon_i \]

\[ \log(\text{GDP})_t = \beta_0 + \beta_1 \log(\text{EXPT})_t + \beta_2 \log(\text{DIS PCI})_t + \beta_3 \log(\text{IND GRTH})_t + \beta_4 \log(\text{GOVT EXP})_t + \epsilon_i \]

**Variable Specification**

- GDP: Gross Domestic Product
- DIS PCI: Disposable income (per capita income)
- IND GRTH: Industrial growth
- GOVT EXP: Central and state government expenditure
- EXP: Export

**Multiple Regression Analysis:**

To examine impact of caused factor multiple regression analysis is used. Generalising the two and three variable linear regression models, the k-variable regression model involving the dependent variable Y and k-1 explanatory variables \(X_1, X_2, \ldots, X_k\) may be written as

\[ Y_i = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \cdots + \beta_k X_{kt} + u_i \]

\[ \beta = (X'X)^{-1}X'Y \]

Here is the vector of required least squired estimators \(\beta_0, \beta_1, \beta_2, \ldots, \beta_k\)

\[ \text{S.E. } \beta_i = \sqrt{\text{var}(\hat{\beta}_i)} = \frac{\sigma^2}{\sigma_u (X'X)^{-1}} \]
FINDING AND RESULTS:

TABLE-1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>1777277</td>
<td>1689925</td>
<td>1.051690</td>
<td>0.0001</td>
</tr>
<tr>
<td>EXPT</td>
<td>0.667872</td>
<td>0.209691</td>
<td>3.185023</td>
<td>0.0244</td>
</tr>
<tr>
<td>DIS_PCI</td>
<td>67.09718</td>
<td>13.91541</td>
<td>4.821790</td>
<td>0.0048</td>
</tr>
<tr>
<td>INDI_GRTH</td>
<td>-197.3014</td>
<td>169.0243</td>
<td>-1.167296</td>
<td>0.2957</td>
</tr>
<tr>
<td>GOVT__EXP</td>
<td>1.606839</td>
<td>0.265430</td>
<td>6.053729</td>
<td>0.0018</td>
</tr>
</tbody>
</table>

The finding show that R-squares is more than 60% means independent variables can influence 99.9% on GDP. F-test p-value is 0% and three of four independent variables are significant only one variable is not significant. The model is good fitted.

TABLE-2

<table>
<thead>
<tr>
<th>Series: Residuals</th>
<th>Sample 1 10</th>
<th>Observations 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.19e-09</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>-7253.204</td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>119829.9</td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>-55829.78</td>
<td></td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>53873.40</td>
<td></td>
</tr>
<tr>
<td>Skewness</td>
<td>1.013409</td>
<td></td>
</tr>
<tr>
<td>Kurtosis</td>
<td>3.375016</td>
<td></td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>1.770263</td>
<td></td>
</tr>
<tr>
<td>Probability</td>
<td>0.412660</td>
<td></td>
</tr>
</tbody>
</table>

Table -2 shows residuals normally distribution.

TABLE-3

Breusch-Godfrey Serial Correlation LM Test:

<table>
<thead>
<tr>
<th>Dependent Variable: RESID</th>
<th>Method: Least Squares</th>
<th>Included observations: 10</th>
</tr>
</thead>
</table>
| Presample missing value lagged residuals set to zero.
Table-3 show no Serial Correlation (auto correlation) between variables. The P value is more than 5% means we cannot reject null hypothesis. This is a good sign for test.

**TABLE-4**

Heteroskedasticity Test: Breusch-Pagan-Godfrey

<table>
<thead>
<tr>
<th></th>
<th>F-statistic</th>
<th>Prob. F(4,5)</th>
<th>0.4560</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obs*R-squared</td>
<td>4.629525</td>
<td>Prob. Chi-Square(4)</td>
<td>0.3275</td>
</tr>
<tr>
<td>Scaled explained SS</td>
<td>1.374399</td>
<td>Prob. Chi-Square(4)</td>
<td>0.8486</td>
</tr>
</tbody>
</table>

In table table -4 show observed R square statistic and corresponding P value which is high 5% so we can say no Heteroskedasticity between variables.

**TABLE-5**

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual GDP</th>
<th>Forecast A1</th>
<th>Root Mean Squared Error</th>
<th>Mean Absolute Error</th>
<th>Mean Abs. Percent Error</th>
<th>Theil Inequality Coefficient</th>
<th>Bias Proportion</th>
<th>Variance Proportion</th>
<th>Covariance Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-2010</td>
<td>6,000,000</td>
<td>6,000,000</td>
<td>51108.79</td>
<td>41680.04</td>
<td>0.434616</td>
<td>0.001993</td>
<td>0.000000</td>
<td>0.000043</td>
<td>0.999957</td>
</tr>
<tr>
<td>2010-2011</td>
<td>8,000,000</td>
<td>8,000,000</td>
<td>51108.79</td>
<td>41680.04</td>
<td>0.434616</td>
<td>0.001993</td>
<td>0.000000</td>
<td>0.000043</td>
<td>0.999957</td>
</tr>
<tr>
<td>2011-2012</td>
<td>10,000,000</td>
<td>10,000,000</td>
<td>51108.79</td>
<td>41680.04</td>
<td>0.434616</td>
<td>0.001993</td>
<td>0.000000</td>
<td>0.000043</td>
<td>0.999957</td>
</tr>
<tr>
<td>2012-2013</td>
<td>12,000,000</td>
<td>12,000,000</td>
<td>51108.79</td>
<td>41680.04</td>
<td>0.434616</td>
<td>0.001993</td>
<td>0.000000</td>
<td>0.000043</td>
<td>0.999957</td>
</tr>
<tr>
<td>2013-2014</td>
<td>14,000,000</td>
<td>14,000,000</td>
<td>51108.79</td>
<td>41680.04</td>
<td>0.434616</td>
<td>0.001993</td>
<td>0.000000</td>
<td>0.000043</td>
<td>0.999957</td>
</tr>
<tr>
<td>2014-2015</td>
<td>16,000,000</td>
<td>16,000,000</td>
<td>51108.79</td>
<td>41680.04</td>
<td>0.434616</td>
<td>0.001993</td>
<td>0.000000</td>
<td>0.000043</td>
<td>0.999957</td>
</tr>
<tr>
<td>2015-2016</td>
<td>18,000,000</td>
<td>18,000,000</td>
<td>51108.79</td>
<td>41680.04</td>
<td>0.434616</td>
<td>0.001993</td>
<td>0.000000</td>
<td>0.000043</td>
<td>0.999957</td>
</tr>
<tr>
<td>2016-2017</td>
<td>20,000,000</td>
<td>20,000,000</td>
<td>51108.79</td>
<td>41680.04</td>
<td>0.434616</td>
<td>0.001993</td>
<td>0.000000</td>
<td>0.000043</td>
<td>0.999957</td>
</tr>
</tbody>
</table>

In table -5 we can forecast the model because RMSE, Theil inequality coefficient bias proportion (and other aspects of Theil inequality coefficient) value data is around the line of best fit.
CONCLUSION:

It is still a burning question that whether this time India would be able to achieve all the targets decided for the Inclusive Growth and sustainable development or like 11th Five year Plan it would fall back. Growth is unease about the economic size of the economy, whereas development is a socio-economic phenomenon. Growth can be natural and reversible. In this paper we find that null hypothesis framed at the beginning of the study was accepted. The finding show that R-squares is more than 60% means independent variables can influence 99.9% on GDP. F-test p-value is 0% and three of four independent variables are significant only one variable is not significant. The model is good fitted and forecasted also.

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