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Human Development in India: An Economic Interpretation of Certain Vital Indicators

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Abstract—*Human development in the post-economic reforms era (1990s) has been given much emphasis in the planning process in India. There are certain studies which advocate improved levels of development while other profess deteriorating levels of development. The present study has carried out an exploratory probe into the depths of levels of development in general and human development in particular. On one hand, India has been registering a slighter rise in the levels of human development in the recent past. While on the other hand, it has been lagging far behind its neighbouring economies, for instance China, in this particular area. There is a wider scope for the Indian economy in registering improvements in various spheres of human development, viz. income, education, health and women participation et cetera. Planning bodies in India have focussed on these aspects of development but it may take a little longer to record decent levels of the same. The present study envisages studying vital indicators of human development in India. It tends to project an economic interpretation of these indicators. First, the present study endeavours to trace annual GDP growth (%) along with annual GDP per capita growth (%) in India. Second, it enquires into the gross enrolment ratio (GER) at primary and secondary school levels in India. Third, it analyzes the crude birth rate (per 1,000 people) and crude death rate (per 1,000 people) in India. Last, the present study tries to estimate the extent of percentage females in total labour force in India. These indicators have been vital in leaving us with a clear picture of levels of human development. It has also suggested certain important recommendations and policy implications to further improve the indicators of human development so as to register balanced and sustained progress.*

Keywords*: GDP, GER, Crude, Birth, Death, Female, Labour.*

1. THE CONTEXT

The process of human development in India began in 1950s in the absence of clear targets and vision. The planning process has failed to achieve high and stable levels of human development. But during the recent years, there have been a little improvement in the sphere of human development in India. Be it GDP growth rate, gross enrolment ratio at school level or crude birth and death rates, these indicators have shown an improvement over a period of time. Whereas, certain indicators like proportion of females in total labour force et cetera in India have declined.

Economic growth in India didn't show any decent increments till the economic reforms era. But with the advent of economic reforms in India, the economic growth showed some momentum. And as a consequence, India now has become the second fastest growing economy in the world after China. For instance, GDP at constant prices (Crore Rs.) in the year 1950-51 was 224786 while it rose to 1083572 in the year 1990-91 and further to 4885954 in the year 2010-11 [14]. The annual GDP growth rate at factor cost averaged 2.6 during the time period 1950-56 while it grew to 5.0 during the time period 1960-65. The annual GDP growth rate at factor cost averaged 6.0 during the years 2000-05. In the year 2005-06, the annual GDP growth rate was 9.0 [2].

As per the educational scenario at schools in India, the gross enrolment ratio (GER) at primary schools (class I-V) had been 105.98 during 2012-13 while the gross enrolment ratio (GER) at upper primary schools (class VI-VIII) had been 82.5 during the same time period. It can be clearly seen that as the levels of education at schools in India goes up from primary to upper primary level, the gross enrolment ratio (GER) has been declining [15]. The gross enrolment ratio (GER) has been high at primary school levels in India and it goes on declining at upper primary school level and secondary school levels [1].

In the context of health variables, the fertility rate in India in the beginning of the present century (from 2000-06) had been 2.9 births per women with crude birth rate of 25 per 1000 people in India. The crude death rate had been around 9 per 1000 people in India during the period 1991-2001. As per statistical estimates, the crude birth and death rates will take more time to be at par [9]. As per a study, the crude birth rate in India has fallen to 22.5 per 1000 people in 2009 from 40.8 per 1000 people in 1951 while the crude death rate in India has fallen from 25.1 per 1000 people in 1951 to 8.4 per 1000 people in 2009 [23].

The female participation in total labour force in India has been declining since early 1990s. The rural female labour force participation rate per 1000 as per usual status has fallen from 331 in 1993-94 to 253 in 2011-12. Females Engaged in NSSO Activity Codes 92 and 93 per 100 Population (age group 15-plus) has fallen from 65 in 1993-94 to 64 in 2011-12 in urban areas [22].

2. PRIME OBJECTIVES

- To trace annual GDP growth and GDP per capita growth in India.
- To enquire into gross enrolment ratios (GER) of both sexes at primary and secondary school levels in India.
- To analyze crude birth rate and death rate in India.
- To estimate the extent of percentage females in total labour force in India.

3. HYPOTHESES

HO 1: There has been a decrease in annual GDP growth and GDP per capita growth in India.

HI 1: There has been an increase in annual GDP growth and GDP per capita growth in India.

HO 2: A rise in gross enrolment ratios (GER) of both sexes at primary and secondary school levels has been recorded in India.

HI 2: A Fall in gross enrolment ratios (GER) of both sexes at primary and secondary school levels has been recorded in India.

HO 3: Crude birth rate and death rate in India have been declining.

HI 3: Crude birth rate and death rate in India have been rising.

HO 4: Proportion of females in total labour force of India has gone up.

HI 4: Proportion of females in total labour force of India has come down.

Note: HO- Null Hypothesis and **HI**- Alternative Hypothesis.

4. ECONOMIC INTERPRETATION

The present study has endeavoured to carry out an economic interpretation of a variety of vital indicators of human development in India. These indicators have shown varied trends in the recent past which can be observed in the present study. The analysis has been pursued in the following manner:

4.1. Annual GDP and GDP per Capita Growth (%)

Annual GDP growth (%) has been defined as sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products [26]. In table 1, it can be observed that annual GDP growth (%) in India had been 9.28 in the year 2005. It had declined to 9.26 in 2006. In the years 2007, 2008 and 2009, these statistics had been 9.80, 3.89 and 8.47 respectively. Annual GDP growth (%) had been 10.25, 6.63 and 5.08 respectively in the years 2010, 2011 and 2012. In the years 2013 and 2014, these statistics had been 6.89 and 7.28 respectively.

Annual GDP per capita growth (%) has been defined as gross domestic product divided by midyear population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products [26]. Table 1 has depicted the data regarding annual GDP per capita growth (%) in India. In 2005, it had been 7.57 while in 2006, it had been 7.59. In the years 2007, 2008 and 2009, these statistics had been 8.16, 2.38 and 6.95 respectively.

Table 1: Annual GDP and GDP per Capita Growth (%)

Years	Annual GDP Growth	Annual GDP per Capita Growth
2005	9.28	7.57
2006	9.26	7.59
2007	9.80	8.16
2008	3.89	2.38
2009	8.47	6.95
2010	10.25	8.75
2011	6.63	5.23
2012	5.08	3.73
2013	6.89	5.57
2014	7.28	5.97
Source: World Development Indicators, 2005-14		

4.2. Primary and Secondary Gross Enrolment Ratios (GER) of both Sexes (%)

Primary gross enrolment ratio (GER) of both sexes has been defined as total enrolment in primary education, regardless of age, expressed as a percentage of the population of official primary education age [26]. Table 2 illustrates figures regarding primary GER of both sexes in India. In the year 2003, it had been 105.39. For the years 2004, 2005and 2006, data wasn't available. In the years 2007 and 2008, these figures had been 114.30 and 115.19 respectively. In the years 2009, 2010 and 2011, primary GER of both sexes had been 113.91, 113.46 and 112.59 respectively. In the year 2012, it had been 114.05.

Secondary gross enrolment ratio (GER) of both sexes has been defined as total enrolment in secondary education, regardless of age, expressed as a percentage of the population of official secondary education age [26]. Table 2 illustrates figures regarding secondary GER of both sexes in India. In the years 2003 and 2004, these figures had been 50.74 and 52.49 respectively. In the years 2005 and 2006, these figures had been 55.13 and 56.10 respectively. In the 2007, 2008 and 2009, secondary GER of both sexes had been 58.65, 61.93 and 61.29 respectively. These figures had been 65.07, 68.50 and 71.47 respectively in the years 2010, 2011 and 2012.

Table 2: Primary and Secondary Gross Enrolment Ratios (GER) of both Sexes (%)

Year	Primary GER	Secondary GER
2003	105.39	50.74
2004	N.A.	52.49

2005	N.A.	55.13
2006	N.A.	56.10
2007	114.30	58.65
2008	115.19	61.93
2009	113.91	61.29
2010	113.46	65.07
2011	112.59	68.50
2012	114.05	71.47
Note: N.A.- Not Available		
Source: World Development Indicators, 2005-12		

4.3. Crude Birth and Death Rate (per 1,000 people)

Crude birth rate (per 1,000 people) can be defined as the number of live births occurring during the year, per 1,000 population estimated at midyear. Subtracting the crude death rate from the crude birth rate provides the rate of natural increase, which is equal to the rate of population change in the absence of migration [26]. Table 3 depicts the data related to crude birth rate (per 1,000 people) in India. In the year 2004 and 2005, these statistics had been 24.62 and 24.14 respectively. In the years 2006, 2007and 2008, crude birth rate (per 1,000 people) had been 23.65, 23.14 and 22.62 respectively. These statistics had been 22.10, 21.59 and 21.11 respectively in the years 2009, 2010 and 2011. In the years 2012 and 2013, these statistics had been 20.67 and 20.29 respectively.

Crude death rate (per 1,000 people) can be defined as the number of deaths occurring during the year, per 1,000 population estimated at midyear. Subtracting the crude death rate from the crude birth rate provides the rate of natural increase, which is equal to the rate of population change in the absence of migration [26]. Table 3 depicts the data related to crude death rate (per 1,000 people) in India. In the years 2004 and 2005, these statistics had been 8.21 and 8.10 respectively. In the years 2006, 2007 and 2008, crude death rate (per 1,000 people) had been 8.01, 7.90 and 7.80 respectively. These statistics had been 7.70, 7.60 and 7.52 respectively in the years 2009, 2010 and 2011. In the years 2012 and 2013, these statistics had been 7.44 and 7.38 respectively.

Note: Subtracting the crude death rate from the crude birth rate provides the rate of natural increase, which is equal to the rate of population change in the absence of migration [26].

Table 3: Crude Birth and Death Rate (per 1,000 people)

Year	Crude Birth Rate	Crude Death Rate
2004	24.62	8.21
2005	24.14	8.10
2006	23.65	8.01
2007	23.14	7.90
2008	22.62	7.80
2009	22.10	7.70
2010	21.59	7.60
2011	21.11	7.52
2012	20.67	7.44
2013	20.29	7.38
Source: World Development Indicators, 2004-13		

4.4. Females in Total Labour force (%)

Females in total labour force (%) have been defined as a percentage of the total labour force as the extent to which women are active in the labour force. Labour force comprises people ages 15 and older who meet the International Labour Organization's definition of the economically active population [26]. Table 4 explains the percentage of females in total labour force from the year 2005 to the year 2014 in India. In the years 2005 and 2006, these figures had been 29.45 and 28.53 respectively. In the years 2007, 2008 and 2009, these figures had been 27.66, 26.83 and 25.93 respectively. Females in total labour force (%) in the years 2010, 2011 and 2012 had been 25.04, 24.61 and 24.22 respectively. In the years 2013 and 2014, these figures had been 24.17 and 24.17 respectively.

Table 4: Females in Total Labour force (%)

Year	Females in Total Labour Force (%)
2005	29.45
2006	28.53
2007	27.66
2008	26.83
2009	25.93
2010	25.04
2011	24.61
2012	24.22
2013	24.17
2014	24.17
Source: World Development Indicators, 2005-14	

5. FINDINGS

First, it can be seen that annual GDP growth (%) in India had been declining from the year 2005 to the year 2014. It had declined from 9.28 in 2005 to 3.89 in 2008. There from, it had risen to 7.28 in the year 2014. Overall, it can be interpreted that annual GDP growth (%) had been falling down in recent years. Similarly, annual GDP per capita growth (%) had also been declining during the same time period. It had been 7.57 in the year 2005. It had declined to 2.38 in 2008. There from, it had risen to 5.97 in the year 2014. Overall, it can be interpreted that annual GDP per capita growth (%) had been falling down in the recent years.

Second, primary and secondary gross enrolment ratio (GER) of both sexes in India had been studied for the time period 2003-12. Primary GER of both sexes had been rising from 105.39 in 2003 to 113.91 in 2009. Further, it had risen to 114.05 in the year 2012 in India. Similarly, secondary GER of both sexes had been rising from 50.74 in 2003 to 61.29 in 2009. Further, it had risen to 71.47 in the year 2012 in India.

Third, crude birth rate (per 1,000 people) in India has been analyzed from the year 2004 to the year 2013. In the year 2004, it had 24.62 and it had come down to 22.10 in the year 2009. Further, it had fallen to 20.29 in the year 2013 in India. Similarly, crude death rate (per 1,000 people) in India has been analyzed from the year 2004 to the year 2013. It had

fallen from 8.21 in the year 2004 to 7.70 in the year 2013. Further, it had fallen to 7.38 in the year 2013 in India.

Last, data related to females in total labour force (%) has been interpreted. It had fallen from 29.45 in the year 2005 to 25.04 in the year 2010. There from, it had fallen to 24.17 in the year 2014.

6. CONCLUSION AND POLICY IMPLICATIONS

The present paper has carried out an exploratory study with respect to certain vital indicators of human development in India. It has observed that annual GDP growth (%) in India has been declining. Similarly, annual GDP per capita growth (%) in India has been declining in the recent years. It can be concluded that with the process of development and growth proceeding in an economy, these growth rates need to be lowered down to witness a stable growth in the economy. As per this argument, the declining annual GDP growth (%) and annual GDP per capita growth (%) in India have been healthy indicators which may guarantee a decent and sustained level of human development in India. India has been witnessing a rise in gross enrolment ratio (GER) at primary and secondary school levels in the recent years. Rising GER is a vital factor helping in bringing around decent and high levels of human developments in India. Higher GER ensures high literacy rates. The present study has also concluded that crude birth rates (per 1,000 people) and crude death rates (per 1,000 people) in India have been declining in the recent past. This situation also assures improved levels of human development in India. Declining crude birth rate in India leads to population control and declining crude death rate in India reflects improved health and medical facilities. Percentage of females in total labour force in India has declined in the recent years. It poorly reflects the poor levels of human development with respect to women in India. As a consequence of this, female unemployment levels in India have gone up in the recent years. As a result of this, development with respect to women in India has further deteriorated.

To conclude, it can be stated that all the null hypotheses (H0) have been accepted whereas all the alternative hypotheses (HI) have been rejected. Overall, it can be interpreted that India has witnessed certain decent levels of human levels but still a lot has to be achieved in this sphere with more emphasis on women development and upliftment. Women in India have been the mainstream sufferers. Similarly, various other indicators of human development have been required to register a lot of improvements for achieving, securing and sustaining decent levels of development and growth in India.

The present study has endeavoured to put forward certain vital recommendations and policy implications. First, planning and public policy focussing on a more strong and stable annual growth rates of GDP and GDP per capita in India must take place. Balanced macroeconomic variables along with the strengthened financial sector within the domestic boundaries need to be established. Second, programmes and awareness campaigns for increasing the gross enrolment ratio at schools in India must be incorporated in the national planning process. Budgetary outlays must be raised on building better educational infrastructure in the country so as to register high literacy rates in India. Third, budgetary outlays on health and medical sector must be raised by a great margin to provide better health provisions to the general masses. Health infrastructure must be build to cover large portions of the population in India. Last, opportunities for women in service sector must be generated to absorb a large number of women. Women education and training must be incorporated in the national planning to disseminate skills so as to make them self-sufficient in earning livelihoods by setting up their own works and businesses. Gender equality has a greater role to play to make women in India more independent so that their proportion in total work force is raised. It would lead to improved and higher levels of human development in India.

BIBLIOGRAPHY

[1] Bagchi, A.K. (2010, Septmeber-December). Towards Democratization of Education in India. *Social Scientist*, 38(9/12), 5-16.

[2] Basu, K. & Maertens, A. (2007, April). *The Pattern and Causes of Economic Growth in India*. Working Paper No. 149, BREAD.

[3] Bhalla, S.S. & Kaur, R. *Labour Force Participation of Women in India: Some facts, Some Queries.* Working Paper No. 40, Asia Research Centre.

[4] Bhaskar, V. & Gupta, B. (2007, Summer). India's Development in the Era of Growth. *Oxford Review of Economic Policy*, 23(2), 135-142.

[5] Bose, A. (2008, August). Increasing Life Expectancy and the Elderly. *Economic and Political Weekly*, 43(32), 41-42.

[6] Chakraborty, A. (2009, June-July). Some Normatively Relevant Aspects of Inter-State and Intra-State Disparities. *Economic and Political Weekly*, 44(26/27), 179-184.

[7] Choudhary, R.& Verick, S. (2014, October). *Female Labour Force Participation in India and Beyond.* ILO Asia-Pacific Working Paper Series.

[8] Coale, A.J. (1983, March). Population trends in China and India (A Review). *Proc. Nati Acad. Sci. USA*, 80, 1757-1763

[9] Dyson, T. (.2008, 28 March). *India's Demographic Transition and its Consequences for Development.* Golden Jubilee Lecture Series of the Institute of Economic Growth, Delivered at IEG.

[10] Ghosh, M. (2006, July-August). Economic Growth and Human Development in Indian States. *Economic and Political Weekly*, 41(30), 3321-3327+3329.

[11] Human Development Report (2015). *Work for Human Development*, United Nations Development Programme.

[12] Kapsos, S., Silberman, A. & Bourmpoula, E. (2014, August). *Why is female labour force participation declining so sharply in India?*. ILO Research Paper No. 10.

[13] Kingdon, G.G.(2007). The progress of school education in India. *Oxford Review of Economic Policy*, 23(2), 168-195.

[14] Kiran, R., Subashini, K. & Nagamani, M.K. (2014, April). Impact of Economic Growth on Employment in India. *International Journal of Innovative Research in Science, Engineering and Technology*, 3(4), 11064-11069.

[15] Kumuda, D. (2014, July-August). Educational Scenario of Children in India- An Analytical Study. *IOSR Journal of Economics and Finance (IOSR-JEF)***,** 5(1), 37-40.

[16] Lahoti, R. & Swminathan, H. (2013, June). *Economic Growth and Female Labour Force Participation in India***.** Working Paper No. 414, Indian Institute of Management Bangalore, Bangalore, India.

[17] Lakshmi, T.S. & Sahoo, D. (2013, January-February). Health Infrastructure and Health Indicators: The Case of Andhra Pradesh, India. *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)*, 6(6), 22-29.

[18] Lieten, G.K. (2002, April). Human Development in Kerala: Structure and Agency in History. *Economic and Political Weekly*, 37(16), 1539-1544.

[19] Madhavan, M.C. (2015, 6 January). *Can India Catch Up with China?*. The Hindu.

[20] Ministry of Health and Family Welfare, Government of India, Website: www.mohfw.nic.in.

[21] Papola, T.S.(2013, January). *Economic Growth and Employment Linkages: The Indian Experience*. Working Paper No. 2013/01, ISID, New Delhi.

[22] Sanghi, S., Srija, A. & Vijay, S.S. (2015). Decline in Rural Female Labour Force Participation in India: A Relook into the Causes. *VIKALPA The Journal for Decision Makers*, 40(3), 255–268.

[23] Sankaraiah, T. & Chandrasekarayya, T. (2013, April). Trends in Demographic Aspects of India. *GRA – Global Research Analysis*, 2(4),236-239.

[24] Sen, A. (2012, January). *Human Development in the Post-2015 Era*. A Lecture by Amartya Sen at Stein Auditorium, India Habitat Centre, New Delhi.

[25] Virmani, A. (2005, January). *India's Economic Growth History: Fluctuations, Trends, Break Points and Phases*. Occasional Paper, ICRIER.

[26] World Development Indicators (2003-2014). The World Bank.

[27] United Nations Development Programme, China and India .Zhu, Z. (2011, June-December). China-India Relations in the 21st Century: A Critical Inquiry. *Indian Journal of Asian Affairs*, 24(1/2), 1-16.

[28] Zhu, Z. (2011, June-December). China-India Relations in the 21st Century: A Critical Inquiry. *Indian Journal of Asian Affairs*, 24(1/2), 1-16.