# Enrolment in Elementary Education with Reference to Right to Education Act 2009: An Empirical Analysis of Selected States of India during 2004-05 to 2015-16

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**Abstract:** The present study analyzes elementary education in terms of enrolment with reference to Right to Education Act 2009 with secondary data obtained from the annual report of National University of Educational Planning and Administration (NUEPA).The time period consider for this study is span of 12 years from 2004-05 to 2015-16 and divided into 2 sub-periods with reference to Right to Education Act 2009 i.e., Before RTE Act (2004-05 to 2009-10) and After RTE Act (2010-11 to 2015-16) for the purpose of our study. The study considers all states and union territories of India as population and 17 states are selected as sample states. Annual Average Growth Rates, Mean and Standard Deviation are calculated for fruitful results. Three statistical tests are employed to test the statistical significance of variations in enrolment across the selected states. The result reveals that the average growth of enrolment is better in pre RTE Act period than post RTE Act period. The estimated average growth and distribution of enrolment during pre RTE Act differ significantly from that of post RTE Act and showing better trend during pre RTE Act. The implementation of RTE Act not contributed in declaiming enrolment in government and private schools. The average growths of girl's enrolment during pre RTE Act is positive and more during post RTE Act. The estimated average growth and distribution of girl's enrolment during pre RTE Act differ significantly from that of post RTE Act. The implementation of RTE Act has positive impact in growth of girl's enrolment.

**Key words:** Enrolment, Elementary Education, Right to Education Act

## I. INTRODUCTION

Education is the root cause for any change which takes place in the social, cultural, spiritual, political and economic aspects of human life. It is education which not only transforms the human animal into a rational human being but also prepares him to survive and adjust with surroundings so as to lead his personal as well social(Samuel, 2011). Education is constant a process of development if innate power of man which are natural, harmonious and progressive. It is said that in the 21st century, a nation ability to convert knowledge in to the wealth and social good through the process of innovation is going to determine its future (Malik, 2012).

The UN declared Convention on Rights of Children that recognise education for all children of the world as the fundamental rights of a child in 1989 but India recognised it in 2002 (Garje, 2011). The Right to Education comprises two main dimensions: 'entitlement' and 'empowerment' (Singh, 2004). The right to education thus acts as an enabling right that functions as the voice through which rights can be claimed and protected. It is therefore an important stepping stone to improve the social situation of the people. Globally, right to education derives its legal basis from Article 26(1) of the Universal Declaration of Human Rights (UDHR), which states that "Everyone has the right to education". Education shall be free, at least in the elementary and fundamental stages. An increasing emphasis has been placed in recent years on right based approach to development the paradigm-shift on the importance of Right to Education is instrumental in the realisation of the other complementary rights as well (EFA, 2005).

The importance of education for the upliftment of the individual is universally acknowledged. It is a recognized fundamental human right. Education is an important tool for empowerment envisaged under the Constitution of India (Anil, 2009). The Government of India made an amendment (86th Constitutional

Amendment Act 2002) in article 45 of the Constitution and provided education as fundamental right of all children (Garje, 2011). Consequently the constitution was amended in 2002, but the Act, required implementing article 21A inserted by the 86th amendment Act was passed only seven years later in 2009 (RTE Forum, 2009).With the enforcement of RTE Act 2009, education has now become a fundamental right of every child in this country. However, it is to be noted that for India as a whole, 19 per cent of the children in the age group 6–17 years are still out of school (Planning Commission, 2011).

The purpose of the RTE Act 2009 was to give a boost to the universalization of primary education by increasing enrolment and retention in the primary education. While most of the educational statistics are based on enrolment, because of enrolment is the key indicator of education status at primary level. Enrolment is the number of students registered on the rolls of an educational institution on a specific point of time. In the Indian context, the enrolment refers to the number of children enrolled as on 30th September of the academic session. Gross enrolment is the total enrolment of pupils in a grade or cycle or level of education, regardless of age, in a given school year. Net enrolment is the number of pupils in the official school age-group in a grade or cycle or level of education in a given school year (Aggarwal & Thakur, 2003).

The Right to Education (RTE) Act came into effect in 2010. The Act received huge acclaim, and experts said it would change the education system in India. The mandates of RTE Act apply not only to publicly funded government schools, but also to all schools wishing to remain operational in India. After crossing six years of its implementation, it remains to be seen whether the Act has been implemented well enough to make a significant impact in the lives of children and whether it will truly serve to improve the quality of education. In this context it would be appropriate to conduct a study on implementation of Right to Education Act with special reference to enrolment of elementary education.

## II.  REVIEW OF LITERATURE

**Das (2010)** pointed in his book Right to Education that is not only necessary for the governments to bring universal access but also assure that even the marginalized children are reached. That means not only bringing the children to school but enabling the means for them to achieve their economic and social aims and get the skills, knowledge values and attitudes necessary to accomplish their actual participation in society. **Jha & Parvati (2010)** said that after the many rounds of drafting and redrafting that went into the Right of Children to Free and Compulsory Education Act of 2009, it was hoped that the Act would be an effective instrument for any child to demand her basic entitlement. Yet, a close look at the provisions reveals disconcerting features.

**Kaushal (2012)** attempt aimed to achieve and facilitate the realization of free and compulsory education to children between the age of 6 and 14 years as a fundamental right. The article analyzed and evaluates the initiative of Right to Education in India, with the compliance of the 86th Constitutional Amendment Act. The article finds that although this attempt has shown benefits, there are serious barriers and roadblocks in way desired objectives of 86th Constitutional Amendment Act. These issues need to be addressed on an urgent basis to strengthen the scene of education at the grassroots level. According to **Puar (2012)** every citizen of the country right from a child, teacher or parent up to Member of Parliament or minister level should honestly admit their responsibility and perform their duty. They should compel the government in implementing the Act in true sense without any further delay and poor people should be encouraged towards Education. By doing so, the RTE Act will prove to be a milestone for long term vision required for development of strong Education base of the future generation of our beloved country.

**Bhatnagar & Gill (2014)** compared different countries in Implementing Right to Education. The RTE Act also aims at reaching to the unreached and disadvantaged groups with providing specific provision of Free and Compulsory Education for every child who is above six years of age and has not yet been admitted to any school or though admitted, could not complete his or her education, then, he or she shall be admitted in a class appropriate to his or her age. To accomplish this task there is a provision in RTE Act for Special Training for such children in order to be at par with others. With all its aims, vision mission we can say that Right to education act is the act for future.

**Ojha (2013)** examined Implementing Right to Education. Two years have passed since implementation of the RTE Act in Haryana but so far there has been some progress only in terms of enrolment /basic infrastructure but towards guaranteeing quality education in terms of student learning the state has not achieved much. Same is the case with regard to its awareness and understanding among its various stakeholders. **Malakar & Mahato (2015)** examined that impact of RTE on girl's enrolment in Tripura State. It is near about 21%, which is quite larger in the entire country. As per census 2011, the overall literacy rate of the state is 87.8%. The state has 4800 schools and 90% among them are Government schools. During 2013-14, total enrolment in school was 590230.In this scenario, the good sign is that, girl's enrolment rate is 49.**Singh (2016)** studied Status of implementation of the Right to Education Act, 2009 in Himachal Pradesh.  According to him, four years have already been passed since implementation of the RTE Act in Himachal Pradesh but still the state have to do more in the terms of enrolment, basic infrastructure, student learning, awareness and understanding

among its stakeholders. By providing some recommendations the study calls for some necessary actions by the government to improve the implementation status of the RTE Act in Himachal Pradesh.

**KPMG & CII (2016)** found that the RTE Act has been able to bring an improvement in the enrolment in primary section. The Net Enrolment Rate (NER) in primary education increased from 84.5 per cent in FY2005-06 to 88.08per cent in FY2013-14. An improvement has been recorded in the enrolment number of girls in the upper primary section. The percentage of girls' total enrolment in upper primary has increased from 48 per cent in FY2009-10 to 49 per cent in FY2013-14.

## III. DATA AND METHODOLOGY

The present study is descriptive- cum- analytical in nature. It analyzes elementary education in terms of enrolment with special reference to Right to Education Act 2009 (RTE Act 2009) with secondary data. Data obtained from the annual report of National University of Educational Planning and Administration (NUEPA) on Elementary Education in India. The URL of the database is http://udise.in/src.htm. The time period we consider for this study is span of 12 years from 2004-05 to 2015-16. The time period divided into 2 sub-periods with reference to Right to Education Act 2009 i.e., Before RTE Act (2004-05 to 2009-10) and After RTE Act (2010-11 to 2015-16) for the purpose of our study. All states and union territories of India considered as population and 17 states are selected as sample states for the study. Sample states are selected based on zonal council of India. From each zone one high literacy state, one moderate literacy state and one low literacy state were selected. Together all 17 states were selected form 7 zones of India.

The study used Annual Average Growth Rates, Mean and Standard Deviation (SD) for selected variables. It is the most common and widely used measure of central tendency or an average (Kothari, 2004). Standard Deviation of a set of scores is defined as the square root of the average of the squares of the deviation of each from the mean (Singh, 2006). The objective of the F- test and Z-test is to find out whether the estimates of variance for selected parameters differ significantly across the selected states (Gupta, 2007). The Kruskal-Wallis test is a nonparametric (distribution free) test, and is used when the assumptions of ANOVA are not met. They both assess for significant differences on a continuous dependent variable by a grouping independent variable (Kanji, 2006). These three tests are employed in the study to test the statistical significance of variations across the selected states.

## IV. RESULTS AND DISCUSSION

**Enrolment in Government Primary Schools**

As per growth of enrolment in primary schools under government management of the 17 States in before the RTE Act, Arunachal Pradesh, Delhi, Madhya Pradesh and Mizoram are observed positive trend. Remaining 12 States have been shown negative trend in Average Annual Growth and ranged between -0.27 per cent in Maharashtra and -8.33 per cent in Tamil Nadu. In Andhra Pradesh, Uttar Pradesh, Sikkim, Uttarakhand, Kerala, Punjab, Goa and Maharashtra negative growth of enrolment in Government Primary Schools was observed less than 3.0 per cent and in Tamil Nadu, Rajasthan, Manipur, Gujarat and Odisha the negative growth was recorded more than 5.0 per cent. During after RTE Act, the enrolment in primary schools under government management has been decreased in all the States excluding Tamil Nadu. In Kerala, Uttarakhand, Mizoram and Odisha the negative growth of enrolment in Government Primary Schools was observed more than 5.0 per cent and in Manipur, Uttar Pradesh, Punjab, Delhi and Gujarat the negative growth was recorded less than 4.0 per cent. The similar kind of pattern has been observed during before and after RTE Act Periods. In majority States, the enrolment in primary education is sowing declining trend during before and after the RTE Act (Table-1).

**Enrolment in Government Upper Primary Schools**

The growth rates of enrolment in upper primary schools under government management of all the 17 States in before the RTE Act period noticed mixed trend that was increasing in 9 States and declining in 8 States. As observed during this period, the remarkable growth enrolment in upper primary schools under government management in the State of Goa was recorded 20.97 per cent. In addition, Arunachal Pradesh, Mizoram, Delhi, Odisha and Rajasthan were recorded more 5.0 per cent and in Maharashtra, Gujarat and Tamil Nadu the growth was recorded less than 2.0 percent. In Uttar Pradesh, Kerala and Sikkim the negative growth of enrolment in upper primary schools was observed less than 2.0 per cent. During the after RTE Act, in all the States the enrolment in upper primary schools has been decreased excluding Tamil Nadu and Punjab. As observed during this period, the remarkable growth enrolment in upper primary schools under government management in the State of Punjab was recorded 60.58 per cent. In Kerala, Rajasthan, Mizoram, and Goa the negative growth of enrolment in was observed more than 5.0 per cent and in Maharashtra, Sikkim, Arunachal Pradesh, Odisha, Manipur and Gujarat was recorded less than 4.0 per cent. The trend during before RTE Act clearly indicate that the enrolment in upper primary schools under government management noticed mixed and

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after RTE Act period clearly shown that the Primary with Upper Primary Schools declining trend in selected States(Table-1).

**Enrolment in Private Primary Schools**

During the before RTE Act, in all the States enrolment in primary schools under private management has been increased excluding Kerala. As observed during this period, the remarkable growth in primary schools under private management in the State of Manipur was recorded 70.34 per cent. In addition Arunachal Pradesh and Goa were recorded more than 20.0 per cent and in Delhi, Madhya Pradesh, Gujarat and Uttar Pradesh positive growth was recorded more than 10.0 per cent. In Mizoram, Sikkim and Uttarakhand enrolment in primary schools under private management was improved more than 8.0 per cent and in Maharashtra, Andhra Pradesh, Odisha, Tamil Nadu, Rajasthan and Punjab the growth was recorded less than 5.0 per cent. During after the RTE Act noticed mixed trend that trend was increasing trend in 11 States and declining in 6 States. As observed during this period. Remarkable growth of enrolment in primary schools under private management in the State of Mizoram was recorded 16.27 per cent. In addition Goa, Punjab, Gujarat, Tamil Nadu and Uttar Pradesh were recorded more 5.0 per cent and in Delhi, Arunachal Pradesh, Sikkim, Maharashtra and Odisha growth of enrolment was recorded less than 4.0 percent. The negative growth has been recorded highest in Madhya Pradesh then by Andhra Pradesh, Manipur, Rajasthan, Kerala and lowest in Uttarakhand. The results from average annual growth rate of during before RTE Act clearly indicates that the enrolment in primary schools under private management increasing trend and after RTE Act period clearly shown that the Primary Schools declining trend in selected States (Table-1).

**Enrolment in Private Upper Primary Schools**

During the before RTE Act, in all the States enrolment in upper primary schools under private management has been increased excluding Tamil Nadu. As observed during this period, the notable growth of enrolment in upper primary Schools under in the State of Arunachal Pradesh was recorded 39.38 per cent. In addition Sikkim, Madhya Pradesh, Goa and Uttar Pradesh have been documented more than 20.0 per cent and in Gujarat, Rajasthan and Uttarakhand enrolment has increased more than 15.0 per cent. In Mizoram, Odisha, Maharashtra and Manipur the growth of enrolment in upper primary schools under was observed more than 10.0 per cent and in Punjab, Delhi, Andhra Pradesh and Kerala growth was recorded less than 8.0 per cent. The growth rates of enrolment in upper primary schools of all the 17 States in after the RTE Act period noticed mixed trend, it was increasing in 12 States and declining in 5 States. Three States with the most improvement in growth rates over the after the RTE Act period are Odisha, Punjab and Uttarakhand. Sikkim, Delhi, Mizoram and Tamil Nadu have been increased in enrolment more 10.0 per cent. In Maharashtra, Uttar Pradesh, Arunachal Pradesh, Goa and Gujarat the positive growth of enrollment recorded more than 4.0 per cent. The negative growth has been recorded highest in Andhra Pradesh then by Madhya Pradesh, Manipur, Rajasthan and lowest in Kerala. The results before RTE Act clearly indicate that the enrolment in Primary with upper Primary Schools under Private management increasing trend and after RTE Act period clearly shown that the Primary Schools declining trend in selected States (Table-1).

The average decline rate of enrolment for 17 states in government primary schools and upper primary schools during the pre RTE Act (-1.68 and -0.02) is lower than post RTE Act (-4.88 and -4.99). In the case of private primary schools and upper primary schools, the average growth of enrolment during pre RTE Act (13.88 and 14.08) is higher than post RTE Act. As per standard deviation the growth of enrolment in government schools is stable in pre RTE Act period when compared to post RTE Act period contrary the growth of enrolment in government schools is steady in during post RTE Act than pre RTE Act. The below table indicate that the average growth of enrolment is better in pre RTE Act period than post RTE Act period. The implementation of RTE Act not contributed in declaiming enrolment in government and private schools. Further, the study found that there are mean differences in average growth of enrolment between pre and post RTE Act periods (Table -2).

Analysis of variance was conducted to examine the statistical significance of above mentioned differences during before and after RTE Act regarding growth of enrolment with parametric and non-parametric tests. Panel - A of Table presents the results of a series of t-test and the null hypothesis of no difference in estimated average growth of enrolment between before and after RTE Act. The null hypothesis is rejected in all cases except government upper primary schools. Hence, the study concludes that there exists significant variation in average growth of enrolment during pre and post reform periods. Panel B of the Table provides the results of the F-test which is also reveals the above conclusion. The average growth of enrolment during pre RTE Act differs significantly from that of post RTE Act. Panel-C of table provides the results of Kruskal-Wallis Test and discloses that the distribution of growth of enrolment between pre RTE Act and post RTE Act is significantly defers. In case of government upper primary schools, distribution of growth is similar during pre and post RTE Act. We note that the null hypothesis is rejected in most of the instances, indicating that the

estimated average growth and distribution of enrolment during pre RTE Act differ significantly from that of post RTE Act (Table -3).

| Variable→ Sample States↓ | Enrolment in Government Primary Schools | | Enrolment in Government Upper Primary Schools | | Enrolment in Private Primary Schools | | Enrolment in Private Upper Primary Schools | |
|---|---|---|---|---|---|---|---|---|
| | **Before** | **After** | **Before** | **After** | **Before** | **After** | **Before** | **After** |
| Madhya Pradesh | 3.43 | -8.20 | -11.38 | -30.58 | 17.05 | -21.15 | 22.53 | -5.63 |
| Uttar Pradesh | -2.76 | -3.65 | -2.09 | -23.44 | 13.55 | 5.22 | 20.58 | 7.23 |
| Uttarakhand | -2.41 | -5.62 | -16.74 | -20.53 | 8.67 | -1.85 | 15.32 | 15.67 |
| Odisha | -4.71 | -5.19 | 6.15 | -1.54 | 4.39 | 0.91 | 11.88 | 20.25 |
| Sikkim | -2.74 | -15.51 | -0.30 | -3.08 | 9.03 | 2.81 | 23.05 | 12.81 |
| Arunachal Pradesh | 9.09 | -7.14 | 9.78 | -1.57 | 32.10 | 3.23 | 39.38 | 6.46 |
| Manipur | -6.59 | -3.68 | -13.35 | -1.46 | 70.34 | -8.61 | 9.91 | -3.10 |
| Mizoram | 1.21 | -5.62 | 8.67 | -5.21 | 9.22 | 16.27 | 13.50 | 11.70 |
| Delhi | 5.40 | -1.56 | 8.08 | -25.17 | 18.88 | 4.03 | 7.00 | 12.05 |
| Punjab | -1.45 | -2.98 | -6.51 | 60.58 | 1.36 | 7.42 | 8.46 | 19.69 |
| Rajasthan | -7.65 | -8.52 | 5.42 | -5.65 | 3.82 | -4.29 | 16.31 | -1.64 |
| Andhra Pradesh | -2.80 | -12.71 | -10.87 | -11.44 | 4.88 | -11.06 | 3.24 | -9.47 |
| Kerala | -2.12 | -5.86 | -0.89 | -8.22 | -2.47 | -2.78 | 0.04 | -0.73 |
| Tamil Nadu | -8.33 | 14.63 | 0.47 | 2.02 | 4.33 | 5.68 | -1.81 | 11.58 |
| Goa | -0.50 | -7.39 | 20.97 | -4.72 | 22.20 | 8.42 | 20.59 | 5.83 |
| Gujarat | -5.33 | -0.66 | 0.94 | -0.62 | 13.77 | 6.08 | 19.43 | 4.04 |
| Maharashtra | -0.27 | -3.34 | 1.24 | -4.28 | 4.92 | 1.54 | 10.00 | 7.56 |

**Table – 1:** Average Annual Growth Rate of Enrolment during Before RTE Act (2004-05 to 2009-10) and After RTE Act (2010-11 to 2015-16)

Source: State Report Cards on Elementary Education in India various issues from 2004-05 to 2015-16, National University of Educational Planning and Administration, New Delhi.

| Variable | Before RTE Act | | | | After RTE Act | | |
|---|---|---|---|---|---|---|---|
| | N | Mean | SD | | N | Mean | SD |
| Enrolment in Government Primary Schools | 17 | -1.68 | 4.57 | | 17 | -4.88 | 6.28 |
| Enrolment in Government Upper Primary Schools | 17 | -0.02 | 9.68 | | 17 | -4.99 | 19.53 |
| Enrolment in Private Primary Schools | 17 | 13.88 | 16.89 | | 17 | 0.70 | 8.62 |
| Enrolment in Private Upper Primary Schools | 17 | 14.08 | 10.00 | | 17 | 6.72 | 8.63 |

Table –2: Enrolment - Descriptive Statistics

| Table -3: Hypothesis Testing | | | | |
|---|---|---|---|---|
| Variable | Enrolment in Government Primary Schools | Enrolment in Government Upper Primary Schools | Enrolment in Private Primary Schools | Enrolment in Private Upper Primary Schools |
| Panel A: t-test $H_0$: *Mean growth of Enrolment between Pre and Post RTE is not different* | | | | |
| t-statistics | 1.701* | 0.940 | 2.867*** | 2.298** |
| p-value | 0.099 | 0.354 | 0.007 | 0.028 |
| Inference | Rejected $H_0$ | Accepted $H_0$ | Rejected $H_0$ | Rejected $H_0$ |
| Panel B: ANOVA $H_0$: *Mean growth of Enrolment between Pre and Post RTE is not different* | | | | |
| F-statistics | 2.893* | 0.884 | 8.219*** | 5.279** |
| p-value | 0.099 | 0.354 | 0.007 | 0.028 |
| Inference | Rejected $H_0$ | Accepted $H_0$ | Rejected $H_0$ | Rejected $H_0$ |
| Panel C: Kruskal-Wallis Test $H_0$: *The distribution growth of Enrolment between Pre and Post RTE is not different* | | | | |
| Test statistic | 5.568** | 4.342** | 8.877*** | 4.487** |
| p-value | 0.018 | 0.037 | 0.003 | 0.034 |
| Inference | Rejected $H_0$ | Rejected $H_0$ | Rejected $H_0$ | Rejected $H_0$ |
| Note:*Significant at 10 per cent level, ** Significant at 5 per cent level & *** Significant at 1 per cent level. | | | | |

## Girl's Enrolment in Primary Schools

The growth rates of girl's enrolment in primary schools of all the 17 States in before the RTE Act period have recorded mixed trend that was increasing in 11 States and declaiming in 6 States. As observed during this period, the growth in girl's enrolment was highest in Arunachal Pradesh then by Madhya Pradesh, Manipur and lowest in Kerala. Remaining States like Uttar Pradesh, Goa, Odisha, Tamil Nadu, Gujarat, Delhi, Rajasthan and Kerala were observed less than 1.0 per cent. The negative trend in girl's enrolment in primary schools was highest in Sikkim then by Uttar Pradesh, Mizoram, Punjab, Andhra Pradesh, and lowest in Maharashtra. During after RTE Act, the trend has been recorded mixed that was increasing in 10 States and declining in 7 States. As observed during this period, the growth in girl's enrolment in primary schools was highest in Punjab then by Rajasthan, Gujarat, Arunachal Pradesh, Uttarakhand, Mizoram, Tamil Nadu, Maharashtra and, lowest in Odisha. The negative trend in girl's enrolment was highest in Sikkim followed by Goa, Madhya Pradesh, Manipur, Uttar Pradesh and Andhra Pradesh and lowest in Delhi. Similar kind of pattern has been observed during before and after RTE Act Periods. In majority States, girl's enrolment in primary schools is sowing increasing trend during before and after the RTE Act (Table -4).

## Girls Enrolment in Upper Primary Schools

The growth rates of Girls Enrolment in upper primary Schools of all the 17 States in before the RTE Act period have recorded mixed trend that was increasing in 11 States and declaiming in 5 States. The growth in girl's enrolment in upper primary schools was highest in Goa then by Rajasthan, Uttar Pradesh, Odisha, and Arunachal Pradesh, and lowest in Sikkim. In Manipur, Gujarat and Mizoram growth of girl's enrolment was observed more than 1.0 per cent and in Tamil Nadu, Kerala and Andhra Pradesh the was recorded less than 1.0 per cent. The negative trend in Girls enrolment in upper primary schools was recorded highest in Uttarakhand then by Madhya Pradesh, Maharashtra and, lowest in Delhi. The growth of Girls Enrolment in upper primary schools of all the 17 States in after the RTE Act period have recorded mixed trend that was increasing trend in 9 States and declaiming trend in 7 States.. As observed during this period, the growth of girl's enrolment in upper primary schools was highest in Uttarakhand and lowest in Tamil Nadu. Remaining States Punjab, Mizoram, Uttar Pradesh, Gujarat, Rajasthan, Arunachal Pradesh and Delhi have shown insignificant growth rate per annum that is less than 1.0 per cent. The negative growth of girl's enrolment in upper primary schools was recorded highest in Goa and lowest in Maharashtra. Remaining States like Sikkim, Madhya Pradesh, Manipur, Odisha and Kerala have shown insignificant average growth rate per annum that is less than 1.0 per cent. The similar kind of pattern has been observed during before and after RTE Act Periods. In majority States, Girls Enrolment in Primary with upper Primary Schools is sowing increasing trend during before and after the RTE Act (Table-4).

| **Table – 4:** Average Annual Growth Rate of Girl's Enrolment during Before RTE Act (2004-05 to 2009-10) and After RTE Act (2010-11 to 2015-16) | | | | |
|---|---|---|---|---|
| Variable→<br>Sample States↓ | Girl's Enrolment in Primary Schools | | Girls Enrolment in Upper Primary Schools | |
| | Before | After | Before | After |
| Madhya Pradesh | 1.10 | -0.31 | -2.14 | -0.27 |
| Uttar Pradesh | 0.78 | -0.24 | 5.12 | 0.41 |
| Uttarakhand | -0.24 | 0.20 | -3.55 | 1.02 |
| Odisha | 0.30 | 0.08 | 3.38 | -0.12 |
| Sikkim | -0.67 | -1.15 | 0.01 | -0.65 |
| Arunachal Pradesh | 1.24 | 0.29 | 3.16 | 0.12 |
| Manipur | 1.02 | -0.28 | 2.46 | -0.16 |
| Mizoram | -0.08 | 0.17 | 1.31 | 0.46 |
| Delhi | 0.21 | -0.12 | -0.20 | 0.05 |
| Punjab | -0.04 | 0.59 | 0.00 | 0.76 |
| Rajasthan | 0.09 | 0.34 | 7.02 | 0.31 |
| Andhra Pradesh | -0.04 | -0.24 | 0.21 | 0.00 |
| Kerala | 0.04 | 0.08 | 0.42 | -0.08 |
| Tamil Nadu | 0.25 | 0.16 | 0.82 | 0.04 |
| Goa | 0.69 | -0.45 | 9.75 | -0.98 |
| Gujarat | 0.21 | 0.33 | 1.52 | 0.39 |
| Maharashtra | -0.04 | 0.08 | -0.21 | -0.04 |
| Source: Source: State Report Cards on Elementary Education in India various issues from 2004-05 to 2015-16, National University of Educational Planning and Administration, New Delhi. | | | | |

The average growth of girl's enrolment of 18 states for government primary and upper primary schools during the pre RTE Act (0.28 and 1.71) is higher than post RTE Act (-0.03 and 0.07). It shows that the average growths of girl's enrolment during pre RTE Act is positive and more during post RTE Act. The standard deviation of growth during post RTE Act is smaller than pre RTE and it shows that the growth of t girl's enrolment has stable in the post RTE Act period than pre RTE Act period. The inception of RTE Act has no impact in growth of girl's enrolment and there are mean differs in growth of teachers during pre and post RTE Act (Table-5).

| **Table – 5** Girl's Enrolment -Descriptive Statistics | | | | | | | |
|---|---|---|---|---|---|---|---|
| Variable | Before RTE Act | | | | After RTE Act | | |
| | N | Mean | SD | | N | Mean | SD |
| Girl's Enrolment in Primary Schools | 17 | 0.28 | 0.52 | | 17 | -0.03 | 0.40 |
| Girls Enrolment in Upper Primary Schools | 17 | 1.71 | 3.26 | | 17 | 0.07 | 0.48 |

Analysis of variance was conducted to examine the statistical significance of above mentioned differences during before and after RTE Act regarding growth of girl's enrolment with parametric and non-parametric tests. Panel - A of Table presents the results of a series of t-test and the null hypothesis of no difference in estimated average growth of girl's enrolment between before and after RTE Act. The null hypothesis is rejected in all cases. Hence, the study concludes that there exists a significant difference in average

growth of girl's enrolment during pre and post reform periods. Panel B of the Table provides the results of the F-test which is also reveals the above conclusion. The average growth of girl's enrolment during pre RTE Act differs significantly from that of post RTE Act in government and private schools. Panel-C of table provides the results of Kruskal-Wallis Test and discloses that the distribution of growth of enrolment between pre RTE Act and post RTE Act is significantly defers in all category of schools. We note that the null hypothesis is rejected in most of the instances, indicating that the estimated average growth and distribution of girl's enrolment during pre RTE Act differ significantly from that of post RTE Act (Table-6).

| | | |
|---|---|---|
| **Table – 6:** Hypothesis Testing | | |
| Variable | Girl's Enrolment in Primary Schools | Girls Enrolment in Upper Primary Schools |
| Panel A: t-test<br>$H_0$ : *Mean growth of  Girl's Enrolment between Pre and Post RTE  is not different* | | |
| t-statistics | 1.959* | 2.045** |
| p-value | 0.059 | 0.049 |
| Inference | Rejected $H_0$ | Rejected $H_0$ |
| Panel B: ANOVA<br>$H_0$ : *Mean growth of  Girl's Enrolment between Pre and Post RTE  is not different* | | |
| F-statistics | 3.839* | 4.183** |
| p-value | 0.059 | 0.049 |
| Inference | Rejected $H_0$ | Rejected $H_0$ |
| Panel C: Kruskal-Wallis Test<br>$H_0$: *The distribution growth of  Girl's Enrolment between Pre and Post RTE  is not different* | | |
| Test statistic | 2.354 | 3.460** |
| p-value | 0.125 | 0.063 |
| Inference | Accepted $H_0$ | Rejected $H_0$ |
| Note:*Significant at 10 per cent level, ** Significant at 5 per cent level & *** Significant at 1 per cent level. | | |

## V.  CONCLUSION

The similar kind of pattern has been observed in growth of enrolment in government primary schools during before and after RTE Act Periods. In majority States, the enrolment in primary education is sowing declining trend during before and after the RTE Act. The trend during before RTE Act clearly indicate that the enrolment in upper primary schools under government management noticed mixed and after RTE Act period clearly shown that in upper primary schools enrolment is declining in selected States. The study found that the annual growth rate of during before RTE, the enrolment in primary Schools under private management increasing trend and after RTE Act period declining trend in selected States. Further, the enrolment before RTE Act in upper Primary Schools under Private management is increasing and after RTE Act period is declining in selected States. In majority States, girl's enrolment in primary schools and upper primary schools is sowing increasing trend during before and after the RTE Act.

The result reveals that the average growth of enrolment is better in pre RTE Act period than post RTE Act period. The estimated average growth and distribution of enrolment during pre RTE Act differ significantly from that of post RTE Act and showing better trend during pre RTE Act. The implementation of RTE Act not contributed in declaiming enrolment in government and private schools. The average growths of girl's enrolment during pre RTE Act is positive and more during post RTE Act. The estimated average growth and distribution of girl's enrolment during pre RTE Act differ significantly from that of post RTE Act. The implementation of RTE Act has positive impact in growth of girl's enrolment.

## REFERENCES

[1].  Aggarwal, Y. P. & Thakur, R. S. (2003).*Concepts and Terms in Educational Planning A Guidebook*. Operations Research and Systems Management Unit, National Institute of Educational Planning and Administration, New Delhi.

[2].  Anil R. Nair, (2009). Accessing Education: Legal Perspectives. Unpublished Ph.D. thesis, *Cochin University of Science & Technology*, Kerala.

[3].  Bhatnagar, S. & Gill, S. (2014). Right to Education: Comparative Analysis of different countries. *Journal of Research in Humanities and Social Science*, 2(2), 29-32.

[4].  Das, A. (2010) *Right to Education*. (First edn), Axis Publications, New Delhi.

[5].  Garje, A. (2011) 'Right to Education Act, 2009'*, Available at SSRN 1834282.* Available at http://dx.doi.org/10.2139/ssrn.1834282

[6].  Gupta, S.P (2007). *Statistical Methods*, Sultan Chand & Sons Publications, New Delhi.

[7].  Jha, P. & Parvati, P. (2010). Right to Education Act 2009: Critical Gaps and Challenges. *Economic and Political Weekly*, 45(13), 20-23.

[8].  Kanji, G. K. (2006).*100 statistical tests. Sage publications*, New Delhi.

[9].  Kaushal, M. (2012). Implementation of Right to Education in India: Issues and Concerns. *Journal of Management and Public Policy*, *4*(1), 42-48.

[10].  Kothari, C. R. (2004*). Research methodology: Methods and techniques*. New Age International, New Delhi.

[11].  KPMG & CII (2016).*Assessing the impact of Right to Education Act*, Ministry of Human Resource Development, Govt. of India.  New Delhi.

[12].  Malakar, R., &Mahato, A. (2015). Implementation Status of Right to Education (RTE) Act 2009 in Tripura: A Critical Analysis. *MGIRED Journal*, 2(1), 90 - 100

[13].  Malik K. P. (2012). *Right to Elementary Education.* Allahabad Law Agency, New Delhi, p. 1.

[14].  Ojha, S. S. (2013). Implementing Right to Education: Issues and challenges. *Research Journal of Educational Sciences, 1(2), 1-7.*

[15].  Planning Commission (2011).India Human Development Report – Towards Social Inclusion. New Delhi: Institute of Applied Manpower Research and Planning Commission, Government of India, Oxford University Press.

[16].  Puar, S. S. (2012). Right to Education Act: A Critical Analysis, *International Journal of Educational and Psychological Research*, 1(2), 27-30.

[17].  RTE Forum, (2009).*Vision Paper*. Right to Education Forum, New Delhi.

[18].  Samuel, R. S. (2011). *A comprehensive study of education*. PHI Learning Pvt. Ltd., p. 3.

[19].  Singh, K. (2004). Right to Education and International Law: UNESCO's Normative Action. *Indian Journal of International Law*, 44(1), 489.

[20].  Singh, V. (2016).Status of implementation of the Right to Education Act, 2009 in Himachal Pradesh. *International Journal of Scientific Engineering and Applied Science, 2 (1)*, 491-505.

[21].  Singh, Y. K. (2006). *Fundamental of research methodology and statistics*. New Age International, New Delhi.

[22].  The Universal Declaration of Human Right (UDHR)," UN website, http://www.un.org/en/documents/ udhr/index.shtml,

[23].  UNESCO, (2004). Global Monitoring Report 2005, *Education for All: The Quality Imperative*, UNESCO, Paris.