Sarva Shiksha Abhiyan in Bihar: Achievements and Failures

Md. Atif Alam
Research Scholar, M. Phil. Centre for Studies in Economics and Planning, School of Social Sciences, Central University of Gujarat

Abstract

The purpose of this paper is to examine the government policy of Sarva Shiksha Abhiyan by assessing the current state of elementary education from class-I to class-VII in the state of Bihar (BH). The main focus of this study is to analyze the impact of Sarva Shiksha Abhiyan on quality of elementary education. To examine the effectiveness of Sarva Shiksha Abhiyan infrastructure facilities and learning skills of students are measured through secondary data. The Sarva Shiksha Abhiyan has a positive effect on infrastructure facilities. But this scheme has failed to improve the quality of elementary education rather it is deteriorating.

INTRODUCTION

Education is an important element for every nation which not only pushes forward to an individual but has a collective gain to whole society or a nation. The country can develop under the umbrella of the effective education system. Although, Education and development of an economy can go hand in hand.

No nation can think about sustainable economic development without the investment on human capital, which works as an engine for economic development. However, it is a long-term investment and slow process, but education is one way to move towards economic development. Education raises the people’s productivity, creativity and promotes technological advancement. Similar notions have been undertaken by Economists, who recognize that investment is necessary for education, or human capital and a prerequisite condition for economic development (Akbari, 2016). In the year 2001 Sarva Shiksha Abhiyan programme was implemented in India with a motive to provide “Free and Compulsory Education” to all between the age
of 6 to 14 years. This Act is focused on to improve the quality of elementary education. However, this highly ambitious programme spread all over India including Bihar, to fulfill the motive of this programme. While this Sarva Shiksha Abhiyan has following objectives: a) All Children complete five years of primary schooling by 2007; b) All Children complete eight years of schooling by 2010; c) Focus on elementary education of satisfactory quality with emphasis on education for life; d) Bridge all gender and social category gaps at primary stage by 2007 and at elementary education level by 2010. e) Universal retention by 2010.

Review of Literature

(Kamal, 2015) explore the Status of elementary education in India. According to him, there is a tremendous increase in the number of primary schools and the growth rate of per annum is recorded as 2.30 percent. Apart from that infrastructure facility in primary school also improved from 1950-51 to 2013-14. He also argues India is almost attained universal access, enrolment, and retention, but the quality of education is abysmal. This finding is based on secondary data that is taken from MHRD Report 2013-14. (Eccles, 1999) the author explores the development of children between the age of 6 to 14 what he calls middle childhood and early adolescence. It’s a crucial stage for children development because cognitive skills developed under 6 to 14 age group. This is the period when children, acquire fundamental skills such as reading and arithmetic.

In the middle childhood years, children more spend time with teachers rather than parents. (Prakash, 2012) The article talks about infrastructure facility and learning skills of the student in elementary education of Bihar. His finding shows, teachers, and girls were reluctant to come to school due to lack of a separate toilet. Apart from that drinking water facility is another problem. On the other hand, teacher-student ratio is also very high. Despite having this problem there is another problem that is learning skills of the student which is also very low. (Panigrahi, 2016), this article examines the performance of students who enrolled in the elementary school of India’s rural areas through principal component analysis (PCA). The results show a dismal picture of the quality of elementary education in
rural India. However, low quality of elementary education in rural India depends on so many factors such as involvement of teachers in non-teaching work, less qualified teacher, lack of good management and so forth. It is also dug out the interesting results those states occupying a major percentage of country’s population shows abysmal performance in subject tests (i.e. Uttar Pradesh, Madhya Pradesh, Bihar, and Rajasthan). While the southern part of India and northeast state of India shown good performance in different tests. (Mehrotra, 2006), conducts the study in eight states of India (Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh, West Bengal, Andhra Pradesh, and Assam). In this article it shows, there is a remarkable progress in enrolment ratio, especially in backward states of India such as Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh.

While, on the other hand, few states shows a dark picture such as Bihar and West Bengal recorded highest pupil-teacher ratio 63 and 52 respectively. Not only that Madhya Pradesh, Bihar, and Uttar Pradesh recorded the highest proportion of single teacher. The survey also reveals that lack of infrastructure facilities and absenteeism of government schools teacher. These are the factors which are directly or indirectly affect the quality of elementary education of government schools. He suggested the government has to penetrate more funds in the education system of India, particularly on elementary education. (Adukia 2016), puts stress on the importance of toilets in elementary schools. In her study, it is found that accessibility of school latrines has a positive impact on enrolment ratio and drop-out ratio. However, sex-specific toilets have a greater impact on female enrolment ratio. On the other hand, sex-specific toilets increase the share of a female teacher in school. In short construction of sex-specific toilets influence the share of a female teacher and girls’ enrolment in government schools. (Das 2007), study focused on the achievement and the problems of Elementary Education in the various state of India, after the completion of five years of Sarva Siksha Abhiyan. His article reflects the light on educational outcomes such as enrolment ratio, drop out ratio, retention ratio, infrastructure facilities, pupil-teacher ratio and so forth. This finding shows that Bihar, Jharkhand, and Assam are doing well in terms of enrolment ratio. On the other hand, Bihar, Chhattisgarh, Madhya Pradesh, and Rajasthan is failing
to maintain adequate building facility. While in case of pupil-teacher ratio Bihar is recorded 85 which is highest and Assam is recorded 20 which lowest among all states of India.

**Research Methodology and Data Sources**

The present study examines the quality of elementary education in Bihar. This study is focused only on government schools. To measure the impact of Sarva Shiksha Abhiyan on quality of elementary education secondary data are employed here. These data sources are DISE and ASER. However to measure the availability of infrastructure facility DISE data are used from 2002-03 to 2011-12. On the other hand to examine the learning skills of student ASER data are used from 2006 to 2016. To evaluate the appropriate results various statistical tools and mathematical tools are used with the help of Microsoft Excel.

**ANALYSIS, RESULTS, AND DISCUSSION**

Adequate infrastructure facilities are a precondition to impart the better quality of elementary education. Lack of infrastructure facilities is one of the major hindrances to achieving the goals of Sarva Shiksha Abhiyan. Improving infrastructure facilities may improve the quality of education. Nevertheless, the effectiveness of teaching-learning may depend on the availability of infrastructure, for instance, lack of classroom, lack of teacher, separate toilets for boys and girls and so on. These are the indirect factors that affect the effectiveness of the teaching-learning process. The Sarva Shiksha Abhiyan augments the infrastructure facility to meet the goal of “Education for all”. The following section discusses the impact of Sarva Shiksha Abhiyan on infrastructure facility and the learning skills of students in the state of Bihar.

**Change in number of schools**

After the implementation of Sarva Shiksha Abhiyan government school in Bihar shows a positive growth rate in one decade. In 2002-03 the number of elementary schools is estimated at 9911 and it has jumped to 27764 in the year 2011-12, while in case of primary school it is recorded as 46546 in 2002-03 and it has reduced to 40573 in
2011-12. In figure 2.1 it is clearly indicated that the percentage change in elementary school of Bihar is estimated at 180 percent. Faster increase in the number of elementary schools to fulfill the dream of “Free and Compulsory Education” as prescribed by Sarva Shiksha Abhiyan. Surprisingly primary school is reduced by 13 percent. This may happen due to the merger with Upper primary school or closing down of primary school because primary school imparts education till class five. While the Sarva Shiksha Abhiyan promised to impart education till class 8 or up to the age of 14.

![Figure 2.1 Growth rate of Government School](image)

**Change in number of Classrooms**

A classroom is an important place where student and teacher interact with each other and children develop their cognitive skills. The inadequate number of the classroom may hamper the effectiveness of the teaching-learning process because sometimes classes are running on sharing basis this creates the problem of overcrowding in one classroom. The figure-2.2 shows percent single classroom is the ratio between primary schools having single classroom divided by total primary school. It is clear from the figure, primary schools are the highest percent of the single classroom and elementary school is the lowest percent of single classroom i.e. 16 percent and 3 percent respectively in the year of 2002-03. But in the year 2012-13, it has reduced to 4 percent and 1 percent in primary and elementary level. This depicts that greater number of the classroom is available at the primary and elementary school.
Change in number of teachers

As the number of schools increases in one decade, there is need to increase the number of teachers to achieve the goal of Sarva Shiksha Abhiyan. As per the figure-2.3, it indicates that there is a jump in the number of primary teachers from 90,256 to 138829 in the year 2002-03 to 2011-12, which is nearly 54 percent. On the other hand in the very same year, elementary school teacher also expand by 276 percent.
Average number of teachers per school
Teachers are the main agent to define children’s destiny, lack of teacher may hamper the quality of education. It is required to penetrate sufficient quantity of teacher to impart the quality of education, “Teachers without school means a body without a soul”. Unequivocally in one decade, there is an improvement in an average number of teacher per school. Figure 2.4 gives the clear picture of an average number of teacher per school in one decade, it has raised in Primary school from 2 teachers per school to 3 teachers per school and in case of elementary school it also expand from 5 teachers per school to 7 teachers per school in the year 2002-03 to 2011-12 respectively.

Figure: 2.4 Average number of Teacher per School

Pupil-Teacher Ratio
Pupil teacher ratio is the ratio between the number of students divided by a number of the teacher. Pupil teacher ratio is one of the important factors that affect the quality of education. Because less number of the teacher may not be capable to work to their fuller potential. Higher the pupil-teacher ratio means fewer teachers are available for enrolled children, while lesser the pupil-teacher means a greater number of teacher is available for enrolled children. Right to Education Act (RTE), 2009 prescribed that pupil-teacher ratio should be 30:1 and
35:1 at primary and upper primary level. Apart from that Unified District information system for Education (UDISE) the PTR level for elementary schools is 24:1. As per the data, Bihar shows an improvement in pupil-teacher ratio in case of the primary and elementary level. In the figure-2.5 pupil-teacher ratio has reduced to 83 to 53 and 75 to 65 at primary level and elementary level respectively. Bihar has not achieved the prescribed pupil-teacher ratio but it shows a fall in pupil-teacher ratio.

**Figure: 2.5 Pupil-Teacher Ratio**

![Pupil Teacher Ratio Graph]

**Source: Own Compilation**

**Data: DISE**

### Percent Single Teacher

The teacher is one who transforms the lives of children and shows the right path. An inadequate number of teacher hamper the quality of education and teacher may not be able to work to their fuller capacity due to the overburden. To achieve the Universalization of elementary education there is a dire need to increase the number of the teacher because the scarcity of teacher is serious consequences on the quality of elementary education.

The figure-2.6 depicts percent single teacher which is the ratio between Primary schools with a single teacher in position divided by
total primary schools. However, over the period of time percent on an average single teacher has reduced from 23 percent to 6 percent and 2 percent to 1 percent at a primary and elementary level in the respective year. The reduction in percent single teacher means that the number of teacher hike in primary and elementary school and this may elevate the quality of elementary education.

**Figure: 2.6 Percent Single Teacher**

![Percent Single Teacher](chart)

**Source:** Own Compilation  
**Data:** DISE

### Educational attainment of girls

As education is not easily accessible for women and girls due to hard cultural and social norms in India. However, Indian society is constructed in a way that girls education is not on priority because investing in girls education would not give any future return or invest in their education is totally futile.

Because Indian society thinks girls responsibility is to share the household responsibility in their childhood or once they became mature their priority is to please their spouse, produce a child and do household chores. The society can be egalitarian society only when both boys and girls get equal chances in all spheres of life.
Although, education is a way to make egalitarian society. As women are vulnerable, education could provide immunity in one way and another way they can actively participate in economic activity, but on the other hand to indulge in economic activity one should get an education from their initial stage. As Sarva Shiksha Abhiyan promised to provide “Free and Compulsory Education” or promised to fulfill the goal of “Education for All” may not be achieved without the girl's education. The strategy to recruit female teacher in a government school is fruitful because it has following positive impacts such as

a) It raises the number of girls child in elementary school.

b) It gives employment to a female teacher. So they also recognize the value of education.

c) It reduces gender inequality in elementary school and primary school.

d) The safety concerns of girls child are also addressed due to the presence of a female teacher.

According to the report “In countries where girls experience significant difficulty participating in education due to cultural and social barriers, increasing the number of female teachers has been shown to have a positive effect on girls’ schooling. The presence of women teachers can allay parents’ concerns over safety and help increase demand for girls’ schooling.” (UNSCO, 2015)

Bihar which is often listed as the less developed state of India also shows the progress in girls’ education by using the strategy to recruit female teacher.

The table 2.1 clearly indicates that the value of “R” is statistically significant. The table produces very interesting results, it shows female teacher and girls student are positively correlated. While a male teacher and girl student are negatively correlated. This depicts female recruitment in primary and elementary schools have a positive impact on girls’ educational attainment.
Sanitation and Education

School sanitation infrastructure impedes educational attainment and it is also detrimental to health. Particularly in case of girls toilets are important for them or else drop out ratio will increase. Because girls would not go for open defecation during schools hour due to threat and harassment concern for them. It is required to build a sex-specific or at least unisex toilet in every part of India to retain girl child. “One in five children worldwide does not complete upper primary school”. (Adukia, Sanitation and Education, 2016) She also added, “If there is sex-specific toilets parents have one less reason to pull girls out of school”. The United Nation also recognize 19 November world toilet day. Even in Bihar open defecation is a cause for concern. Bihar government schools often suffer from lack of sex-specific toilets or unisex toilet. “When we had to relieve ourselves, we would not go because we were afraid the boys would follow us. They would stand there and watch us. Our stomachs would start hurting because we would not go. Then we would not feel well so we would take the rest of the day off from school.” (India's Need For School Toilet, 2016) Unequivocally, Bihar still suffers from the problem of open defecation and lack of toilets in government schools that may be one of the reason for parents to pull girls out of school. But Sarva Shiksha Abhiyan stress to improve the physical infrastructure including toilets
in a government school. This may push the percent of girl toilets in government schools, which indirectly increase the percent of girl. Table 2.2, depicts “R” value is statistically significant, which means sex-specific toilet shows a positive impact on girls educational attainment in the time span of 2002-03 to 2011-12.

Table 2.2 Correlation between Sex-Specific toilet and Girls Student

<table>
<thead>
<tr>
<th>Year</th>
<th>Variables</th>
<th>R-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-03 to 2011-12</td>
<td>Sex-Specific toilet and Girls Student¹</td>
<td>R = +0.8</td>
</tr>
<tr>
<td></td>
<td>Sex-Specific toilet and Girls Student²</td>
<td>R = +0.9</td>
</tr>
</tbody>
</table>

Source: Own Compilation

Data: DISE

Note: 1-Primary School, 2-Elementary School

Bihar shows a progress after the adoption of national programme Sarva Shiksha Abhiyan. It has gained in terms of infrastructure facility, this leads to increase in enrolment ratio of the student. Over the decade lots have been done to increase the quantity of student, but the quality of education is yet to begin at elementary school. Now, quality of education has to give more priority to make the human capital productive and useful.

Because without focusing on quality of elementary education our nation or state cannot be productive. According to Sarva Shiksha Abhiyan, eight years of schooling is free, but if these years of schooling are not fruitful, their chances for higher education will also close or they end up with the petty job. So, quality of education from the beginning is necessary for the betterment of their life and economy.

However, the policy Sarva Shiksha Abhiyan is able to promote infrastructural facilities in elementary schools of Bihar but failed to address the quality of elementary education in Bihar. While ASER conducts a quality test for elementary Education in Bihar through “Reading Level” and “Arithmetic Level”. To measure the reading
levels of student from 6 to 14 age group the parameters are used “Nothing”, “Letter”, “Word”, “Para” and “Story”. Surprisingly, in one decade nothing category has jumped by 5.51 percent, not only that at word level and para level it also cut down by 3 and 5 percent respectively.

On the other hand, letter level and story level shows a mild jump in one decade, i.e. 1.43 and 1.06 percent respectively figure 4.5.

**Source:** Own Compilation  
**Data:** ASER

While for “Arithmetic level” five parameters are taken into consideration to measure the quality of student between the age group of 6 to 14 years. These parameters are “Nothing”, “Number recognition 1 to 9”, “Number recognition 11 to 99”, “Subtraction” and “Division”.

Unfortunately, in one decade, nothing category of student bounce to 2.3 percent points. On the other hand, division and subtraction category depicts falling trend i.e. 4.3 and 7 percent collectively. However, only number recognition 1 to 9 and 11 to 99 shows a progress by 3.68 and 5.31 percent respectively figure 4.6.
Bihar is still not able to maintain quality at the elementary level in one decade, which is a cause for concern. Lack of quality of elementary education is not only depressing cognitive skills of the student but it has repercussion on human capital that further restricts the economic growth of Bihar.

**Conclusion**

Although, if a country wants to achieve universalization of elementary education it is necessary to focus on infrastructure facilities which give the strength of teaching-learning process. Without proper infrastructure facility, it is difficult to achieve the goal of universalization of elementary education.

To achieve the goal of universalization of primary education, Indian government introduces the Sarva Shiksha Abhiyan Scheme, which assures the “Free and Compulsory Education” up to the age of 6 to 14 years. This programme meets the goal of universalization of primary education. However, Sarva Shiksha Abhiyan has a positive impact on the Bihar elementary education system. The scheme not only increases the enrolment ratio in Bihar but also improve infrastructure facility which is required for the smooth functioning of the school. Interestingly, this scheme is capable to increase the girl's enrolment ratio and it also increases the number of a female teacher in elementary school. Unequivocally, infrastructure facility is required to
run the school efficiently and effectively. But only infrastructure facility cannot be the parameter to measure the quality of elementary education. Because a plethora of debate is floating among the research scholars and policymakers regarding the quality of elementary education. However, one of the goals of Sarva Shiksha Abhiyan is quality of elementary education which is yet to address in the northern state of Bihar. Thus, Bihar has a long way to go to improve the quality of elementary education. Now it is a high time that Bihar has to focus on the quality of elementary education rather than quantity of student.

1. **References**