



CHITKARA

Issues and Ideas in Education

Journal homepage: <https://iie.chitkara.edu.in/>



Educational Development Index of Bihar: Towards Better Tomorrow

Chandra B P Singh

Department of Psychology, T M Bhagalpur University, Bhagalpur: 812007

Email: chandrabpsingh@gmail.com

ARTICLE INFORMATION

Received: April 24, 2018
Revised: June 08, 2018
Accepted: June 25, 2018
Published online: September 03, 2018

Keywords:

Elementary Education, U-DISE, EDI, Quality, Achievement

DOI: <https://doi.org/10.15415/iie.2018.62009>

ABSTRACT

The study was designed to compute district wise Educational Development Index of Bihar. At the same time, an attempt was made to assess the trend of improvement in elementary education for the last few years. U-DISE data for the last two years (2014-15 and 2015-16) was analyzed and compared with the baseline data. Bihar showed significant improvement on many parameters of elementary education. Despite the fact that Bihar is yet to achieve the desirable level but the progress is evident. Other than learning achievement in terms of quality Bihar has shown her firm determination to change the gloomy picture of elementary education. The findings reflect a positive trend of upward movement. Right from access to teachers in school Bihar has made progress in the light of RTE act, 2009.

1. Introduction

The study conducted by Bihar Education Project Council, Patna (BEPC) on U-DISE (Unified District Information of School Education) and later on, compiled by National University of Education and Planning, New Delhi (2016) for generating composite scenario of elementary education in India gives rise to two distinct patterns of school education-within state and between states. BEPC (2015-16) presents scenario of elementary education of 38 districts in Bihar. These two separate analyses generate time series data for understanding the effectiveness of Sarva Shiksha Abhiyan (SSA) within the state and between the states. Bihar when compared with other states, trails on many educational parameters. But the reality is something else. Some districts of Bihar have consistently performed well while some of them have gradually improved within temporal interval. Educational Development Index (EDI) reflects the relative standing of each district within a temporal span. It helps formulate the forward educational planning. Further, a volume of inputs required for each district on each parameter can be determined. Educational Development Index (EDI) is applied to diagnose malaise in SSA and make categorical treatment of the performing districts. Time series data generated by U-DISE are reflected through four parameters-access, infrastructure, teacher and outcomes. Each parameter consists of a number of variables. The

composite scores (weighted score) of each parameter reveal the relative standing of a district. Hence, it is desirable to analyze district wise educational development. It is too early to conclude that Bihar accounts for poor performance on elementary education. Flash Statistics (2014-15) published by NUEPA for all 36 states and UTs demonstrated that Bihar was at the 32th rank (Primary 36th rank and Upper Primary 31st rank). Student Classroom Ratio (SCR) and Pupil Teacher Ratio (PTR) were 57 and 52 respectively in Bihar which was very high as compared to other States. For the last one decade the Government of Bihar (GoB) has initiated a plethora of interventions to improve the status of elementary education. These interventions cover both the state-designed programme as well as the central government programme known as SSA to attain the basic objectives of RTE, 2009. It has made some significant effects on school education. The purpose of the study is to assess the progress of elementary education in Bihar and to compute a district-wise Educational Development Index (EDI). This paper assesses an impact of various educational inputs on elementary education in Bihar in terms of access, infrastructure, teacher and outcomes. Based on the Unified-District Information of School Education (U-DISE) data an effort was made to compute an Educational Development Index (EDI) separately for each parameter- access, infrastructure, teachers and outcomes and also a composite index for the state. Another aim of the study is to appraise

the progression of elementary education for the last one decade on some selected parameters. For this, the baseline data of 2005-06 was taken into consideration.

2. Objective of the Study

The main objectives of the study included the followings:

- (i) To assess universal access, enrolment and retention in Bihar.
- (ii) To map out availability of infrastructure and teachers.
- (iii) To compute Educational Development Index (EDI) of each district.

3. Method

3.1 The Setting and Coverage

At present the state has 42,762 Primary Schools and 29,149 Middle Schools (excluding Govt. Aided Schools) as per the District plan, 2016-17. About 10% (7098) schools have no building. There exists a huge infrastructural gap in the schools. Student Classroom Ratio (SCR) is 57:1 (92:1 in 2005-06) as per available classrooms adversely affecting the quality of education. Pupil Teacher Ratio (PTR) at elementary level has been reduced to 56:1 from 65:1 as compared to 2005-06. The Gross Enrolment Ratio (GER) at the primary and upper primary level for Bihar in 2015-16 is 107.7 and 107.9 respectively. The girls GER at primary and upper primary level are 113.3 and 119.4 respectively. Among the underprivileged sections of the population, the GERs for the Muslims at the primary and upper primary stages are 105 per cent and 87 per cent respectively. As per Census 2011, about 235.72 lakhs children are in the age group of 6-13 years in 2011 which is 22.64 per cent of total population. The projected population (based on Census, 2011), Bihar has about 2.17 crores children of age group 6-13 in 2015-16. Around 2.17 lakhs children, in the age group of 6 to 13+ years, were out of school. Percentage of girls and other disadvantaged sections was disproportionately high among these children.

3.2 Sources of Data

The study examined U-DISE data (2014-15 and 2015-16) available at www.udise.in and www.bepcssa.in for educational development index (EDI). To assess the progression in elementary education, a baseline the data of 2005-06 was taken into consideration. The basic aim was to ascertain the trend of progression in elementary education after interventions. The core parameters – access, infrastructure, teachers and outcomes designed by NUEPA were included in the study. On each parameter there existed a set of sub-parameters (22 variables). For each sub-parameter the baseline data was decided. Some other sources of data such as All India Educational Survey (AIES, 2002, 2009) and Annual Work Plan and Budget (AWP&B, 2015-16, 2016-17) of SSA in Bihar were taken into consideration. It was a time series data based on U-DISE data capture format (DCF).

3.3 Tool Used

The study followed the tool suggested by NUEPA for computing Educational Development Index (EDI) for two separate years (2014-15 and 2015-16). Variables (n=22) used by NUEPA for analysis were taken into consideration while computing EDI. Composite weightage score on each parameter for each district was computed. Details of variables for each parameter are presented in table 1.

3.4 Converting Raw Data into Normalized Values

The following procedure was adopted in converting raw data into normalized form. First the Best and Worst values in an indicator are identified. The BEST and the WORST values would depend upon the nature of a particular indicator. In case of a positive indicator, the HIGHEST value would be treated as the BEST value and the LOWEST considered as the WORST. Similarly, if the indicator was NEGATIVE then the LOWEST

Table 1: Indicators Frameworks for Computing EDI.

Component	No. of Indicators	Indicators	Type of Indicators*
ACCESS	3	Percentage of Habitations not Served* (corrected with reference to new schools (Govt.) opened since 2002-03)	Negative
		Availability of Schools per 1000 Child Population	Positive
		Ratio of Primary to Upper Primary Schools/Sections (only at Upper Primary stage)	Negative

INFRASTRUCTURE	5	Average Student-Classroom Ratio	Negative
		Schools with Student Classroom Ratio ≥ 60	Negative
		School with Drinking Water facility	Positive
		School with Common toilet	Positive
		Schools with Girl's toilet	Positive
TEACHERS	6	Percentage of Female Teachers	Positive
		Average Pupil-Teacher Ratio	Negative
		School with Pupil-Teacher Ratio ≥ 60	Negative
		Single-Teacher Schools (in schools with more than 15 students)	Negative
		Percentage of Schools with ≤ 3 teachers	Negative
		Teachers without Professional Qualification	Negative
OUTCOME	9	Gross Enrolment Ratio – Overall	Positive
		Participation of Scheduled Castes Children: Percentage SC Population (2001 Census) - Percentage SC Enrolment	Positive
		Participation of Scheduled Tribes Children : Percentage ST Population (2001 Census) - Percentage ST Enrolment	Positive
		Gender Parity Index in Enrolment	Positive
		Repetition Rate	Negative
		Drop-out Rate*	Negative
		Ratio of Exit Class over Class I Enrolment (only at Primary stage)	Positive
		Percentage of Passed Children to Total Enrolment	Positive
		Percentage of Appeared Children passing with 60 per cent and more marks	Positive

value would be considered as the BEST value and the HIGHEST, the WORST value. Once the Best and Worst values were identified, the following formula was employed to obtain the normalize value. The normalized values always fall between 0 and 1.

$$NV_{ij} = 1 - \left\{ \frac{\{\text{Best } X_i - \text{Observed } X_{ij}\}}{\{\text{Best } X_i - \text{Worst } X_i\}} \right\}$$

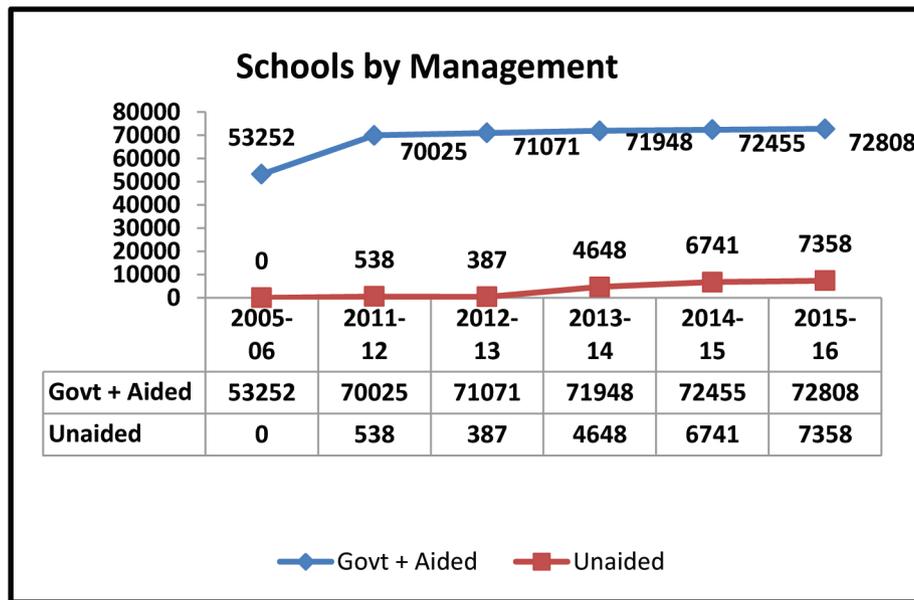
4 Results

The analysis of results covered two set of data. The first set comprised time series data since 2005-06 while another set of U-DISE data (separately for 2015 and 2016) followed statistical analysis as suggested by NUEPA, New Delhi. Time series data was reflected in terms of either graph or mean percentage. U-DISE data on each variable was normalized for getting the composite score.

4.1 Access

Bihar witnessed a significant expansion of schools for the last few years. About 98 per cent habitations had elementary schools. The analysis suggested that upper primary schools

were more equitably distributed among 38 districts. The SSA had substantially strengthened primary as well as upper primary schools (fig. 1). The total enrolment at upper primary level was consistently increasing for the past several years. An overall increase at primary level was 5.4 per cent (about 8.3 lakh) from the previous year (2014-15). The enrolment at upper primary classes had increased significantly (7 per cent) in the state during the same period. While enrolment for primary classes increased by 43.94 per cent from 2005-06 to 2015-16, it climbed up to 235.65 per cent for upper primary classes. Out of 234.32 lakh, 214.73 (91.64 per cent) lakh students were in the government managed schools and the remaining 19.59 lakh (8.36 per cent) in private managed schools. There existed 4.60 upper primary schools/section to serve per one thousand population of age group 11-13+. Despite a significant achievement on access parameter, a number of habitations remained deprived of primary schooling facilities within one kilometer and upper primary schools within a distance of three kilometers. Nevertheless, access to elementary education in tune with the increased Gross Enrolment Ratio (GER) required many more school buildings both for primary and upper primary levels. It was evident that the Department of Education (the GoB) was the main provider of elementary education followed by the govt.-aided schools.



(Source: Bihar Education Project, 2017)

Figure 1. School by management.

4.2 Infrastructure

The basic infrastructure facilities such as classrooms, toilets, drinking water, etc. help improve attendance, retention and facilitate learning processes. The RTE Act, 2009 lays down the minimum physical and academic infrastructure for a school. Strangely, most of the government schools did not fulfill the norms as prescribed by the RTE Act. Of 70860 Govt. schools, only 9505 (13 per cent) complied with RTE norms for teachers. 34,337 (82 per cent) primary schools did not comply with RTE norms for PTR while it was 27,018 (about 93 per cent) in case of upper primary/Sec/Hr. secondary schools. Similarly, only 16,973 (24 per cent) schools complied with RTE norms for classrooms. In case of upper primary/Sec/Hr. secondary schools it was about 86 per cent. A large number of primary schools (opened after 2006-07) did not have their own school buildings and other teaching-learning facilities. It was important to highlight that Bihar was facing acute shortage of the government as well as the donated land for construction of New School Buildings (NSBs). However, the state was making her sincere efforts to make available land for NSBs. The situational analysis further revealed that student classroom ratio (92:1) was dense in 2005-06. However it got reduced to 57:1 in 2015-16. A large number of schools (2.76 lakh) got additional classrooms till 2015-16. In case of middle schools the existing infrastructure was certainly better. But, some essential facilities lacked in many of these schools. It was important to mention that as per U-DISE data 2014-15, there existed a huge requirement of additional classrooms (approximately. 2.14 Lakh) in the state. The

pace of completion of the sanctioned additional classrooms (ACR) as well school buildings was relatively slow. Though the state had been able to provide basic amenities like toilet separately for boys and girls and drinking water facilities for many elementary schools, a real challenge revolved around maintaining toilets and making it usable for the children. Opening new schools would merely not serve the purpose. The infrastructure of elementary education in Bihar painted a disappointing picture. Facilities available in schools revealed that Bihar was below than national average. About 10 per cent primary schools had without drinking water facility. Separate girls’ toilet facilities were still inadequate. About 46.62 per cent schools had boundary wall. About 37.51 per cent schools had without kitchen shed. About 64.70 per cent schools had no playground. Two third schools had no electricity connection.

4.3 Teacher

Bihar had a large number of teaching forces making the schooling system more vibrant. At the state level, only 12 per cent primary schools (all management) existed which had more than five teachers (U-DISE 2015-16). However, only 9 per cent (the govt. management) primary schools had more than five teachers. About 28 per cent primary schools had four-five teachers. 54 per cent primary schools had two-three teachers. On an average the number of teachers in all categories of schools was 5.39 in 2015-16 which was only 3.86 in 2005-06. The situational analysis further indicated that pupil teacher ratio (PTR) was 64.82 in 2005-06. This got reduced to 56.20 in 2015-16. There existed some

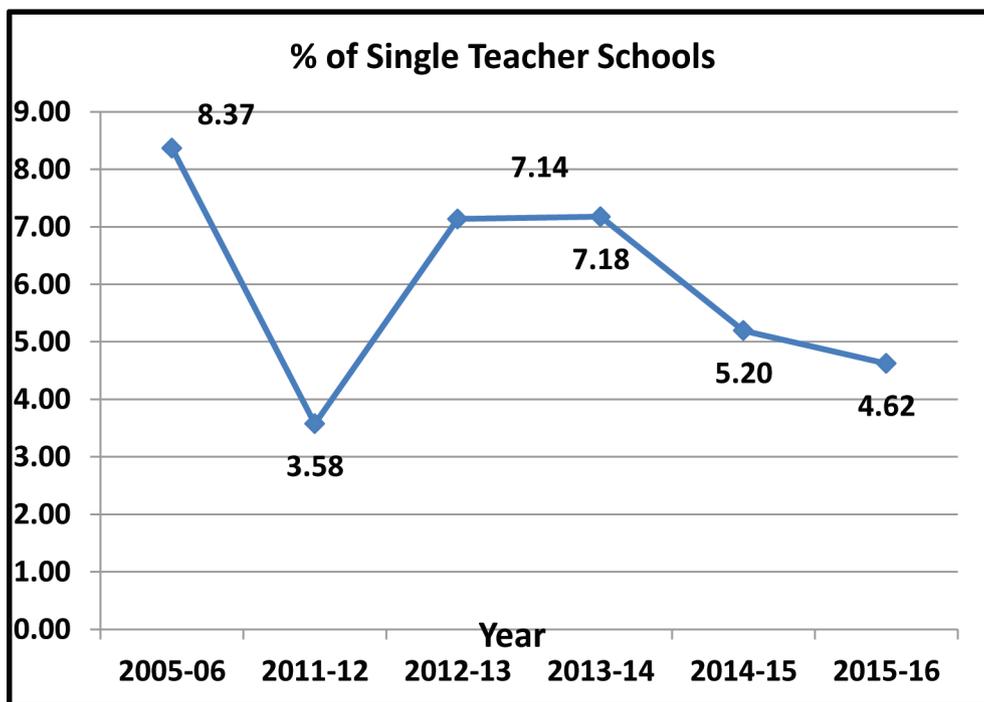
schools which did not have adequate number of teachers (fig. 2). In 2005-06 about 26 per cent female teachers were deployed in the schools. It got climbed up to 40 per cent in 2015-16. Still it was far away from satisfactory inclusion of female teachers in the schooling system. Female teachers were the best option for primary level education. Many schools run without Head Master (HM) and the graduate trained teachers. Upper Primary teachers faced difficulties in teaching science and mathematics as they did not have science teachers.

Almost all DIETs, PTECs and B.Ed. colleges in Bihar were gasping by the end of 2005-06. They were dysfunctional because of poor infrastructure facilities, the stagnated human resources and predominating restraining forces in the institutions. Right now, the State Council of Educational Research and Training (SCERT) in Bihar has made almost all DIETS functional as the untrained teachers were being trained under Open Distance Learning (ODL) Programme. Though facilities available for pre-service and in-service training of teachers were inadequate in the state, they had delivered tangible results. The SCERT by its innovative practices played an important role in capacity building programme of newly appointed teachers (BEPC, 2015-16). It showed an affirmative action aimed at revamping of the existing training institutions and setting-up of new institutions. Block Resource Centre (BRCs), Cluster Resource

Centre (CRCs) and School Management Committee (SMC) were constituted in all districts. Though these bodies provided a little academic support to teachers as well as schools, they could not be cornered in school education.

4.4 Enrolment and Out of School Children (OOSC)

The Gross Enrolment Ratio (GER) at the primary level was consistent over the years (108 per cent, 2016). The same trend for Net Enrolment Ratio (NER) was observed (104 per cent, 2016). No major gender gap was recorded in the GER and NER (< 5 per cent). Further the district-wise analysis revealed that the GER of girls was higher than their counterpart in many districts. The data disclosed a substantial increase in GER at upper primary level over the years. The NER at the primary level continued increasing over the years since 2005-06. There was an increase of one per cent point during 2015-16 as compared to previous year (2014-15). The NER at the primary level required further improvement. The NER of girls was better than that of boys over the years. The Gross Enrolment Ratio at upper primary level had increased by 16 per cent from the previous year. The GER and NER had a difference of about 4 percentage point indicating an inclusion of about 4 per cent underage and overage children at upper primary level. A large number



(Source: Bihar Education Project, 2017)

Figure 2. Single Teacher Schools in %.

of children left the school before completion the elementary education cycle. It seemed that the exiting primary education system transited every 4th or 5th child to upper primary cycle.

It was heartening to note that the transition rate of girl children was better than that of boys. If a child continued up to class III, the probability of completing the primary cycle was high. The dropout rate at upper primary level was not very high. The out of school children (OOSC) of SC category was 18.45 per cent in 2006-07 whereas, it was 1.77 per cent in 2015-16. The trend of ST and minority children was also encouraging. But more efforts were required to bring them to minimum level. Although the number of out-of-school children came down to about one per cent, it required a contextual strategy to bring them back to school (figure 3). Continuous awareness campaign has already been initiated to narrow the gender and social gaps at elementary level. In the light of RTE Act, every elementary school was supposed to prepare School Development Plans (SDP). Although this bottom-up approach to planning was a kind of democratic engagement, there existed non-readiness to school development plan by the stakeholders.

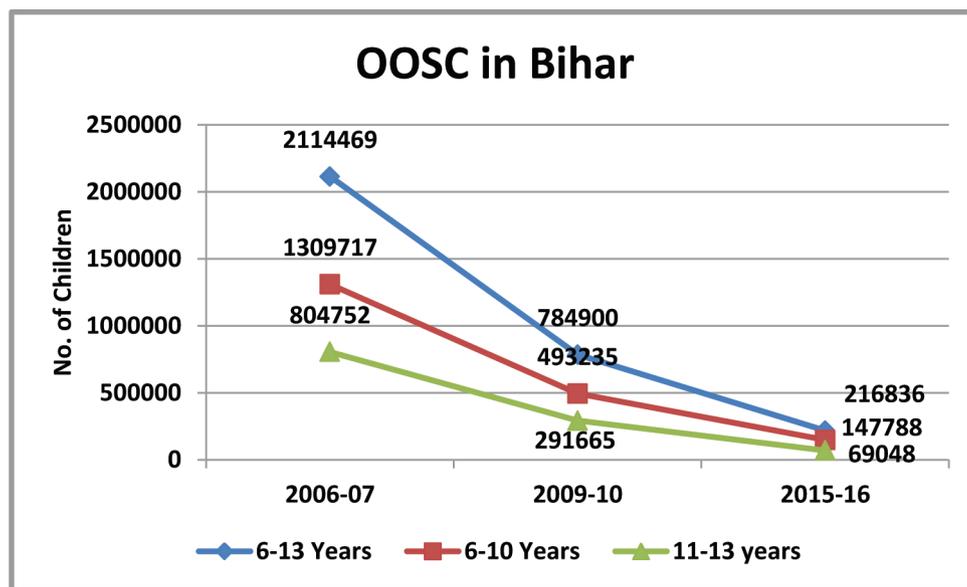
4.5 Learning Outcomes

Despite improvement in access and retention, the learning outcomes of children continued to be a serious concern. Studies (NAS, 2012) confirmed that the children were far away from basic learning skills during their schooling. Many children reaching grade V could not read simple sentence and failed to work out numerical problems (NAS,

2015, SCERT, 2017). Students especially girls studying in class III, V and VIII secured less than 50 per cent marks in Hindi language (NAS, 2012). The state mean per cent of KGBV students was around 40 with SD 20.57. Of 10 districts where the study was conducted, Nalanda and Jamui secured 54 per cent and 55 per cent respectively while Kishanganj and West Champaran underscored by obtaining only 25 per cent and 29 per cent (SCERT, 2017). Bhagalpur had 36 per cent, showing 4 per cent below the state mean per cent. Madhepura and Madhubani secured 37 per cent and 38 per cent which was about 2-3 per cent less than the state mean per cent. The results further, revealed substantial differences in learning outcomes between the highest performing districts (Nalanda followed by Jamui) and the lowest performing districts (Kishanganj followed by West Champaran). A large scale assessment exercise could not ensure quality improvement in learning unless the system was ready to reflect on the findings and use them for improving the quality of teaching and learning processes.

4.6 Composite EDI

Analysis of composite Elementary Education Index (EDI) made it apparent that Siwan, Nalanda, Patna, Begusarai and Muzaffarpur were top five districts in the year 2014-15 while Kishanganj, Arwal, Nawada, Purnea and Araria were at the bottom of ranking (table 1). In year 2015-16 Siwan and Nalanda continued maintaining their ranking in top five. But, three new districts- Aurangabad (11th rank), Vaishali (7th rank) and Jamui (9th rank) improved



(Source: Bihar Education Project, 2017)

Figure 3. Status of Out of School Children in Bihar by Ag.

Table 2. Indices and Ranking at Elementary Level: All Districts (2015-16).

S. No.	District	Access		Infrastructure		Teacher		Outcome		All	
		Index	Rank	Index	Rank	Index	Rank	Index	Rank	Index	Rank
1	Siwan	0.606	8	0.777	1	0.682	1	0.707	3	0.697	1
2	Aurangabad	0.588	9	0.717	6	0.595	3	0.620	13	0.633	2
3	Vaishali	0.583	10	0.718	4	0.590	4	0.522	23	0.613	3
4	Nalanda	0.544	14	0.717	5	0.621	2	0.460	26	0.602	4
5	Jamui	0.481	19	0.698	7	0.560	7	0.622	12	0.594	5
6	Gopalganj	0.499	18	0.519	20	0.561	6	0.793	1	0.577	6
7	Darbhanga	0.537	16	0.752	2	0.404	23	0.608	17	0.574	7
8	Bhojpur	0.564	12	0.687	8	0.433	20	0.625	11	0.573	8
9	Begusarai	0.453	23	0.633	12	0.577	5	0.614	15	0.571	9
10	Patna	0.549	13	0.664	10	0.405	22	0.611	16	0.552	10
11	Buxar	0.411	26	0.728	3	0.466	16	0.525	21	0.541	11
12	Munger	0.610	5	0.631	13	0.297	32	0.651	6	0.533	12
13	Jehanabad	0.474	21	0.645	11	0.379	27	0.616	14	0.523	13
14	Sheohar	0.666	2	0.329	35	0.387	26	0.762	2	0.504	14
15	Muzaffarpur	0.579	11	0.581	15	0.451	19	0.361	36	0.503	15
16	Khagaria	0.399	27	0.584	14	0.470	15	0.525	22	0.497	16
17	Kaimur	0.364	32	0.576	17	0.504	11	0.436	29	0.480	17
18	Rohtas	0.364	32	0.576	17	0.504	11	0.436	29	0.480	17
19	Madhubani	0.318	37	0.672	9	0.455	18	0.360	37	0.469	19
20	Saran	0.504	17	0.414	29	0.387	24	0.641	8	0.469	20
21	Sitamarhi	0.469	22	0.475	24	0.333	30	0.666	5	0.467	21
22	Katihar	0.345	34	0.474	25	0.482	14	0.577	18	0.465	22
23	Lakhisarai	0.396	29	0.530	19	0.419	21	0.503	24	0.461	23
24	Arwal	0.632	4	0.506	21	0.309	31	0.391	34	0.457	24
25	Sheikhpura	0.634	3	0.418	28	0.238	33	0.640	9	0.457	25
26	E. Champaran	0.389	30	0.287	37	0.532	9	0.668	4	0.452	26
27	Saharsa	0.426	24	0.379	30	0.523	10	0.451	27	0.445	27
28	Nawada	0.384	31	0.466	26	0.387	25	0.572	19	0.443	28
29	Bhagalpur	0.475	20	0.376	31	0.557	8	0.326	38	0.442	29
30	Banka	0.610	6	0.481	22	0.197	35	0.469	25	0.427	30
31	Gaya	0.608	7	0.346	34	0.231	34	0.632	10	0.426	31
32	Kishanganj	0.723	1	0.581	16	0.053	38	0.371	35	0.422	32
33	Madhepura	0.543	15	0.363	32	0.366	29	0.428	31	0.418	33
34	Supaul	0.396	28	0.263	38	0.499	13	0.438	28	0.395	34

(Source: Bihar Education Project Council, 2017)

their ranking and were listed in top five. It was due to the providing access to new primary school in the uncovered habitation, appointment of teachers and construction of new buildings/classrooms. The state average of composite EDI for the year 2014-15 and 2015-16 was almost same (0.516 and 0.502 respectively). Keeping the base figure of

composite EDI to year 2014-15 (0.516), the number of districts above the state average (0.516) were 13 and below it were 25. In year 2015-16 a total number of districts above the state average (0.502) was 15 and below it 23. Several districts had improved their relative position on various parameters of Composite EDI.

Discussions and Conclusion

There has been a significant expansion of schools in Bihar for the last few years. The analysis suggests that upper primary schools are more equitably distributed among districts of the State than that of primary schools. The implementation of the SSA has substantially strengthened primary and upper primary schools and additional classrooms (ACR). Despite significant achievement on access parameter, a significant number of habitations remain deprived of primary schools facilities within one kilometer and upper primary schools within a distance of three kilometers. Over a period of time, the ratio of primary to upper primary schools has significantly improved but the same is not as envisaged in the policy directives. The State needs to notify neighborhood schools for each habitation on priority basis. Nevertheless, access to education in tune with the increased Gross Enrolment Ratio (GER) requires many more school buildings both for primary and upper primary levels. It is evident that the Department of Education is the main provider of elementary education. The department of Welfare runs a few schools designed for the specific targeted population. Several studies have supported the fact that basic infrastructure facilities such as classrooms, toilets and drinking water, etc. improve attendance, retention and facilitate learning processes. The RTE Act, 2009 lays down the minimum physical and academic infrastructure for a school. Unfortunately, most of the government schools do not fulfill the norms as prescribed by the RTE Act. A large number of primary schools (opened after 2006-07) do not have their own school buildings and other teaching-learning facilities. It is important to highlight that Bihar is facing acute shortage of govt. as well as donated land for construction of New School Buildings (NSBs). However, the State is making her sincere efforts to make available land for NSBs. The situational analysis reveals that student classroom ratio (SCR) is dense in Bihar. A large number of schools do not have adequate instructional rooms adversely affecting the quality learning. In case of middle schools the existing infrastructure is certainly better but some essential facilities lack in many of these schools. As per U-DISE Data 2014-15, there is a huge need of Additional Class Rooms (Approx. 2.14 Lakhs) in the State. The pace of completion of the sanctioned additional classrooms (ACR) as well school buildings is relatively slow. Efforts need to be taken for timely completion of such schemes. The State also needs to take up the detailed exercise of school mapping immediately and plan proper development of classrooms in the campus. Every school requires at least two toilets—one for boys and other for girls, falling which the drop out and gender and social

gaps would widen. Although the State has been able to provide basic amenities like boys and girl's toilet and drinking water facilities for many elementary schools, a real challenge lies in maintaining toilets and making it usable for the children. Opening new schools will merely not serve the purpose. The State should ensure that schools must evolve sanitation practices. The State needs first, to put much more efforts to reduce infrastructural gap and second, to induce basic facilities from the perspective of implementation of the RTE Act. The situational analysis indicates that the number of teachers and pupil teacher ratio (PTR) over the time has improved significantly but, still there are schools which do not have adequate number of teachers. Hence, the State should take decision to rationalize teacher post and should ensure that every school has adequate number of teachers as per its need. Upper Primary teachers face difficulties in teaching science and mathematics as they do not have science teachers. Therefore, appointment of teachers against all sanctioned posts is urgently needed. The poor quality of school education is a direct result of poor quality of teacher education and teacher training. A large number of untrained teachers are working in the schools. Almost all the DIETs, PTECs and B.Ed. colleges in Bihar are in a state of hibernation. The facilities available for pre-service and in-service training are inadequate in the State.

The enrolment at the primary and upper primary levels of education over the time has improved significantly. The increase in enrolment at upper primary is more substantial as compared to primary. The Gross Enrolment Ratio (GER) at the Primary level is consistent over the years. The same trend has also been observed for Net Enrolment Ratio (NER). No major gender gap is observed in the GER and NER. Further district-wise analysis reveals that many districts of Bihar the GER of girls is higher than boys. The data also reveals a substantial increase in GER at Upper Primary level over the years. It is heartening to note that the transition rate of girl children is better than that of boys. The number of out-of-school children has substantially been reduced (about 1 per cent). The GER is fraught with statistical flaws. An urgent need therefore, is to ensure the record of children properly by maintaining and updating the figures being archived. The number of out of school children (OSCC) reported is also not in line with other flow rate of indicators. However, the number of OOSC is still significant and requires specific planned intervention.

Summing up

A large-scale assessment cannot ensure quality improvement in learning unless the system is ready to reflect on the findings

and use them for improving the quality of teaching and learning processes. Thus, the State needs to carefully analyze the current learning levels of their children and understand the gap as well as reasons of it. The implementation of the RTE Act in Bihar requires a concrete planning based on the feasibility assessment of physical infrastructure, human resource engagement and inclusion of all children within the stipulated age-group of 6-14 years into the elementary education system.

References

- Bihar Education Project Council (2005-06). Annual Work Plan & Budget 2005-06, Source Monitoring Research Evaluation (MRE) Cell, BEPC, Patna
- Bihar Education Project Council (2014-15). Annual Work Plan & Budget 2014-15. Retrieved from www.bepcssa.in/en/AWP&B.php#
- Bihar Education Project Council Department of Education (2015-16). Annual Work Plan & Budget 2015-16. Retrieved from www.bepcssa.in/en/AWP&B.php#
- Bihar Education project Council Department of Education (2016-17). Annual Work Plan & Budget 2016-17. Retrieved from www.bepcssa.in/en/AWP&B.php#
- Census of India (2011). Post Enumeration Survey, retrieved from http://www.censusindia.gov.in/2011census/PCA/PCA_Highlights/pca_highlights_file/India/Chapter-1.pdf
- Kumar, M. (2017). Elementary Education in Bihar-A Situational Analysis, Unpublished Doctoral Dissertation, Department of Psychology, T M Bhagalpur University, Bihar
- National University of Educational Planning and Administration (2014-15). Elementary Education in India Progress: Towards UEE -Flash Statistics 2014-15. Retrieved from www.dise.in/Downloads/Publications/U-DISE-School Education in India-2014-15.pdf
- National University of Educational Planning and Administration (2015-16). Elementary Education in India Progress: Where Do We Stand? State Report Cards, Retrieved from http://dise.in/Downloads/Elementary-STRC-2015-16/Elementary-State_Report_Cards_2015-16.pdf
- National Council of Educational Research and Training (2012). National Achievement Survey Class V. Retrieved from www.ncert.nic.in/departments/nie/esd/pdf/NAS_5_cycle3.pdf
- National Council of Educational Research and Training (2015). What Students of Class V Can Know and Do. Retrieved from www.ncert.nic.in/programmes/NAS/NAS.html
- Right to Education Act (2009). The Right of Children to Free and Compulsory Education Act. Retrieved from http://mhrd.gov.in/sites/upload_files/mhrd/files/upload_document/rte.pdf
- Sen, A, (1999). Development as Freedom. Oxford: Oxford University Press
- Singh, C.B.P. (2017). Hindi Language Competence of KGBV Students in Bihar, Issues and Ideas in Education, 5 (2), 127-141 <https://doi.org/10.15415/iie.2017.52008>
- World Development Report. (2018). Learning: To Realize Education's Promise. Retrieved from <http://www.worldbank.org/en/publication/wdr2018>