STUDY ON CWSN AND ROLE OF INFRASTRUCTURE: STEP TOWARDS INCLUSIVE EDUCATION.

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ABSTRACT

‘Education’ is termed as the nucleus of Human Resource for any country. It highly affects the socio and economic aspects as of the country. It has a huge impact on the standard of living of the citizens of a nation or be it an overall growth of a child. These could have had been attained if a country holds a strong foundation in the field of education.

In the past intensity of time, it is noticed that, ‘inclusive growth’ and ‘inclusive education’ are terms that are being discussed among the researchers and policy-makers. Inclusive growth is a wholesome growth in a nation and more importantly to attain it, the major and prominent elements is education. Inclusive growth and inclusive education go hand in hand. Also, ever since studies have been conducted for inclusive education, CWSN have been a major area to work on.

Inclusive education is a new way to address the basic education of kids who are differently abled and require special assistance in an approach opted for the normal kids. Education of each kid is essential irrespective of any differences. In the past reign, as the focal point has had been led on ‘inclusive education’ it is being seen that the prime attention has landed on educators, policy-makers, etc. There are few initiatives that have been applied, such as: RTE Act, 2009; Persons with disabilities, 1995; Sarva Shiksha Abhiyan- and the main aim of doing so is to provide equal and fair opportunities to CWSN in the field of education.

Now as the initiatives are being mentioned, it is important to put forward that under Right to Education Act, 2009 the administration/state has made acquiring elementary education as a primary right of each and every child. This could be considered as a stepping stone towards developing and making India a spirited nation. Having said that, it also talks about and mentions the importance of equal and all vital facilities to kids who are differently abled (CWSN). This contributes in letting their inner potentials out.
A CWSN might need certain facilities to complement their easy-going education journey. Therefore, following study conducted aims to examine the part of infrastructural facilities such as: trained teachers for better proficiency of such children, ramps for mobility in campus, drinking water, special toilets- on the enrolment of CWSN in schools. The study focuses on infrastructure influencing the educational life of CWSN and thus contributing towards inclusive education.

Key words: Inclusive education, infrastructure, Children with Special Needs (CWSN), policy.

CHAPTER- 1

Introduction

Broadly ‘education’ can be described as an activity of transmitting a set of knowledge by a human group to another. Education is considered as a lifelong criterion which a person acquires at levels/steps of a person’s life span. This process holds a positive impact on an individual’s personality and drives towards bringing a social change.

It is important to keep in notice that all the children have the right to get educated irrespective of any disability or discrimination. Now a days, inclusion of every child has led to increase the potential of children on a large scale and secure their right towards attaining proper education. ‘Inclusion’ has been connected to education in the term - “inclusive education” which is an important element to move towards “inclusive growth”.

Inclusive education basically focuses on educating every child without any discrimination. Moreover, inclusion is a primary right of any human and should not be termed a privilege. It offers a new approach for involvement of kids who are differently abled with normal children in same institutions. Inclusive education has been set out as ways that magnifies the learning needs of differently abled kids. Hence, it is rightly said that “inclusive education is not an experiment which is to be tested but a value to be followed”.

Over the years, the state has also been focusing on inclusive education and hence has come up with schemes which contribute towards the same. ‘Sarva Shiksha Abhiyan’: which has a main objective towards universalization of elementary education and ‘Samagra Shiksha Abhiyan’: which is actually an amalgamation of the scheme Sarva Shiksha Abhiyan however it bring much more prominent sight towards Children with Special Needs, are the schemes which talk about inclusive education, barrier free education and most importantly with special mention to CWSN.

Various factual studies have had come up with a statement that, investment in the education sector tends to fasten growth of various sectors in the economy. It happens to provide better economic returns when it comes to education sector. Moreover, development of an educational institutes is associated to factors such as: infrastructure, furniture, working environment etc. In addition to this, a barrier free education could be imparted if suitable facilities are being available for all.
Moreover, there is a basic saying that a good quality and consistent education and most specifically the ration of enrollment of kids are highly dependent of the infrastructural quality and atmosphere prevailing in the institution. The major infrastructural necessities which are essential for a barrier free and healthy educational system are: toilets, buildings, libraries, faculty standards, boundary walls, play grounds, water. (Gouri sankar Bhunia, Parvat Kumar Shit, Soumen Duary, 2012).

Considering the above information, the basic motive of the study is not just to study the elements of infrastructure but also to establish a relationship between the enrolment ratio of CWSN and the infrastructure. The investigation has been directed to analyse how far can infrastructure impact the enrolment ratio of differently abled kids.

CHAPTER-2

India and Inclusive Education

The fundamental human right constitutes inclusive education. It could be put into words as a way to full fill the learning requirements of differently abled kids. Moreover, the government have had been complementing enough to make a better place of receiving education and learning, for children with disabilities. 1974, was the year when the centre initiated IEDC (Integrated Education for Disabled Children). This scheme was brought into the picture to provide equal opportunities to CWSN in the schools. Turning back some more pages, back in 1986, government came up with National Educational Policy, which had a special mention for differently abled children with respect to their equal participation in all fields with the normal children. In 1987, National Council of Educational Research & Training i.e NCERT got together with UNICEF in order to launch a project named: Project Integrated Education for Disabled Children (PIED). This was launched with a motive to integrate disabled children in normal schools.

The National Curriculum Framework of 2005, stated a clear picture regarding inclusive education and its importance. Furthermore, the most recent upgradation for CWSN has had been under Sarva Shiksha Abhiyan and Samgra Shiksha Abhiyan. Sarva Shiksha Abhiyan adopts the zero-rejection policy. SSA has been working over a broad field of inclusive education for CWSN, a multi option model is being implemented.

Education of differently abled kids had been a prominent part of policy making and development in India in the past era and carry on the same in the coming years. The concern of the state with respect to differently abled kids and their inclusive education have been reflected in the policy making and implementations.

We see the efforts being made in a view of equal involvement of these ‘special children’ and inclusive education, nationally and on international platform as well. To achieve the aim of ‘inclusive education’ it has become a prime concern that these special children are being incorporated in an orderly and barrier free environment. Researchers have stated in studies that students tend to be productive in a normal environment with a general syllabus. In Studies it has been seen that children perform well in academics when placed in
an inclusive atmosphere. Hence, to develop a productive and skill full youth it is important to focus more on inclusive education.

CHAPTER – 3

Research Methodology

‘Education’ has been named as a crucial factor for deciding the social evolution and the economic growth of a nation. Moreover, it plays a decisive factor in living conditions of households and basic food necessities. Studies list that investing into the elementary education accelerates the efficiency in majorly all the sectors in the economy (Gouri Sankar Bhunia, Parvat Kumar Shit, Soumen Duary, 2012).

‘Right to Education Act’ 2009 holds a prominent role in letting India emerge as a spirited nation as it makes elementary education a fundamental right for every child. This act mentions that, every child deserves access to all the necessary schooling facilities, more specifically including Children with Special Needs (CWSN). It focuses on quality education which is accessible by all (Dr. Talmeez Fatma Naqvi, Dr. Mohammad Ahsan, 2019).

The growth although depends on various factors, however, one of the factors is the infrastructure availability in an educational institute. School infrastructure plays an important role when it comes to quality education. School infrastructure include: buildings, basic facilities (toilets, water etc.), equipment which help in learning; if these necessities are not met then it builds a huge gap in effective and quality education (Gouri Sankar Bhunia, Parvat Kumar Shit, Soumen Duary, 2012). Children who require special needs (CWSN) should be provided with special education in special schools which are made for them. These schools should provide facilities which could meet their needs (Komalalakshmi Jayaraman, 2020).

The schools which have targeted to move towards inclusive education of differently abled children must have special educators or teachers for a better understanding and quality education of such students. Moreover, these educators must include qualities such as: they should be well organised, optimistic, patience, loving, caring, creative etc. so that students feel comfortable around them. Trained teachers contribute in interesting learning. Learning should not persist as a tiring task rather it should be an adventurous and enjoyable educational journey for every student (Komalalakshmi Jayaraman, 2020).

This is of prime significance, especially in case of CWSN in view of appropriate supervision and instructions. The quality of teaching staff could have a prominent impact on the emotional, social welfare of a children with special need (Sandhya Limaye,2016). RTE act has rules compiled which works over providing in service or pre service teachers training for a better quality staff (Richa Bhutani, Radhika M. Alkazi). Drinking water is another important factor which lies in the domain of infrastructural development (Gouri Sankar Bhunia, Parvat Kumar Shit, Soumen Duary, 2012).

Toilets are the essentials part when it comes to infrastructure. Building toilets in schools brings change in school compounds and contributes to hygiene. Moreover, if proper toilets are built there is lesser deterioration in the attendance of students (Gouri Sankar Bhunia, Parvat Kumar Shit, Soumen Duary, 2012).
The kids who require special assistance, who are children with special needs, it is important that for their well-being and to maintain a friendly environment the institutions must fuse ‘ramps’ in the infrastructural provisions (Gouri Sankar Bhunia, Parvat Kumar Shit, Soumen Duary, 2012).

As per Samagra Shiksha Abhiyan, in order to provide quality, barrier free education to children with the need of different necessities, the schools must adhere with respect to the availability of special toilets, ramps in the building for such kids. Such infrastructural developments support the education of CWSN (Richa Bhutani, Radhika M. Alkazi).

Considering the above information and dynamics, a clear study has been conducted to understand the role of infrastructure in the enrolment of differently abled kids or CWSN in schools. Being enrolled in a school and going there on daily basis and not being able access/get proper facilities such as toilets, water, decent building infrastructure could be frustrating for children. This could impact their willingness to come to school and attain education. Furthermore, in case of CWSN it becomes of prime importance that the schools are built in a manner which is very much the environment is of friendly nature to them and they are at ease.

Thereby, in accordance to the above literature review infrastructure is stated as one of the major factors influencing the education of differently abled kids. Therefore, the study tries to analyse the relationship between infrastructural requirements and educational standards of specially abled kids. The variables henceforth identified to judge the level of education among differently abled kids is the ‘enrollment of CWSN’.

Moreover, the writing proposes that the enrolment of CWSN is majorly affected by ‘infrastructural development’. In the domain of infrastructure some elements have been took for the research: construction of ‘special toilets’ for CWSN, availability of ‘trained teachers’, availability of ‘drinking water’ and provision of ‘ramps’ in the construction for easy movement of CWSN during their educational ride. Hence, the regression model which is formed considering the variables is:

\[ Y = c + b1X1 + b2X2 + b3X3 + b4X4 \]

Where:

- \( Y \) = Enrollment of CWSN
- \( X1 \) = Toilets for CWSN
- \( X2 \) = Trained Teachers
- \( X3 \) = Facility of Drinking water
- \( X4 \) = Facility of Ramps.

The statistics incorporated in the study is a cross sectional data, of the year 2018-19. It’s a state & UTs wise data which is picked up from ‘Department of school education and literacy-Ministry of Education’.
The tools incorporated to analyse is OLS which is - ‘Linear Regression’ method. Linear regression, is a test which is utilized to build up a solid connection between the dependent and the independent factors looked over the examination. It makes a further relapse condition which can be utilized for expanding the exploration and concentrate by the examiner. It accepts that the factors taken by the analyst are known to him/her. Another method applied for analysis is ‘correlation’. It is a multivariate examination, where numerous relations between different factors are analysed all the while.

CHAPTER- 4

DATA ANALYSIS

This Chapter about analyzing and then interpreting the entire research work and coming out with the impactful outcome. The Chapter surrounds the research in a view to bring out the objectives of the research. The ultimate motive of our research work is to determine the role of infrastructure on the education of specially abled children. The analysis is done with the help of statistical tools which is derived out of the data given below (Table1).

Table 1: (cross-sectional data of year 2018-19)

<table>
<thead>
<tr>
<th>State/UT</th>
<th>CWSN ENROLLMENT</th>
<th>CWSN Toilets</th>
<th>trained teachers</th>
<th>Drinking water</th>
<th>Ramp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andaman &amp; Nicobar Islands</td>
<td>502</td>
<td>82</td>
<td>129</td>
<td>413</td>
<td>196</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>102249</td>
<td>1575</td>
<td>6219</td>
<td>49254</td>
<td>24006</td>
</tr>
<tr>
<td>Arunachal Pradesh</td>
<td>2641</td>
<td>192</td>
<td>566</td>
<td>1982</td>
<td>774</td>
</tr>
<tr>
<td>Assam</td>
<td>65430</td>
<td>8621</td>
<td>10949</td>
<td>57065</td>
<td>37291</td>
</tr>
<tr>
<td>Bihar</td>
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<td>9072</td>
<td>11217</td>
<td>87398</td>
<td>62514</td>
</tr>
<tr>
<td>Chandigarh</td>
<td>4802</td>
<td>137</td>
<td>847</td>
<td>229</td>
<td>163</td>
</tr>
<tr>
<td>Chhattisgarh</td>
<td>43087</td>
<td>25945</td>
<td>9102</td>
<td>50046</td>
<td>35694</td>
</tr>
<tr>
<td>Dadra &amp; Nagar Haveli</td>
<td>2187</td>
<td>242</td>
<td>95</td>
<td>346</td>
<td>286</td>
</tr>
<tr>
<td>Daman &amp; Diu</td>
<td>157</td>
<td>65</td>
<td>112</td>
<td>140</td>
<td>113</td>
</tr>
<tr>
<td>Delhi</td>
<td>24936</td>
<td>5011</td>
<td>6498</td>
<td>5703</td>
<td>4240</td>
</tr>
<tr>
<td>Goa</td>
<td>2062</td>
<td>54</td>
<td>691</td>
<td>1486</td>
<td>801</td>
</tr>
<tr>
<td>Gujarat</td>
<td>100510</td>
<td>6811</td>
<td>24657</td>
<td>54573</td>
<td>44129</td>
</tr>
<tr>
<td>Haryana</td>
<td>30899</td>
<td>6163</td>
<td>4935</td>
<td>23453</td>
<td>14836</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>9476</td>
<td>4011</td>
<td>3082</td>
<td>18134</td>
<td>12255</td>
</tr>
<tr>
<td>Jammu And Kashmir</td>
<td>27949</td>
<td>962</td>
<td>2030</td>
<td>27925</td>
<td>10120</td>
</tr>
</tbody>
</table>
Considering the above-mentioned data set I employ a multiple regression model. The regression results have laid down in the following summary output table (Table 2) which includes all the independent variables incorporated - the enrolment of CWSN, special toilets for CWSN, trained teachers for their convenience, drinking water facility and most importantly facility of ramps- which together constitute as the infrastructure.

**Table 2:**

**SUMMARY OUTPUT**

<table>
<thead>
<tr>
<th>Regression Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>0.879558265</td>
</tr>
<tr>
<td>R Square</td>
<td><strong>0.773622741</strong></td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.744412772</td>
</tr>
<tr>
<td>Standard Error</td>
<td>37282.97867</td>
</tr>
<tr>
<td>Observations</td>
<td>36</td>
</tr>
</tbody>
</table>

*Department of school education and learning, Ministry of Education (2018-19)*
The analysis performed is based on the interaction of the enrolment of CWSN with the rest of the independent variables. In view of the obtained results by applying multiple linear regression, the ultimate regression equation comes out to be:

$$0.773622741 = 13719.6856 + 2.138084258 \times X_1 + 0.39015323 \times X_2 + (-1.18167543) \times X_3 + 2.639067627 \times X_4$$

Overall, the result of the analysis reflects that a significant relationship has only been established for toilets for CWSN, trained teachers and ramps with that of enrolment of CWSN. This could be figured out that, as the P-value<0.05 of all these three variables. This reflects that any change in the provision of toilets or of trained teachers or construction of ramps will have a significant impact on the enrolment ratio of differently abled kids. Hence, it comes out that all these variables play an important role in making the enrolment of CWSN much better. Although, talking about the other side, the variable ‘drinking water’ doesn’t show a significant influence (P value= 0.186293679; >0.05).

However, to consider the direction of relationship of the ‘independent variables’ with the ‘dependent variable’ (enrolment of CWSN), we opted to go for correlation analysis as well. The results are in the following table (Table 3).
After, performing correlation analysis we got to realize that every one of the factors had a positive correlation with that of CWSN’s enrolment. This implies that if any independent variable increases this will make the enrolment of CWSN to rise as well (vice-versa). Moreover, the drinking water also holds a positive relationship with enrolment of CWSN.

CHAPTER-5

CONCLUSION

While we conclude our study, it is important to mention that ‘inclusive education’ aims at development of each and every child whether normal or with disabilities. Education has been stated as one of the prominent instruments to curb inequality and move towards development. Moreover, ‘Prof. Amartya Sen’ who is a Nobel awardee, he had emphasized on sustainability and stated that “even the poorest of poor should be provided proper education”. Hence, its ubiquitous and valuable provision is of prime importance for every country today.

This study explores the domain in terms of especially abled kids and the quality education that these children deserve. Here, we have had mentioned certain government interventions: Samagra Shiksha Abhiyan and Sarva shiksha Abhiyan, how they have been working towards inclusive education and making things better for differently abled kids. Nevertheless, there are challenges which government faces in the enactment which might fade off, provided there are joint efforts of state and the centre; this is crucial to bring a difference in the system.

The main focus of our research was, to establish a relationship between CWSN’s enrolment ratio and certain elements related with the infrastructural availability in schools for these children. The principal concern has been how much the infrastructure affects the enrolment of CWSN. Our results show up a recommendation that, infrastructure such as: ‘trained teachers’, ‘special toilets’, ‘Ramps’ and ‘drinking water’ facility- have certainly a direct relation with enrolment, which says that if these facilities are improved then definitely enrolment in schools will improve as well.

Furthermore, rest of the factors have a significant impact on enrolment except the drinking water. This might be because drinking water plays a comparatively less association with academic performance (Divyanshi Wadhwa, April 2016). However, it is required to develop a friendly atmosphere for CWSN so as to enhance their participation in schools. This is feasible if quality and barrier free education is being imparted in
schools and hence, infrastructure plays an important role. Thus, we can say that ‘inclusion’ has helped these kids get quality education.

CHAPTER-6

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