



**Learning Assessment of Children
with Visual Impairment and
Knowledge Attitude and Practices
of Teachers Under Sambalam Project**

Supported by:



Initiative by:



Foreword



Sightsavers India envisions a society where children with disabilities (CwDs), in particular children with visual impairment (CVI) can easily access quality education in mainstream schools. Most of the children are from vulnerable communities living in rural areas and in urban slums. In the last few years, because of intensive efforts of the government and NGOs, the number of children with visual impairment, identified and registered in government as well as private schools has shown a phenomenal increase. Although the number of visually impaired children identified and enrolled in schools has increased, the desired holistic development is not taking place and retention is an increasing problem.

Sightsavers India implemented 'Project Sambalam – Inclusive education for CVI' in three states of India i.e., Bihar, Rajasthan, and West Bengal with support from the HCL Foundation under the leadership of respective state governments. This project provisions the availability of assistive devices, accessible educational materials and IT infrastructure accessibility for CVIs. It also provides hands-on training and strengthens the capacity of resource teachers and general teachers working under Samagra Siksha. Information and Communication Technology (ICT) facilitates the CVIs to receive required information and access education materials in the format that they can perceive and prefer. And it is an added advantage, if the teachers are trained on these devices and on inclusive pedagogy to support children with visual impairment in their study.

This report presents two major findings. First on the learning assessment (LA) of CVIs and the second is on Knowledge, Practice and Attitude (KAP) of teachers. Learning assessment is based on ICT support, services offered to CVIs at Digital Learning Empowerment Centres (DLEC) and at schools, which enabled them to access digital gadgets and use learning applications, whereas KAP assessment is based on the training of teachers on inclusive pedagogy who can further provide support to children with disabilities in a mainstream education system. The findings will be helpful to explore how CVIs were engaged with digital technologies and how the system can be strengthened by building capacity of teachers/ resource teachers to support CVIs education and improve their learning vis-à-vis direct and indirect outcomes of the project.

I congratulate everyone who has contributed to this report.

A handwritten signature in black ink, appearing to read 'RN Mohanty'.

RN Mohanty,
CEO, Sightsavers India

Acknowledgement

We are highly grateful to HCL Foundation for supporting the five year Sambalam project for the educational empowerment of children with Visual Impairment and children with other disabilities in 5 districts of 3 states.

We would like to express our gratitude to the Director Programme, Sightsavers India, team of 'Project Sambalam', including the National Programme and Programme Performance, Research and Learning Team, Area Directors, Finance Team, State Programme Leads and Project Officers for providing necessary project context, technical inputs, and logistics for conducting learning outcome assessment. Additionally, the state consultants and Project Staffs from intervention States/ Districts for supporting data collection and documenting observations.

We are especially thankful to State Project Director of Samagra Siksha, State Programme Officer of Inclusive Education under Samagra Siksha, District and Block level education officials of project intervention areas for their continuous support.

We are also thankful to School Administrators, Resource Teachers, and Teachers of Government Schools where children with visual impairment (CVI) are studying.

We are indeed grateful to the parents and guardians of CVI and all stakeholders who were directly or indirectly involved and provided their support.

The data entry, analysis of data and report writing is done by [Market Xcel Data Matrix Pvt Ltd.](#)

Abbreviations and Acronyms

CVI	Children with visual impairment
CwSN	Children with Special Needs
HDI	Human Development Index
ICT	Information and Communication Technology
IE	Inclusive Education
LA	Learning Assessment
KAP	Knowledge, Attitude and Practices
CAPI	Computer Assisted Personal Interview
MoE	Ministry of Education
NCERT	National Council of Educational Research and Training
NEP	National Education Policy
NGO	Non-governmental organization
PWD	Persons with Disability
RMSA	Rashtriya Madhyamik Shiksha Abhiyan
RPWD	Rights of Persons with Disability
RTE	Resource Teacher
SDG	Sustainable Development Goal
SSA	Sarva Shiksha Abhiyan

Table of Contents

Foreword.....	2
Acknowledgement	3
Abbreviations and Acronyms	4
List of Figures.....	7
List of Tables	7
Executive Summary	8
Chapter 1: Background	10
1.1 Inclusive Education: A New Approach of Education System	10
1.2 Disability Inclusive Education System	11
1.3 Significance of Inclusive Education among Visual Impaired Children	12
Chapter 2: Project Sambalam- Inclusive education for Children with Visually Impairment.....	14
2.1 About the Project	14
2.2 Intervention Detail	14
2.3 Overall Objective of the Sambalam Project	15
2.4 Intervention Geography	16
2.5 Intervention Target Group.....	16
Chapter 3: Research Design.....	17
3.1.1 Study Purpose and Scope	17
3.1.2 Study Objective	17
3.1.3 Assessment Framework.....	17
3.2 Data and Methods.....	18
3.2.1 Mixed Methods Approach	18
3.2.2 Sampling Procedure.....	19
3.2.3 Data Collection Tool	20
3.2.4 Training	21
3.2.5 Data Quality Mechanism	21
3.2.6 Field Implementation	21
3.2.7 Ethical Guidelines	21
3.2.8 Analysis Plan	22
Chapter 4: Effectiveness of Information Communication & Technology towards improving the learning level of Children with Visual Impairment.....	23
4.1 Introduction	23
4.2 Socio- Economic Characteristics.....	23
Figure 2: Economic profile of CVI assessed across intervention area during the baseline and endline study.....	24
4.3 Utilization of ICT among Blind and Low Vision Categories of Visual Impairment	24

The present section captures the accessibility of educational and non-educational support and services in the project interventions provided by the Sightsavers project team for CVI.	24
Figure 3.1 & 3.2-Accessibility of non-educational services among Blind and Low Vision Children across intervention area during the baseline and endline study	25
Figure 4.1- Accessibility of assistive educational materials by Bind children across intervention area during the baseline and endline study	26
Figure 4.2- Accessibility of assistive educational materials by Low Vision children across intervention area during the baseline and endline study	27
4.3 Effect of Sambalam Project Intervention in Improving Learning Outcomes	27
Chapter 5: Impact of the Capacity Building Intervention in Improving the Knowledge, Attitude, and Practices amongst the Teachers	30
5.1 Introduction	30
5.2 Socio-Demographic and Economic Characteristics	30
5.3 Information on Inclusive Education	31
5.4 Changes in Perspective and Attitude on Inclusive Education	33
5.5 Feedback of Teachers Regarding Receipt of Training, Quality of Education, Methods, and Techniques of Training.....	35
Chapter 6: Impact of Sambalam project in Inclusive Education System: Insights from State and District-level Stakeholders	37
6.1 Perception about Inclusive Education.....	37
6.2 Importance of Program and Policies for Promoting Inclusive Education	37
6.3 Perception about Special Classroom Setting within General School	38
6.4 Key Components of Sambalam Program.....	39
6.5 Impact of Sambalam Program in Promoting Inclusive Education System.....	40
Chapter 7: Conclusion.....	41
Chapter 8: Way Forward.....	42
Annexures	44
Table 1: Demographic Characteristics of CVI assessed across intervention area during the baseline and endline study.....	44
Table 2: Economic profile of CVI assessed across intervention area during the baseline and endline study.....	44
Table 5- Accessibility of assistive educational materials by category of visual impairment children across intervention area during the baseline and endline study	44
Table 4-Accessability of non-educational services by category of visual impairment children across intervention area during the baseline and endline study	45

List of Figures

Figure 1: Project Intervention Area

Figure 2: Demographic Characteristics of CVI assessed across intervention area during the baseline and endline study.

Figure 3: Economic profile of CVI assessed across intervention area during the baseline and endline study.

Figure 3.1 & 3.2: Accessibility of non-educational services among Blind and Low Vision Children across intervention area during the baseline and endline study

Figure 4.1: Accessibility of assistive educational materials by CVI children across intervention area during the baseline and endline study

Figure 4.2: Accessibility of assistive educational materials by Low Vision children across intervention area during the baseline and endline study

Figure 5: Percentage changes regarding knowledge on inclusive education among teachers across intervention states

Figure 6: Percentage change of teacher's towards "Children with Disabilities should change themselves as per the school and curriculum.

Figure 7: Percentage changes regarding teachers' perception about importance of inclusive education within CwSN across intervention states

Figure 8: Percentage Changes in teachers' perspective about importance of inclusive education for CwSN across intervention states

Figure 9: Training satisfaction towards inclusive education training services provided under Sambalam

List of Tables

Table 1: Evaluation Framework

Table 2: Quantitative and Qualitative Sample Distribution across States

Table 3-Percentage sample distribution by category of visual impairment children across intervention area during the baseline and endline study

Table 4- Regional and English Language Proficiency and Numeric Skill of visually impaired children across intervention area during the baseline and endline study

Table 5: Age distribution of teachers assessed across intervention area during baseline and endline study.

Table 6: Distribution of teachers assessed across intervention area during baseline and endline study according to their working years of experience.

Table 7- Distribution of teachers assessed across intervention area during baseline and endline study according to their Educational Qualification

Table 8- Receipt of Training and Name of Organization/Institution/Department who provided the training across intervention states.

Executive Summary

Inclusive education (IE) addresses the diverse needs of all learners by reducing the barriers inside the education system.¹ However, inclusive education is, widely associated with providing equal learning opportunities to all those groups which were traditionally separated. Within the concept of 'inclusive education Children with Special Needs are also included.

India's National Education Policy, 2020 (NEP, 2020) has emphasized on the development of creative potential of everyone with the aim to provide universal access to quality education for all. The 2030 Agenda for the Sustainable Development Goals states has to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all". Fulfilment of such mandate requires reconfiguration of the existing education system. The Ministry of Education (MoE), Government of India (GoI) has launched 'Samagra Shiksha' that envisions to ensure inclusive and equitable quality education from pre-school to senior secondary stage across the country with the aim to contribute to the achievement of global sustainable development goals on education. Overall, these policies and acts have helped to improve access to quality education for children with disabilities in India.

Despite these efforts, there are still challenges to the implementation of inclusive education in India. One of the major challenges is the lack of infrastructure and resources to support inclusive education. Many schools in India are not equipped to accommodate students with disabilities, and there is a shortage of trained teachers and specialized support staff to provide the necessary assistance to these students. Another challenge is the social stigma attached to disability, which can make it difficult for children with disabilities to be accepted and included in mainstream schools.

To address this issue, Royal Commonwealth Society for the Blind (Sightsavers India) is working together with HCL Foundation since 2018 for the implementation of 'Project Sambalam – Inclusive education for children with visual impairment' in three states of India i.e., **Bihar, Rajasthan, and West Bengal**. HCL Foundation has supported this intervention that broadly provisions for skills training and development of education management and leadership amongst teachers.

The project broadly aims to mainstream all Children with Visual Impairment (CVI) so that they can receive a quality education within the universal education system. The key focus areas under the project were to provide capacity building training to teachers on inclusive education, enhance the learning levels of children through usage of information and communication technology (ICT) as a critical medium to bridge the existing learning gap and strengthening 'Block Level Resource Centers'(BRCs)' established by State Education Department, Government of India.

After five years of the project implementation, an end-term evaluation has been conducted to review the achievements of the project against objectives and outputs.

The programme focused on ICT interventions to support and uplift learning practices among the CVI. So as to fulfil the objectives, Sightsavers India aided braille kits and other educational materials to visually impaired students, as well as trained and supported them to use ICT devices and software effectively. Additionally, Sightsavers India aimed to roll out capacity building programme for special educators and general teachers at the government schools and successfully organized training programmes for the selected teachers in these states on IE in two different phases.

This report provides comparative analysis of demographic and socio-economic characteristics of children and teachers who were assessed to get an insight of the effectiveness of Sambalam project during the baseline and endline survey.

¹ Mitchell, D. (2015). Inclusive education is a multi-faceted concept. *Center for Educational Policy Studies Journal*, 5(1), 9-30.

Overall, project findings yielded significant achievements in terms of a positive impact on the learning of children using ICT materials. The overall performance indicator table reflects that almost two-fold increment was labelled as good performance category of overall learning level. Present assessment has also shown improvements with respect to the reading of local and English languages, comprehension capacity of the English words and sentences as well as arithmetic skills. Sambalam project mitigates the challenges to accessing assistive educational materials for children with visual impairment in study area. These technologies further helped to bridge the learning gaps by providing alternative ways to access information and interact with learning materials. Additionally, the report found that the ICT intervention has significantly resulted in improving the local and English languages proficiency as well as arithmetic skills of CVI.

Moreover, the endline findings yielded positive results in terms of giving the first opportunity to many regular teachers to know about IE and necessary skills and pedagogy to teach the CwSN in general schools along with others. The survey findings show that the intervention by Sightsavers has been exponentially beneficial in creating positive attitude and awareness about nature and needs of CWSN among special educators and general teachers and improving the learning levels of CVI through utilization of technology and ICT.

However, it is essential to note the contributing factors that went into making the program a success – a vigilant monitoring structure, liaising with government departments, getting the community onboard with the proposed changes, and finally the level of intervention techniques specific to the stakeholders. To move into the future, replicability or scaling up of the project – focus on the key facets that made this intervention successful would have to unequivocally be given.

Chapter 1: Background

1.1 Inclusive Education: A New Approach of Education System

Education is one of the three indicators of Human Development Indicators (HDI). It is an important contributor in development of a nation. Today's educated youth is important asset for tomorrow, keeping in mind the goal is to build up a sound economic condition for future eras. These youthful people have the potential not just to upgrade the nation's economic capacity, but also make an economic impact and place social pressure on the society. In that sense, as a determinant of the human capital, education is one of the key variables for the country. "Investment in education is incurred in two domains: individual and institutional. Together they constitute the social domain".²

Imparting education is no doubt important but along with that access to quality education also matters. In today's world education might have got accessible, but accessibility of quality education is still beyond its benchmark. Quality education is beyond books and classroom that includes quality teaching and learning materials, continuous professional development, and the establishment of safe and supportive quality learning environments.³ It will further ensure the acquisition of knowledge and skills that enables individuals to increase their productivity and to improve their livelihoods.

In 2012, the United Nations involved 'Quality Education as a part of their Sustainable Development Goals. Quality education is a critical indication of progress and a major factor in well-being. Out of 17 SDGs of the United Nations, the 4th goal is about Quality Education. It aims to ensure inclusive, equitable quality education and promote lifelong learning opportunities for all by 2030. The UNs Sustainable Development Goals establish specific requirements for increasing educational quality and protecting the well-being of children. UN's agenda for Sustainable Development Goal 4 which aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" was adopted in India in 2015.⁴

The Indian education landscape is replete with several central and state-level education schemes aimed at helping the country attain the desired education goals. Samagra Shiksha (subsuming Sarva Shiksha Abhiyan, Rashtriya Madhyamik Shiksha Abhiyan and Teacher Education), the Mid-Day Meal Scheme, Integrated Child Development Services (ICDS), Rashtriya Uchchatar Shiksha Abhiyan (RUSA), Pradhan Mantri Kaushal Vikas Yojana (PMKVY), National Skill Development Corporation, Udaan, Standard Training Assessment and Reward (STAR), Saakshar Bharat, National Service Scheme (NSS) and the Centrally Sponsored Scheme for Teacher Education are some of the key national schemes helping achieve specific SDG 4 targets corresponding to early childhood, school, higher and tertiary education. They are further supported by schemes undertaken by state governments. Furthermore, the recently released National Education Policy 2020 acts as an overarching policy providing the overall direction in meeting various education objectives. It emphasises on quality education, universal access to education, equitable quality education and lifelong learning, all of which are the basic tenets of the SDG 4 agenda.⁵

Inclusive education is a continuous process of educational transformation, and a clear set of equity indicators – such as from UNESCO (2017) – can support inclusive education implementation. Measuring

² Tilak, J. B. (2002). *Determinants of household expenditure on education in rural India* (No. 88). New Delhi: National Council of Applied Economic Research.

³ Brainard, P. C. Factors Affecting Quality Teaching and Learning Outcomes in Teacher Education in Sierra Leone.

⁴ Bhalla, R. (2022). A review paper on the role of sentiment analysis in quality education. *SN Computer Science*, 3(6), 469.

⁵ Karpagam, K., & KALA, M. (2022). *EDUCATION POLICY*. Ashok Yakkaldevi

the success of inclusive education should go beyond merely counting students to evaluate access, but should include measures of educational quality, outcomes, and experiences.⁶ Inclusive education (IE) address the diverse needs of all learners by reducing the barriers inside the education system.⁷ However, inclusive education has been, and still is, widely associated with the inclusion of people with disabilities, and with the concept of 'special educational needs'. The root cause behind exclusion were mandatory medical assessment, physical inaccessibility, discriminatory attitudes of school staff, and lack of adequate training for teachers and school principals in inclusive education methods.⁸ Inclusive education system have lobbied to ensure that all human rights instruments specifically mention people with disabilities and emphasise their right to education, whatever the extent or nature of their impairments.

1.2 Disability Inclusive Education System

Disability is present in every race, ethnicity, gender, sexual orientation, age, and religion. There are an estimated 650 million people with disabilities (PwD) in the Asia-Pacific region (65% of the total global disability population), The United Nations (UN) Convention on the Rights of Persons with Disabilities (CRPD) recognizes that "disability is an evolving concept that results from the interaction between persons with impairments and attitudinal and environmental barriers that hinder their full active participation in society on an equal basis with others".⁹ These person often face conditions of extreme poverty, exclusion, and discrimination and are denied the basic services offered to their peers without disabilities. The United Nations Children's Fund (UNICEF) estimates that 90 percent of children with disabilities in low-income countries have never received any form of education¹⁰.

Therefore, in May 2012, a separate Department of Empowerment of Persons with Disabilities (Divyangjan) (DEPWD) under Ministry of Social Justice & Empowerment was set up. This department aimed to empower Persons with Disabilities, through its various Acts/ Institutions/Organizations and Schemes for rehabilitation and to create an enabling environment that provides such persons with equal opportunities, protection of their rights and enables them to participate as independent and productive members of society.

The department empowered persons with disabilities through inter-disciplinary process, covering various aspects namely- prevention, early detection, intervention, education, health, vocational training, rehabilitation, and social integration. Out of all inter-disciplinary processes, education is the most effective vehicle of social and economic empowerment. In line with this the Government has launched Samagra Shiksha in 2018 to improve school effectiveness in terms of equal opportunities, and equitable learning outcomes and aims to 'enable all children and young persons with disabilities to have access to inclusive education and improve their enrolment, retention and achievement in the general education system'. Recently, National Education Policy, 2020 also aims to achieve inclusive and equitable education system so that all children have equal opportunity to learn and thrive, and so that participation and learning outcomes are equalized across all genders and social categories by 2030.¹¹ These programs have been effective for all 21 government listed categories of disability. However, in this report we are aiming

⁶ UNESCO, A. (2017). A guide for ensuring inclusion and equity in education. *Geneva: UNESCO IBE*. <https://unesd oc. unesc o. org/ark:/48223/pf000, 2482, 54>.

⁷ Mitchell, D. (2015). Inclusive education is a multi-faceted concept. *Center for Educational Policy Studies Journal*, 5(1), 9-30.

⁸ Stubbs, S. (2008). Inclusive education. *Where there are few resources*. Oslo, *The Atlas Alliance Publ*.

⁹ United Nations. Convention on the rights of persons with disabilities. 2006 [cited 2014 Oct 10]; Available from: <http://www2.ohchr.org/english/law/disabilities-convention.htm>.

¹⁰ Unicef. (2014). Global initiative on out-of-school children: South Asia regional study, covering Bangladesh, India, Pakistan, and Sri Lanka. *Retrieved March 22, 2015*.

¹¹ Pathak, R. (2021). National Education Policy 2020: Can it improve Faculty Motivation and Academic Outcomes in India. *International Research Journal of Modernization in Engineering Technology and Science*, 3(4), 573-579.

for understanding the governmental and non-governmental approaches to ensure full inclusion of Visual Impaired Children in mainstream education system.

1.3 Significance of Inclusive Education among Visual Impaired Children

Visual impairments refer to any degree of impairment to a person's ability to see that affects his or her daily life.¹²

Visual Impairment seriously interferes with the quality of life of the person with visual impairment, especially in developing countries where public facilities are not equipped for the physically abled children.

Children with visual impairment who lack access to vision correction are often at a disadvantage in terms of school enrolment, educational attainment, and learning. When visual impairment is severe, children may never enrol in school or drop out. In low-income countries, schoolwork focuses on teachers and information written on blackboards, which puts children with uncorrected vision impairment at a disadvantage. In addition, even children with minor vision problems can have difficulty seeing the blackboard clearly because many classrooms do not have adequate lighting or electricity, so that dark rooms exacerbate the problem.¹³ Therefore, education of visually impaired students has been a problematic issue for governments in terms of providing an adequate educational environment, competent educational personnel, and appropriate teaching material.

However, in a country as vast as India with a nine million blind persons, with an estimated 30 percent being children of school age, it will be almost impossible to have sufficient schools solely for blind children in the country, many of whom reside in rural areas.¹⁴ Therefore, it is advisable that as many blind children as possible be sent to general schools. A concept of teaching is being promoted as inclusive education where visually impaired children attend a regular school in their home community where they study in the regular classroom with regular teachers but receive extra help or "support services" from a special education teacher who has been trained to work with visually impaired children.¹⁵

However, these students still experience academic challenges with regards to reading, writing, speaking, lack of knowledge, information, ineffective teaching methods, lack of resources, lack of teacher's collaborations and rigid curriculum. These challenges can be resolved with effective communication skill, making appropriate use of technology and use of assistive device.¹⁶ However, there are limited assistive devices and teaching learning materials to provide reading, writing and idea development support to visually impaired students. Therefore, Information communication and technology (ICT) have been playing a crucial role to access the curriculum, supports learning, and creates a stage for disabled trainers to advance their skills. ICT plays a remarkable part in teaching visually impaired learners in the classroom.¹⁷

With this change in perspective and approach, has also emerged the need to understand the customized requirements of children with disabilities and methods to address them equitably in the classroom. Addressing the individual needs in a common classroom implies all students, with or without disabilities

¹² Peterson, P. L., Baker, E., & McGaw, B. (2010). *International encyclopedia of education*. Elsevier Ltd..

¹³ Male, C., & Wodon, Q. (2017). The price of exclusion: Disability and education. *Disability gaps in educational attainment and literacy*. Washington DC: The World Bank.

¹⁴ Fazelbhoj, R. S. (1989). Integrated education in India: Benefits and problems. *Journal of Visual Impairment & Blindness*, 83(1), 47-50.

¹⁵ Bavli, B., Korumaz, M., & Akar, E. (2020). Visually Impaired Mentally Sighted: An Inclusive Education Case. *International Journal of Progressive Education*, 16(6).

¹⁶ Kapur, R. (2018). Challenges experienced by visually impaired students in education. *Unpublished paper available at researchgate*.

¹⁷ Subedi, S. (2021). *Use of ICT Software for Visually Impairment Learners* (Doctoral dissertation, Department of ICT Education).

can gain education and have the access to same curriculum and utilize the same resources and services. This arrangement holds that the education system be flexible and can assimilate the requirements of diversified learners.¹⁸ This approach further needs a positive mindset of teachers and peers. Addressing the needs of promoting inclusive education in the country government along with voluntary organisations are providing short-term training to general teachers to provide resource and itinerant teachers for integration.

For inclusion of students with visual impairment in regular schools, there are numerous initiatives were taken such as use of assistive devices (Braille kit, Taylor frame, Abacus, Geometry kits etc.), developing resource rooms, use of ICT devices for children with visual impairment, providing training to general teachers, sensitising various stakeholders on disability and inclusion. However, still reaching to every child with disabilities in all targeted regions of the country for continuing inclusive education is a challenge. Therefore, the government is imparting the services to the beneficiaries by involving local bodies and organizations. In this same regard, Sightsavers India is working closely with the education department to provide educational support to Children with Visual Impairment (CVI) in 5 districts of 3 states so that they can receive a quality education within the universal education system.

¹⁸ Fazelbhoy, R. S. (1989). Integrated education in India: Benefits and problems. *Journal of Visual Impairment & Blindness*, 83(1), 47-50.

Chapter 2: Project Sambalam- Inclusive education for Children with Visually Impairment

2.1 About the Project

Royal Commonwealth Society for the Blind (Sightsavers India) is working together with HCL Foundation since 2018 for the implementation of 'Project Sambalam – Inclusive education for children with visual impairment' in three states of India i.e., **Bihar, Rajasthan, and West Bengal**. HCL Foundation has supported this project which broadly provisions for the availability of assistive devices and accessible educational material, provision of compensatory skills training, infrastructure accessibility and building education management and leadership, among others. The project broadly aims to mainstream all Children with Visual Impairment (CVI) so that they can receive a quality education within the universal education system. The two core components of the projects were – a) improving the quality of learning outcomes and b) facilitating enablement that supports pro-disability education decisions.

2.2 Intervention Detail

The key focus areas under the project were to provide capacity building training to teachers on inclusive education, enhance the learning levels of children through usage of information and communication technology (ICT) as a critical medium to bridge the existing learning gap and strengthening 'Block Level Resource Centers'(BRCs)' established by State Education Department, Government of India. This section draw attention on core interventions carried out under the project.

Usage of ICT for enhancing learning level of CVI-

The first component of the project treaties with creating a conducive and inclusive environment in educational institutions. To impart education to the CVI, Sightsavers has leveraged digital technologies to develop skills amongst these students to develop skills and learn different subjects as well as native and English languages. The project provided ICT devices i.e., laptops and smartphones and training to these children to facilitate teaching learning over digital means and improve the existing learning level amongst them. The ICT devices provided by Sightsavers also aided in their developing e-learning process wherein they transform the loaded textbooks in e-pub format. Additionally, the ICT interventions also focused on providing concurrent training to CVI on enabling efficient usage of ICT devices to improve their learning level.

Capacity building of teachers on inclusive education-

The second component of the Project Sambalam is to roll out capacity building activities for the available special educators and general teachers at the government schools in the project intervention districts in different batches. This activity creates a trained resource base in the government schools as a long-term sustainable strategy for inclusive education. Selected teachers were trained on Inclusive Pedagogy and Information and Communication Technology (ICT) with a goal of bridging the existing gap of special educators in the education system and reaching the CVI and COD with all possible support and enable quality education. Phase-1 of capacity building activities was rolled out in 2019-20 in an offline environment while latter phase was organized in 2020-21 in an online environment. In total 257 teachers took part in the training in 2019-20 while 247 teachers received training in 2020-21. Pre-test and post-test were conducted before and after training to assess the knowledge, attitude, and practices of participants around inclusive education vis-à-vis training outcomes and identification of future need for capacity building.

Strengthening the Block Level Resource Centers (BRCs)-

The third component focused under Sambalam project was to strengthen 'Block Level Resource Centers'(BRCs) established by State Education Department, Government of India in each of the intervention districts to assist them in their academic learning and to provide them a platform for co-curricular activities. In pre-intervention phase the BRCs were less operational and equipped with educational and co-curricular activities kits. The community sensitization about operationalization of BRCs was also low.

The Sambalam project focused on refurbishment of BRCs with latest technological devices including Refreshable Braille display, mobile phones, DAISY players, Computer/Laptops with INDO-NVDA for promoting learning children with visual impairment. The project also focused on sensitizing the community members specially the family members of Children with Special Need about the functionalities of BRCs that includes availability of special educator, assistive devices, ICT devices and E-Learning materials to assist CWSN in their academic learning. As a result, the accessibility of BRCs significantly increased among CWSN after the project intervention.

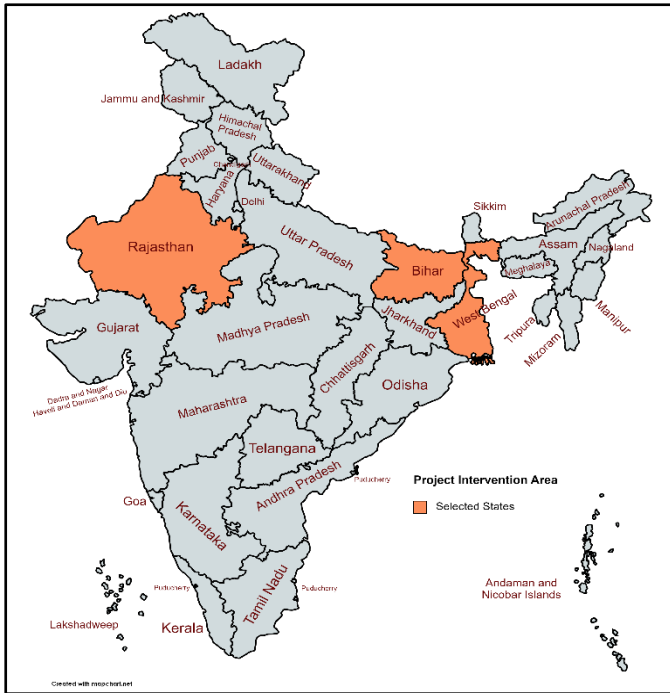
Implementation of Tele-Educational Model during Covid-19 outbreak-

During the outbreak of Covid-19, Sightsavers launched Tele-Education Model to combat the crises across the study area. The basic idea was that curriculum-based education should continue for CVI during the lockdown period. It included enhancing the ICT (Information and Communications Technology) skills of children with visual impairment. Therefore, in the initial days, the Sightsavers team focused on developing tele-appropriate content and teaching learning methodology of the Tele-Educational Model. The main tool used for delivering the Tele-classes were through mobile phones of parent/guardian of CVIs. Prior to starting the tele-classes, counselling sessions with parents and children were scheduled to motivate them to create a learning environment for Telephonic Education for the children. The focus was on teaching CVI their regular curriculum along with the use of ICT devices and Braille reading writing and practices of other arithmetic devices. Special classes were planned individually for children who required extra support in understanding the concepts. This model turned out to be an effective initiative in providing quality education and improving academic learning outcome of the children during Covid pandemic. Looking at the success rate of the tele-education model, Sightsavers team proposed the State Department of Education to scale-up the model to all categories of disabled children. Within a month the model was adopted by the state government and was implemented across the study states.

2.3 Overall Objective of the Sambalam Project

The broad objective of the projects is to improve the quality of learning outcomes and facilitate enablement that supports pro-disability education decisions. In addition, the specific objectives of the project are given below-

1. Capacity building of teachers at developing a conducive environment for CVI to undergo quality in-class learning.
2. Assessing and systematically working towards enhancing the learning levels of CVI to grade specific learning levels.
3. Utilization of technology and ICT as a critical medium in bridging the learning gap between the sighted and blind children in the schools



Figures 1: Project Intervention Area

2.4 Intervention Geography

This project has currently been implemented in five districts (**Bihar: Jehanabad and Bhagalpur; Rajasthan: Jhalawar and Udaipur, West Bengal: Howrah**) across selected intervention states.

The selection of districts was based on the socio-economic vulnerability in terms of the availability of special educators who can provide quality education to almost 4000+ CVI and Children with Special Needs (CWSN).

2.5 Intervention Target Group

The project intervention was designed to promote an inclusive education system through capacity building of **general teachers** and to provide ICT related training and assistive devices to **visually impaired students** so that they can receive quality education within the universal education system.

- Therefore, a total number of **487 CVI** were enrolled under the 'Project Sambalam' for ICT interventions as well as concurrent training to these children from time to time by the Sightsavers' team to enable efficient usage to improve learning.
- Additionally, capacity building sessions were conducted targeting general teachers from schools with CVI across five selected intervention districts.

Chapter 3: Research Design

This chapter summarizes the endline study methodology including endline study design, study methodologies, tools, and study procedure.

3.1.1 Study Purpose and Scope

After five years of the project implementation, an end-term evaluation has been conducted to review the achievements of the project against objectives and outputs as detailed in the project documents, focusing specifically on understanding key successes and challenges in the implementation of the project, to help inform the future design of Sightsavers programs and identify any further cross-cutting or organizational level lessons and recommendations.

3.1.2 Study Objective

The core objectives for the endline study are elaborated in the following section.

- The broad objective is to understand the achievements of the project in relevance with the expected outcomes of the project.
- The specific objectives are as follows:
 - To assess the quality of achieved outputs, outcomes, and results of the project throughout the period of the implementation.
 - To determine the effectiveness of ICT intervention towards improving the learning level of CVI in the study area
 - To assess the impact of the capacity building intervention in improving the knowledge, attitude, and practices amongst the teachers at government schools on inclusive education vis-à-vis efficacy of training
 - To identify key good practices and key lessons learnt, including how these have been used throughout the project to improve its delivery and make recommendations for future improvements of similar projects based on the evaluation findings.

3.1.3 Assessment Framework

The evaluation was designed in line with the assessment framework criteria for a comprehensive study. The objective and indicators under the assessment framework have been derived from two core thematic areas namely – ‘Learning Assessment of CVI’ and ‘Knowledge Attitude and Practices Assessment of Teachers’. These two separate assessments instruments have combinedly formulated a normative framework used to determine the merit or worth of an intervention (policy, strategy, programme, project, or activity).

The following evaluation framework has been adopted for conducting the endline assessment study-

S. No.	Thematic Area	Specific Objectives	Indicators
1	Learning Assessment of CVI	<p>To assess systematically, whether the concerned students have acquired skills</p> <p>To put forward recommendations based on the findings</p>	<ul style="list-style-type: none"> • Socio- Demographic and Economic profile of Children • Receipt of educational and other services from government. • Receipt of braille and low vision material training • Availability of ICT Equipment’s (Laptops and smart phones etc.), braille and low vision material

			<ul style="list-style-type: none"> • Reading and comprehensive capacities of CVI (local language and English) like alphabet read, word read, paragraph read and story read. • Arithmetic skills of the CVI like identification of number from 1 to 9, 10-99, subtraction and division
2	Knowledge Attitude Practices of teachers	To assess the effectiveness of the teacher's training program	<ul style="list-style-type: none"> • Socio- Demographic profile of Teachers • Teachers understanding on inclusive education. • Changes in teachers' perspective about importance of inclusive education for CWSN • Changes in teachers view on schools and curriculum for CWSN. • Learning challenges faced by CVI and change in teachers' attitude to identify the solutions. • Change in teachers' attitude after the implementation of inclusive education program. • Feedback of teachers regarding receipt of training, quality of education, ICT equipment's pedagogy, methods and techniques of training
To identify knowledge gaps, beliefs, and behavioral patterns (Prospective) that may obstruct delivery of quality education to the children with visual impairment and children with other disabilities			
To explore the existing barriers prevailing in education system to help improving the systemic challenges			
To assess the knowledge base of the teachers to make important decisions and support system in school system for delivery of quality education to the CwSN			

Table 1: Evaluation Framework

3.2 Data and Methods

3.2.1 Mixed Methods Approach

The assessment is based on a convergent mixed method research design that involves collection of quantitative and qualitative data simultaneously and analyzing them separately for findings and insights. The quantitative data collection procedure adopts a multistage sampling strategy for selection of respondents across the five selected districts viz. Jehanabad, Bhagalpur, Jhalawar, Udaipur and Howrah. The assessment was conducted in all five HCL funded project intervention areas as per the MIS database provided by Sightsavers India team.

The qualitative methods used for the assessment are based on the grounded theory approach that is widely applied in policy research. A multi-site case study approach was used to understand the programmatic context, covid-19 impact, practice environment and compliances. The qualitative interviews focused on understanding of the inclusive education activities, impact of ICT towards improving the learning level of CVI, gaps and challenges in functioning of inclusive education system and operations, perspective of the teachers, school authorities, state, and district nodal person from inclusive education department.

3.2.2 Sampling Procedure

Sampling Approach-

Multistage sampling approach has been used in the quantitative survey with selection of states at first stage, program implemented district, blocks and villages at second stage. Moreover, at the third stage the respondent has been selected randomly based on the list provided by the Sightsavers state team.

The selection of study participants was based on the excel sheets extracted from internal MIS dashboards of Sightsavers. The Sightsavers team provided us with a separate database for teachers and CVI which was further used as sampling frame for Knowledge, Attitude & Practice Assessment along with Learning Assessment respectively.

Teachers Selection Criteria for Knowledge, Attitude & Practice Assessment Survey -

A random sampling approach was adopted for the selection of Teachers from the Sightsavers database. The procedure of selection of teachers included segregating teachers having experience of teaching Children with Visual Impairment from final list followed by selection of teachers using the random number table. Overall, 150 teachers were covered across the study area.

CVI Selection Criteria for Learning Assessment Survey-

The selection procedure of Children with Visual Impairment for conducting learning assessment test included extraction of data from Direct Beneficiary list provided by Sightsavers. Subsequently, using Probability Proportionate to size (PPS) sampling methods for grade-wise distribution of sample size.

Sample Size Estimation-

A study conducted in India reported the prevalence of school readiness between 27.8% and 42.5% over a 3-year period¹⁹, but currently there is no reliable literature existing on school readiness of blind children.

Since the baseline indicator of school readiness is unknown, a conservation prevalence of 50% is assumed. Considering the targeted approach on a smaller scale, a change of 14% is assumed to quantify the endline quantitative sample. The minimum number of respondents required for a statistically valid sample that will have the power to measure a 14% difference test results among target group can be computed using the following formula:

$$n = \frac{deff \times \left[Z_{1-\alpha} \sqrt{2P(1-P)} + Z_{1-\beta} \sqrt{P_1(1-P_1) + P_2(1-P_2)} \right]^2}{(P_2 - P_1)^2}$$

Where:

- P1 is the hypothesised value of the outcome indicator before intervention.
- P2 is the hypothesised value of the outcome indicator after intervention.

$$P = \frac{P_1 + P_2}{2}$$

- Z_{1-α} is the standard normal deviate value for a type I error (1.96)
- Z_{1-β} is the standard normal deviate value for a type II error (0.842)
- deff is the design effect (1.5)

N = 192, taking non-response rate into account, we propose: N = 200, i.e.

- A total of 200 children's assessment

¹⁹ Kaul V, Bhattacharjea S, Chaudhary AB, et al.. The India early childhood education impact study. New Delhi: UNICEF; 2017: 1–186. <http://www.unicef.in/earlymomentmatter/Story-Full-Report-The-India-Early-Childhood-Education-Impact-Study.html> [Accessed 22 Aug 2019]. [[Google Scholar](#)]

- A total of 150 teacher interviews

As a part of the endline survey, around 200 learning assessment interviews and 150 KAP assessment interviews with teachers were conducted across the study area.

Geography		Learning Assessment	KAP Assessment	In Depth Interviews			
State	Districts	Children	Teachers	Govt. Official	State Program Lead	School Principals / Teachers	Sightsavers Team
Bihar	Bhagalpur, Jehanabad	80	60	1	1	4	4
Rajasthan	Jhalawar, Udaipur	80	60	1	1	4	
West Bengal	Howrah	40	30	1	1	2	
Total		200	150	20			

Table 2: Quantitative and Qualitative Sample Distribution across States

3.2.3 Data Collection Tool

Quantitative Tool-

The study will be utilizing two sets of structured questionnaires for data collection. One set has been prepared to capture change in Knowledge, Attitude and Practices of teachers and another set has been designed to evaluate the learning assessment of the Children with Visual Impairment. Both the assessment tool has been described below:

Knowledge, Attitude and Practice (KAP) Assessment Tool

The KAP assessment tool was developed by Sightsavers. The tool aimed to have an analytical perspective on the impact of Sightsavers capacity building intervention in improving the level of knowledge (i.e., what is known), attitude (i.e., what is thought) and practices (i.e., what is done) (KAP) of the participating teachers. The questionnaire is divided into 5 section that has been describe below:

- Section 1: General Information
- Section 2: Knowledge about Inclusive Education (IE)
- Section 3: Perspective towards Inclusive Education
- Section 4: Attitude towards Inclusive Education
- Section 5: Receipt of training on Inclusive Education

Learning Assessment Tool for Children with visual Impairment

The learning outcome assessment tool was developed by the Sightsavers. This tool aimed to assess the knowledge and skills of the CVI around native and English languages and arithmetic skills. In the endline survey we have utilized the baseline tool for collecting information from the CVI. The questionnaire is divided into 5 sections that has been describe below:

- Section 1: Primary Information
- Section 2: Beneficiary information
- Section 3: Household Economic Status

Section 4: General information about the child

Section 5: Language and Arithmetic assessment of children

Qualitative Tool-

The study administered interview guidelines for conducting in-depth interviews with relevant stakeholders viz. teachers, school authorities, state, and district nodal person from inclusive education department. The key components captured through the interview guides were- perception on inclusive education, knowledge about policies and laws related to inclusive education, programmatic activities conducted under Sambalam project, role of ICT towards improving the learning level of CVI, impact of Covid -19 on learning levels of CVI, gaps and challenges in functioning of inclusive education system.

3.2.4 Training

For the smooth operation of the field plan, three separate physical training sessions were conducted at state head quarter for quantitative data collection. The training was held between the field team, research team and Sightsavers representatives. The field team is comprised of state manager, enumerators, and supervisors; the research team consisted of the project manager and the other team members such as Quantitative Expert and Research Executive.

The team was trained on the research guidelines, safeguarding policies, scope, objectives, sampling, tool, methodology and usage of “Go Survey” application etc. A substantial part of the training focused on manoeuvring the tablet application for data collection, hands-on training with the tablets that would be used for the data collection. The training was conducted through presentations, and group discussions, and followed by a session of mock calls to familiarize the enumerators with the questionnaire flow.

3.2.5 Data Quality Mechanism

Fieldwork quality under the assignment was ensured by the Supervisors who conducted both spot-checks and back-checks of the data enumerated by field teams. Besides, the Field Supervisors checked the consistency and possible omissions in filled-up questionnaires on 100% basis at the end of each day’s fieldwork. Fieldwork monitoring was undertaken by core staff members of Sightsavers team daily. Additionally, special educators were recruited and engaged for conducting learning assessment tests with CVI students to provide quality data. In this way, the field teams were duly assessed for their performance leading to taking corrective actions on a regular basis.

3.2.6 Field Implementation

The field survey for the endline study commenced in the first week of February and was completed within a fortnight including qualitative interviews as well.

The quantitative data was collected in an android tablet-based Computer Assisted Personal Interview (CAPI). The survey questionnaire tools were coded on the mobile application, which were further deployed on tablets.

The data collected by the team was possible in offline/ online mode. It was ensured that the data synchronization happens in real-time if the device is online. If the device is in offline mode, the synchronization happens automatically whenever connectivity is established.

3.2.7 Ethical Guidelines

The study was reviewed and approved by the Ethics Committee of the Sightsavers, India. It may be noted that the anonymity of the respondents was a major concern. The field enumerators adhered to ‘Child Safeguarding Policy’ during conducting learning assessment test with CVI students.

Confidentiality of the data gathered was also kept in mind when storing and sharing with other collaborators/analysts. Our findings do not specify the source of suggestions, complaints, and feedback to ensure that the respondents' privacy and anonymity are respected.

Not only during the data collection but also while processing and coding the data, these ethical principles were adhered to. Market Xcel assures the anonymity and confidentiality of participants' data. Market Xcel also assures that the visual data is protected and used for agreed purposes only.

3.2.8 Analysis Plan

Quantitative analysis involves collecting and analysing data in a systematic and structured way, using the surveys questionnaire. The data is then analysed using bi-variate analysis table to identify patterns and relationships between variables. We conducted all analyses in SPSS version 19.

Qualitative analysis plan involves transcription and analysis of all in-depth interviews through thematic analysis. The analyzing process included several steps. First, the qualitative researchers reviewed the transcriptions material to become familiar with the contents. This was followed by the generation of an initial coding of statements across the entire data set (all three informant-subgroups). In the next step codes were combined into potential themes, which were visualized in thematic maps for each informant subgroup separately, with the aim to capture variation as well as similar thoughts and experiences between individuals and informant sub-groups. The themes for each informant-group were then reviewed all over again, resulting in some of them being combined. In the last step the final themes were re-analyzed, defined, and named. Finally, a thematic summary was developed, in which the themes for each informant-group were organized. We conducted all the qualitative in Atlas ti version 22.

Chapter 4: Effectiveness of Information Communication & Technology towards improving the learning level of Children with Visual Impairment

4.1 Introduction

In Indian education system assistive technology acts as an incredibly helpful methods in supporting the learning and development of visually impaired children. Screen readers, Braille displays, magnifiers, audio books and podcasts, tactile graphics, electronic notetakers, OCR, and adaptive software and hardware are just some examples of the wide range of assistive technology available to support children with visual impairments. To impart education to the CVI, Sightsavers has leveraged digital technologies to develop skills amongst these students to develop skills and learn different subjects as well as native and English languages. It provided ICT devices i.e., laptops and smartphones and training to these children to facilitate teaching-learning over digital means and improve the existing learning level amongst them. Prior to ICT, visually impaired students were separated inside a small bubble of connections and communication, only being able to connect truly with those who read and wrote in Braille.

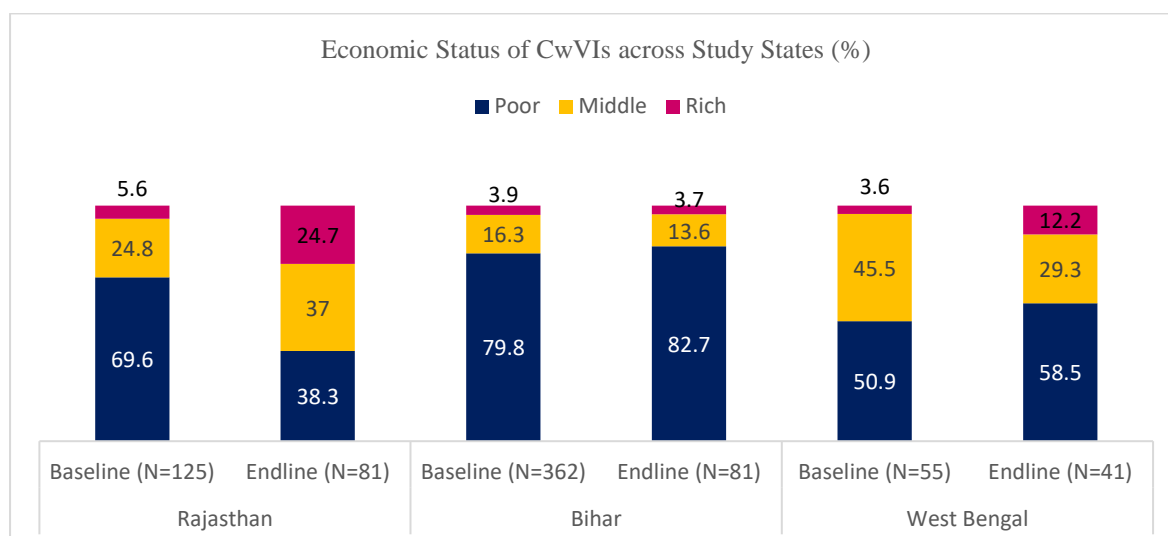
After the implementation of Sambalam project, education has become incredibly diversified in the 5 years, especially due to technological advances such as ICT across intervention area. Under Project Sambalam, Sightsavers has provided ICT equipment, study materials and continuous capacity-building support to the children with visual impairment (CVI) for a better learning experience for them and to develop their competencies in reading and comprehension of local and English languages, and arithmetic skills.

4.2 Socio- Economic Characteristics

This section summarizes the socio-demographic and economic status of the CVI who were assessed using 'learning outcome assessment' tool during the endline survey of Sambalam project across study states.

The wealth index utilised in the study to depict the economic status of CVI assessed during baseline and endline was derived by adding the 9 unique questions provided in Indian Equity section. These questions are related to the status of living in a household and the surrounding environment. A summative score ranging between 0 and 9 was generated to score each respondent. The score was further categorized into 3 categories namely respondent obtaining score between 0 to 3 was categorized as 'poor', respondent obtaining score between 4 to 6 was categorized as 'middle' and respondent obtaining score between 7 to 9 was categorized as 'rich.'

Figure 2: Economic profile of CVI assessed across intervention area during the baseline and endline study.



The above table depicts that more than 60% of the CVI who were assessed in endline belong to poor economic status. While 74.5% CVI during baseline belong to poor economic status. However, 21.2% CVI during baseline and 26.1% CVI in endline study belong to middle economic status. Moreover, during baseline 4.2% CVI and during endline 13.8 % CVI belong to upper economic status.

Across the states, Bihar reported the highest number of CVI belonging to poor economic status in both the surveys.

The difference in the percentage of economic profile in baseline and endline shows substantial differences which might be recorded as varied sample coverage. As observed, sample coverage was higher in baseline compared to endline.

4.3 Utilization of ICT among Blind and Low Vision Categories of Visual Impairment

The present section captures the accessibility of educational and non-educational support and services in the project interventions provided by the Sightsavers project team for CVI.

Table 3-Percentage sample distribution by category of visual impairment children across intervention area during the baseline and endline study

Background Characteristics	Rajasthan		Bihar		West Bengal		Overall	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Blind	23.2	18.5	33.4	61.7	38.2	22.0	31.5	36.5
Low Vision	76.8	81.5	66.6	38.3	61.8	78.0	68.5	63.5
Total (N)	125	81	362	81	55	41	542	203

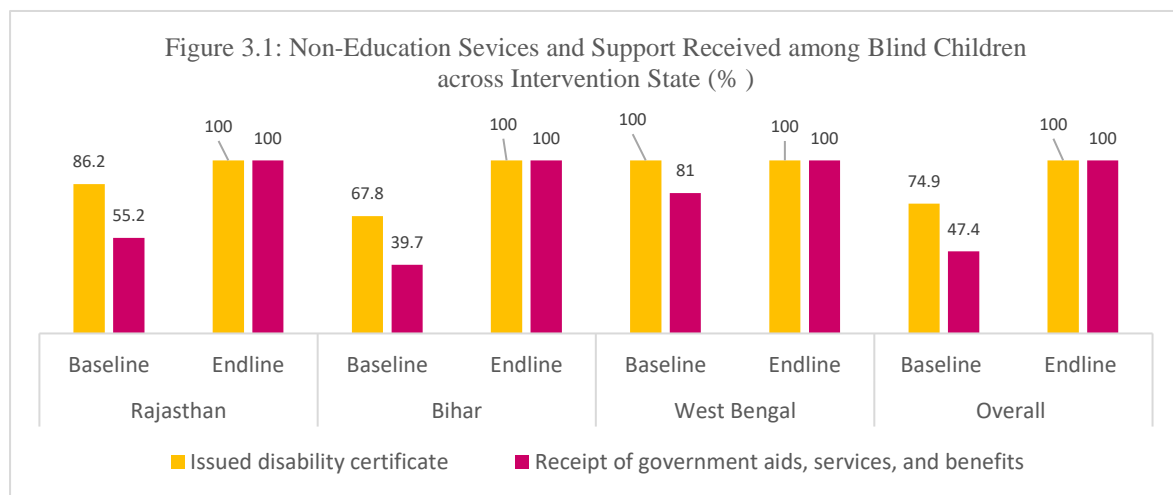
During the baseline study, out of 542 total CVI assessed across overall study area, 68.5% of students belong to low vision category while 31.5% students were Blind. Within the states, the highest proportion

of blind students were assessed in West Bengal (38.2%) followed by Bihar (33.4%) and then Rajasthan (23.2%).

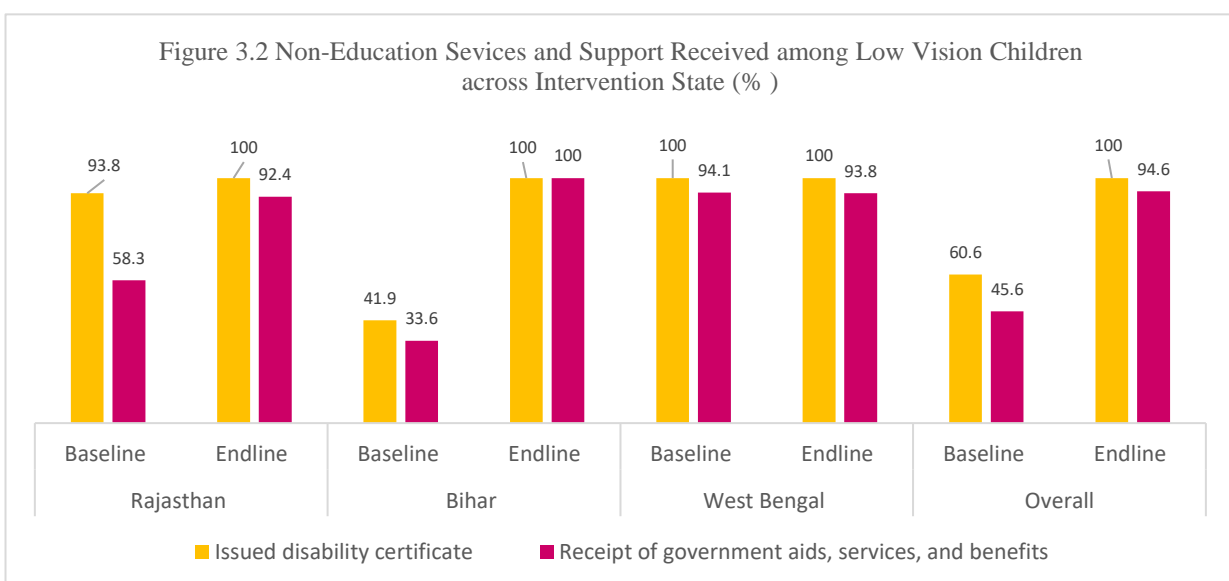
A similar pattern of sample distribution by categories of visual impairment was reported in endline survey as like the baseline survey in overall study area.

In endline study, out of 203 CVI, 63.5% children belong to low vision category and 36.5% children were blind. Withing the states, Bihar has reported the highest number of blind children followed by West Bengal and Rajasthan.

Figure 3.1 & 3.2-Accessibility of non-educational services among Blind and Low Vision Children across intervention area during the baseline and endline study



The Sambalam project focused to ensure that children with visual impairment have access to quality education in mainstream schools. The activities listed under the project were identification and assessment, training and support, advocacy, monitoring and evaluation, and partnerships to promote inclusive education and provide holistic growth opportunity to children with visual impairment to reach their full potential.



After the implementation of the project, a significant increment in accessibility of non-educational services was reported among the CVI during the endline survey. During baseline, only 61% of children

with low vision reported that they have disability certificate in overall study area. However, during endline almost all children with low vision reported the receipt of above-mentioned facility. Within the states, Bihar reported less than 50% of the children with low vision not having disability certificate during baseline. Whereas, in endline the percentage significantly increased up to 100%.

The accessibility of government aids, services and benefits also significantly improved by almost 50% after the implementation of Sambalam project among both the categories of children with visual impairment across the intervention states. Within Bihar, the access to government services were reported the lowest (below 40%) among both the VI categories in comparison with other states. However, during endline survey it was noted that the accessibility of government aids, services and benefits has increased up to same per cent in Bihar.

Accessibility of Assistive Educational Support for CVI

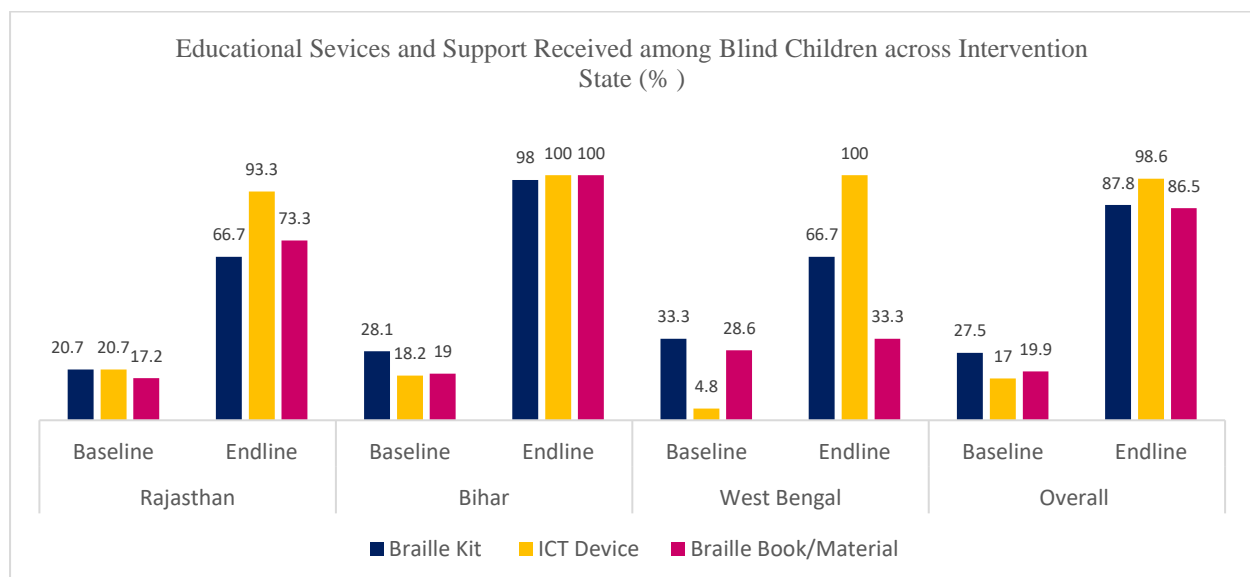
In India, the accessibility of assistive educational materials such as Braille kits and ICT devices among children with visual impairment can be challenging due to a variety of factors.

One of the main issues is the lack of availability of these materials, particularly in rural areas where access to specialized equipment and resources is limited. Additionally, the cost of braille kits and ICT devices can be prohibitively expensive, making them difficult to afford for many families.

However, Sambalam project has been working towards improving the accessibility of assistive educational materials in intervention area. The government has also introduced schemes such as the Assistance to Disabled Persons for Purchase or Fitting of Aids and Appliances (ADIP) scheme, which provides financial assistance to individuals with disabilities for the purchase of aids and appliances.

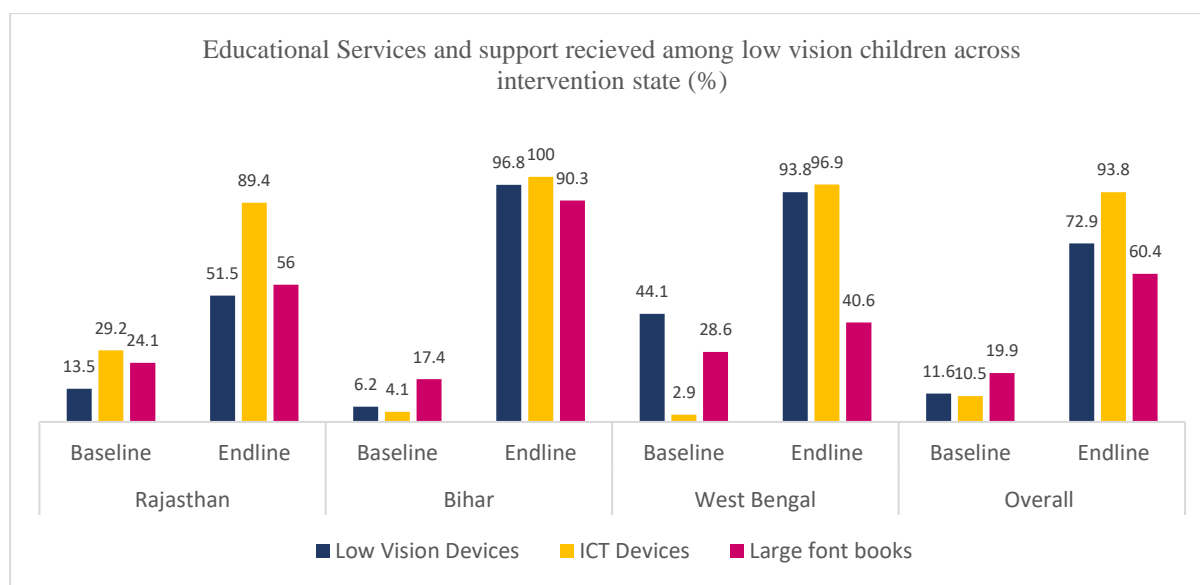
In line with government schemes and policies, Sightsavers Sambalam project has been working towards improving access of braille kits and ICT devices for children with visual impairment across the intervention area. The Sambalam project provide free braille kits and other educational materials to visually impaired students, as well as training and support to help them use ICT devices and software effectively. Overall, Sambalam project mitigates the challenges to accessing assistive educational materials for children with visual impairment in study area, these efforts will further lead to improve accessibility and promote inclusion for these students.

Figure 4.1- Accessibility of assistive educational materials by Blind children across intervention area during the baseline and endline study



The study reported that among the blind children the assistive educational material used for supporting better learning experience were braille kit, ICT devices (mobile, DAISY player, laptop) and braille book material. After the intervention of the Sambalam project, the utilization of the assistive educational material reported to increase by more than 50 per cent between baseline and endline study in overall intervention area. The major increment was noted in utilization of ICT devices from 17% in baseline to 99% in endline survey. Within the states, West Bengal reported the highest percentage of change i.e., 96% in utilization of ICT devices in between baseline and endline survey.

Figure 4.2- Accessibility of assistive educational materials by Low Vision children across intervention area during the baseline and endline study



The assistive educational material utilized by low vision children were namely low vision device such as magnifying glasses, ICT devices (mobile, dicey player, laptop) and large font books. Prior to the implementation of Sambalam project, below 20% of children with low vision were using the above-mentioned educational materials. Conversely, a significant increase was noted within all the categories of assistive educational material during the endline survey.

Across the categories of assistive educational material, highest improvement was noted in the utilization of ICT device (83%) and lowest increment was noted in utilization of large font books (40%) between baseline and endline in overall intervention area.

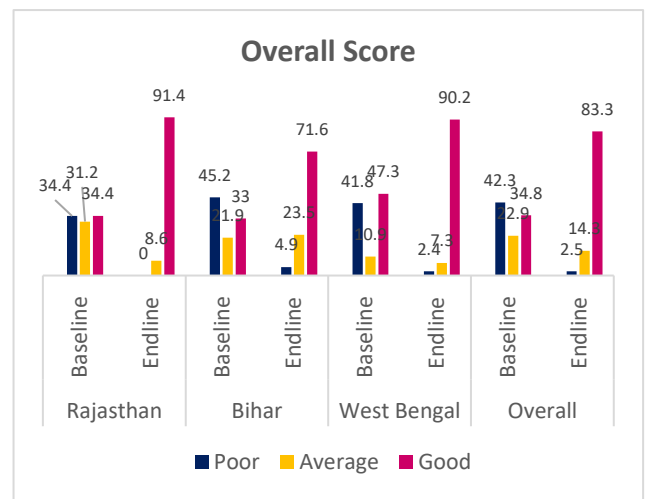
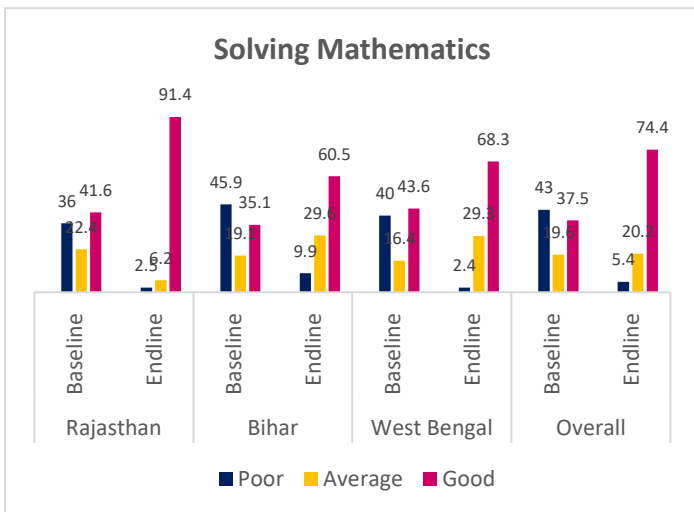
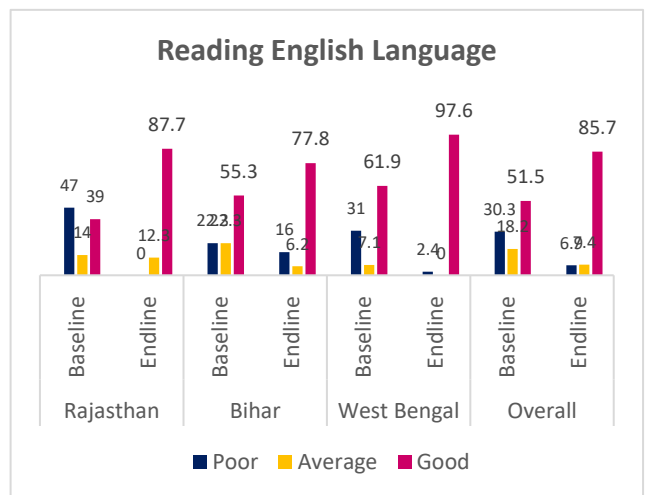
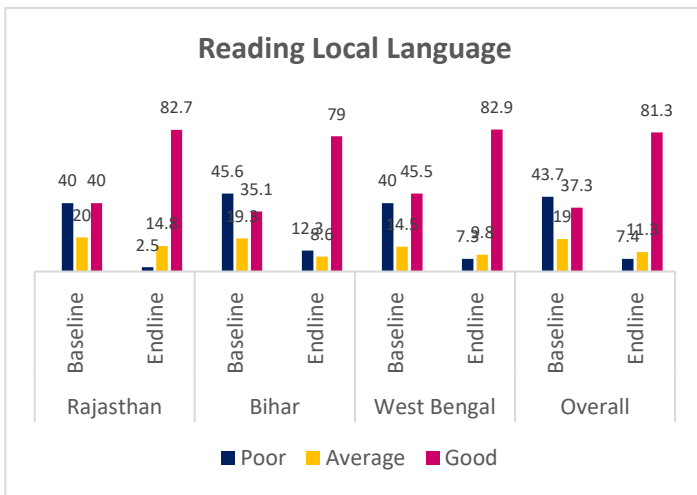
4.3 Effect of Sambalam Project Intervention in Improving Learning Outcomes

The present section captures the outcome of the project interventions provided by the Sightsavers project team on the ground to improve the learning level of CVI.

Table 4- Regional and English Language Proficiency and Numeric Skill of visually impaired children across intervention area during the baseline and endline study

Background Characteristics	Rajasthan		Bihar		West Bengal		Overall	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Reading Local Language								
Poor	40	2.5	45.6	12.3	40	7.3	43.7	7.4
Average	20	14.8	19.3	8.6	14.5	9.8	19	11.3
Good	40	82.7	35.1	79	45.5	82.9	37.3	81.3

Reading English Language								
Poor	47	0	22.3	16	31	2.4	30.3	6.9
Average	14	12.3	22.3	6.2	7.1	0	18.2	7.4
Good	39	87.7	55.3	77.8	61.9	97.6	51.5	85.7
Solving Mathematics								
Poor	36	2.5	45.9	9.9	40	2.4	43	5.4
Average	22.4	6.2	19.1	29.6	16.4	29.3	19.6	20.2
Good	41.6	91.4	35.1	60.5	43.6	68.3	37.5	74.4
Overall Score								
Poor	34.4	0	45.2	4.9	41.8	2.4	42.3	2.5
Average	31.2	8.6	21.9	23.5	10.9	7.3	22.9	14.3
Good	34.4	91.4	33	71.6	47.3	90.2	34.8	83.3
Total (N)	125	81	361	81	55	41	541	203



The assessment questionnaire included five different phases of learning to check the learning status of CVI with respect to their reading capacity and the same were 'learning phase to read', 'alphabet read', 'word read', 'paragraph read', and 'story read'. These phases were designed in a way where each of the next levels includes proficiency achieved in the previous level (s).

Furthermore, the categories for assessing arithmetic skills included 'beginner', 'identification of number (1-9)', 'identification of number (10-99)', 'subtraction' and 'division'. 'Division' has been among the high level of arithmetic skills followed by subtraction and identification of two-digit and single-digit numbers.

The performance index utilised in the study to measure the improvement in the learning levels of CVI assessed during baseline and endline was derived from the average score obtained in each assessment test. The score obtained in each assessment test ranged between 1 and 5. The score was further categorized into 3 categories namely respondent obtaining score between 1 and 2 was categorized as 'poor', respondent obtaining 3 was categorized as 'average' and respondent obtaining score between 4 and 5 was categorized as 'good'.

Additionally, an overall performance indicator was derived from the average score obtained in all three-assessment tests for measuring the overall learning level of CVI. The score ranged between 3 and 15. The score was further categorized into 3 categories namely respondent obtaining score between 3 to 6 was categorized as 'poor', respondent obtaining 7 to 10 was categorized as 'average' and respondent obtaining score between 11 to 15 was categorized as 'good'.

The assessment of *local language proficiency* depicted that a significant improvement in learning levels was noted between baseline and endline survey in overall study area. In comparison with the baseline study, almost 40% increase was reported in good performance category. The good performance category indicates that the children have achieved highest level of local language proficiency wherein they can read stories fluently. State wise data also revealed a significant improvement in local language proficiency. In Rajasthan 43%, in Bihar 44% and in West Bengal 44.5% increase was reported in good performance category. This reflected a huge impact of Sambalam project intervention on improving the local language learning levels among CVI.

The assessment of English language proficiency depicted that almost 35% improvement in learning levels was noted between baseline and endline survey in overall study area. In comparison with the baseline study, around 25% decrease was reported in poor performance category. The poor performance indicates that the children is still in initial learning level of English language wherein they cannot identify capital alphabet of English language. The endline survey reported that around 98%, 88% and 78% children were able to read sentences in English language across West Bengal, Rajasthan, and Bihar.

The categories for assessing arithmetic skills included 'beginner', 'identification of number (1- 9)', 'identification of number (10-99)', 'subtraction' and 'division'. 'Division' has been among the high level of arithmetic skills followed by subtraction and identification of two-digit and single-digit numbers. The percentage of CVI who were at poor performer level at the time of endline survey reduced by almost forty per cent in overall study area. Around two-fold increase was reported in proportion of children who have good numeric ability. Within states, Rajasthan recorded highest proportion of CVI (91.4%) in good performer category followed by West Bengal (68.3%) and Bihar (60.5%) during endline survey.

The overall performance indicator table reflected that almost two-fold of increment was noted in good performance category of overall learning level. Present assessment has also shown improvements with respect to the reading of local and English languages, comprehension capacity of the English words and sentences as well as arithmetic skills. Project Sambalam has proven that the project intervention through ICT intervention, stakeholder's sensitisation and training of teachers/ resource teachers is beneficial for the CVI to enhance their learning outcomes by acquiring knowledge and skills.

Chapter 5: Impact of the Capacity Building Intervention in Improving the Knowledge, Attitude, and Practices amongst the Teachers

5.1 Introduction

In India, Inclusive Education is increasingly being promoted through the government. But still as of today, we lag far behind in promoting inclusive education services to Children with Visual Impairment (CVI), with only few schools practicing IE.

There are numerous factors that have hindered progress amongst which predominant negative attitude of teachers because of low knowledge and awareness towards CwSNs in India is the most important challenge that we are currently facing. A recent review reported that nearly 70% of the regular schoolteachers in India had neither received training in special education nor had any experience teaching students with disabilities²⁰

As teachers are crucial to the effective delivery of education, Sightsavers India came out with project Sambalam aimed to roll out capacity building programme for the available special educators and general teachers at the government schools in the project intervention districts in different batches. Selected teachers were trained on Inclusive Pedagogy and Information and Communication Technology (ICT) with a goal of bridging the existing gap of special educators in the education system and reaching the CVI and COD with all possible support and enable quality education.

Sightsavers India conducted capacity building programme (CBP) for the special educators and general teachers in two phases and in different batches. Pre-training and post-training tests were conducted with the aim to have an analytical perspective on the current level of knowledge (i.e., what is known), attitude (i.e., what is thought) and practices (i.e., what is done) (KAP) of the participating teachers on IE as well as determining the basis of comparison for post-test result and observe the changes.

The key purpose of the training was to build the capacity of teachers around IE in terms of increased knowledge and enhanced understanding for improving the existing practices towards ensuring quality education to the CwSN at the schools.

Below section summarizes the socio-demographic status of teachers who were participated in the survey and comparing the change in Knowledge, Attitude and Practice among schoolteachers.

5.2 Socio-Demographic and Economic Characteristics

This section summarizes the socio- economic status of the CVI who were assessed using ‘learning outcome assessment’ tool during the endline survey of Sambalam project across study state.

Table 5: Age distribution of teachers assessed across intervention area during baseline and endline study.

Background Characteristics	State							
	Bihar		Rajasthan		West Bengal		Total	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Age								
<30	6.8	1.6	25.9	6.5	9.5	6.7	11.9	4.6
30-39	52.3	31.1	22.4	32.3	55.6	26.7	46.2	30.7

²⁰ Savarimuthu KM, Innamuri R, Tsheringla S, Shonima AV, Mammen MP, Alwinnesh M, et al. Knowledge, Attitude and Practices of Inclusive Education among Indian School Teachers: An Interventional Pilot Study (Paper B). J Psychiatry Mental Disord. 2020; 5(1): 1017.

40-50	35.6	39.3	29.3	32.3	27.0	50.0	32.0	38.6
>50	5.3	27.9	22.4	29.0	7.9	16.7	9.9	26.1
Total (n)	132	61	58	62	63	30	253	153

Above findings revealed that during baseline study, maximum respondents were in the age group of 30 and 39 years (46.2 per cent) whereas, in endline majority of the respondents were aged between 40-50 years. Within the states maximum number of respondents were in the age group of 40- 50 years for endline study.

Table 6: Distribution of teachers assessed across intervention area during baseline and endline study according to their working years of experience.

Background Characteristics	State							
	Bihar		Rajasthan		West Bengal		Total	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Working Experience								
<5	4.5	.0	27.6	32.3	19.0	3.3	13.4	13.7
4-14	87.9	57.4	37.9	29.0	65.1	43.3	70.8	43.1
15-24	6.1	41.0	13.8	14.5	14.3	50.0	9.9	32.0
25-35	1.5	1.6	20.7	21.0	1.6	3.3	5.9	9.8
>35	.0	.0	.0	3.2	.0	.0	.0	1.3
Total (n)	132	61	58	62	63	30	253	153

Regarding working experience, more than half of the respondents (70.8 percent) during baseline were having 4 to 14 years of experience in teaching. In endline results also, maximum respondents (43.1 percent) were having teaching experience of 4 to 14 years.

Table 7- Distribution of teachers assessed across intervention area during baseline and endline study according to their Educational Qualification

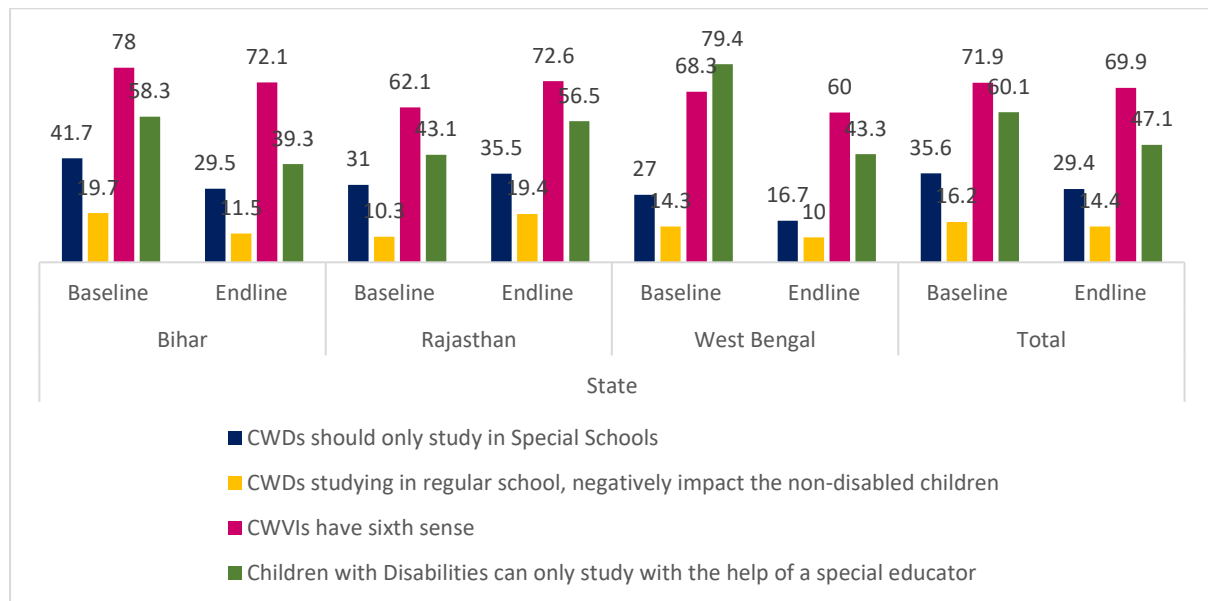
Background Characteristics	State							
	Bihar		Rajasthan		West Bengal		Total	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Graduate	31.8	36.1	12.1	3.2	39.7	16.7	29.2	19.0
Postgraduate	15.9	44.3	6.9	24.2	6.3	20.0	11.5	31.4
Diploma in Education	31.1	3.3	29.3	11.3	19.0	16.7	27.7	9.2
B.Ed.	15.9	8.2	46.6	58.1	19.0	40.0	23.7	34.6
Other (Please specify)	5.3	8.2	5.2	3.2	15.9	6.7	7.9	5.9

In terms of education, the top qualifications were found to be Bachelors' Degree, B.Ed., Diploma in education and Masters' Degree. During baseline, 29.2 respondents reported their qualifications as graduate and 27.7 reported as Diploma in education. In endline data, 34.6 teachers in endline were B.Ed. and 31.4 were post-graduate while the same was reported by 23.7 and 11.5 of the teachers in baseline respectively. Within the states, 44.3% teachers were Post graduate from Bihar, 58.1% were B.Ed. from Rajasthan and 29.2% from West Bengal were Graduate only in endline survey.

5.3 Information on Inclusive Education

The present section captures the outcome of the project interventions provided by the Sightsavers India project team on the ground to improve information on Inclusive Education of teachers.

Figure 5- Percentage changes regarding knowledge on inclusive education among teachers across intervention states



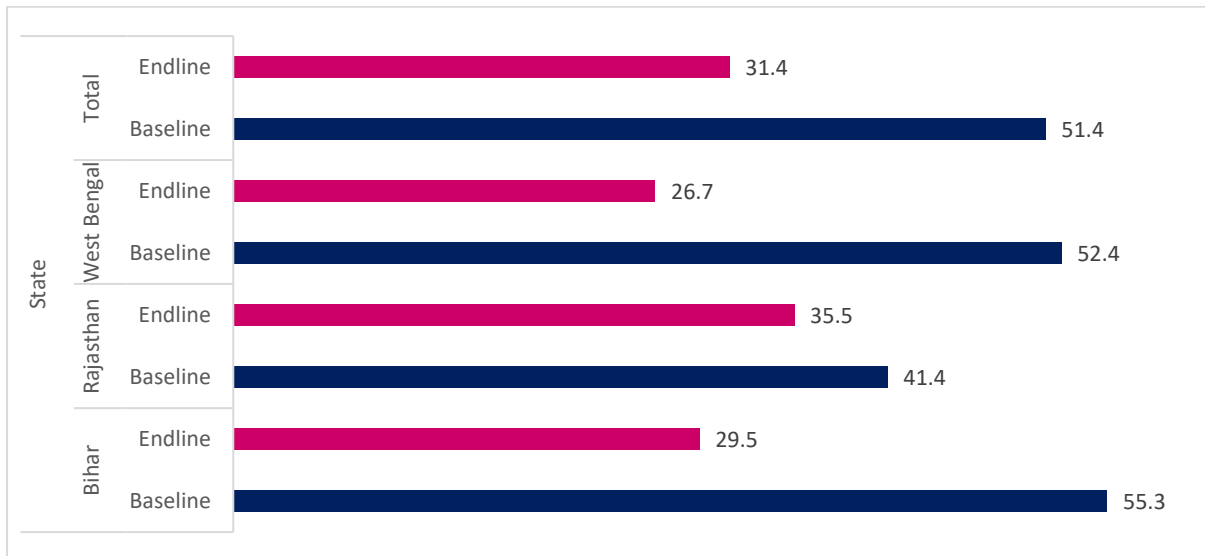
Comparative analysis of baseline and endline shows a substantial decrease in the proportion of respondent’s traditional opinion regarding “CWDs should only study in special schools.” 35.6% respondents during baseline admitted that CWDs should only study in special schools while in endline it was decreased to 29.4%. The analysis with the breakdown by states shows a positive decrease in Bihar (from 41.7 to 29.5 percent) and West Bengal (from 27.0 to 16.7 per percent) regarding CWDs should only study in special schools whereas the percentage has slightly increased in Rajasthan (from 31.0 to 35.5).

A positive diminution was observed regarding “CWDs studying in regular school, negatively impact the non-disabled children” in endline results when compared to baseline. In baseline, overall, 16.2% respondents stated that CWDS studying in regular school negatively impact the non- disabled children. While in endline this percentage decreased from 16.2% to 14.4%. Furthermore, State wise distribution shows that the percentage has decreased only in Bihar and West Bengal.

Regarding “CVI have sixth sense” understanding of teachers has improved positively. 28.1% respondents during baseline were not able to understand that CVI do not have sixth sense that has increased to 30.1 in endline. At the State level, Bihar and West Bengal are showing positive increase from 22.0% to 27.9% and 31.7% to 40% respectively. Whereas, in Rajasthan it has decreased negatively from 37.9% to 27.4%.

With regards to understanding about “Children with Disabilities can only study with the help of a special educator” overall proportion has decreased positively compared to baseline. In baseline data, 60.1% teachers responded that CWDs can only study with the help of a special educator which decreased to 47.1% in endline. The analysis with the classification by states shows a positive reduction in Bihar (from 58.3 to 39.3 percent) and West Bengal (from 79.4 to 43.3 per percent) whereas the percentage has negatively increased in Rajasthan (from 43.1 to 56.5 percent)

Figure 6- Percentage change of teacher’s towards “Children with Disabilities should change themselves as per the school and curriculum”.

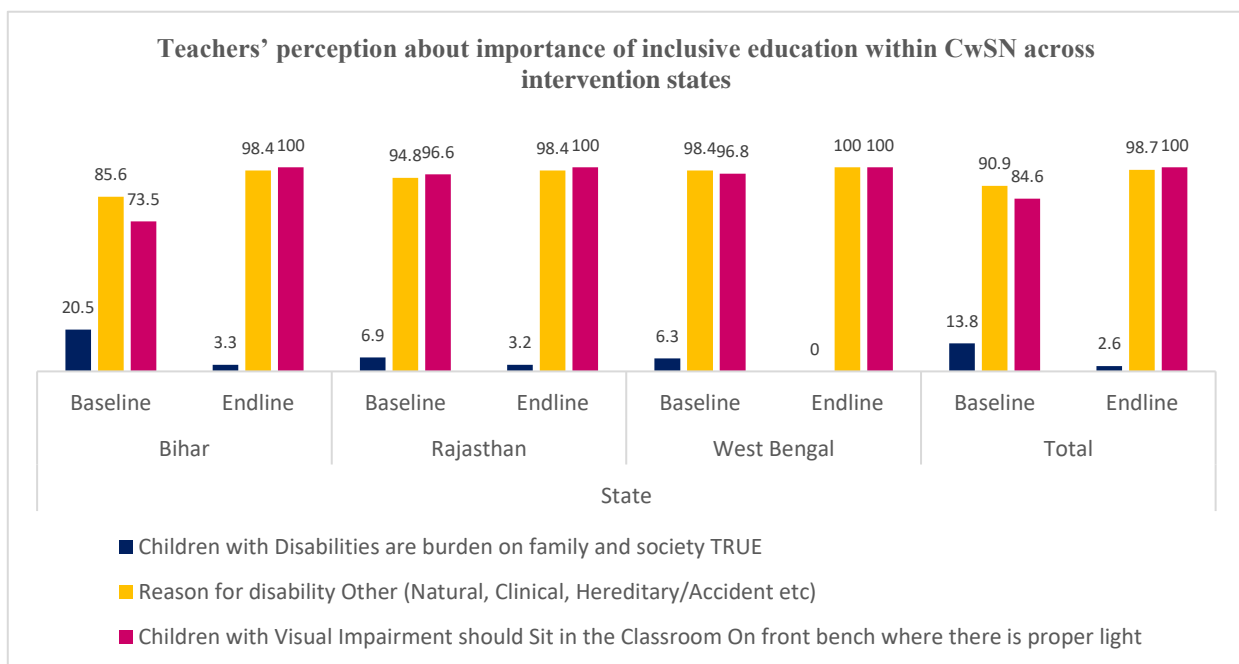


The comparative findings revealed a significant positive change in the existing knowledge base of teachers. Overall, more than half (51.4 percent) of the teachers said that children with disabilities should change themselves during baseline which decreased to 31.4% during endline. State wise distribution also shows a significant decrease among teachers of all the three states regarding the same.

5.4 Changes in Perspective and Attitude on Inclusive Education

This section summarizes the outcome of the project interventions provided by the Sightsavers India to improve the perception and attitude of teachers towards CwSNs.

Figure 7- Percentage changes regarding teachers’ perception about importance of inclusive education within CwSN across intervention states

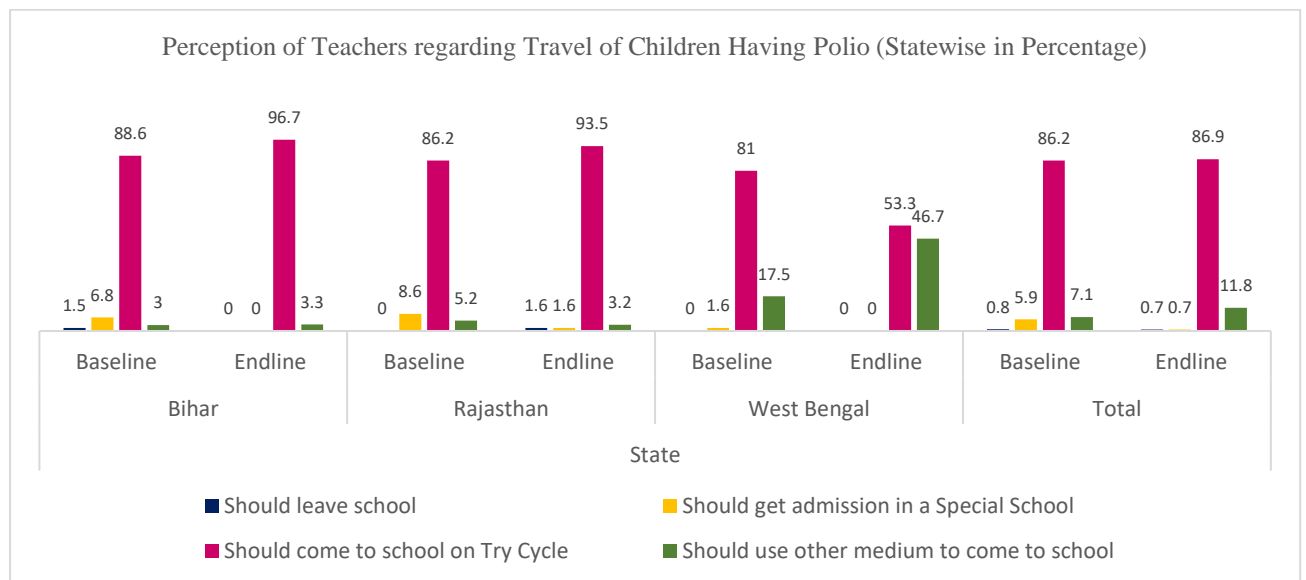


Concerning about *Children with disabilities are burden on family and society*, 13.8% responded stated during baseline that they are burden for family and society. While in endline participants responded that CwSN are not the burden on the society and family; they are just differently abled. The same positive increase was reported by state wise respondents as well in all the three states in endline findings when compared to baseline. In the endline study, the figures decreased by 17.2% in Bihar, 3.7% in Rajasthan and 6.3% in West Bengal.

In baseline, 90.9% of teachers had correctly responded to the question *reason of disability* while the percentage had increased to 98.7% in endline. State wise distribution also shows that nearly all the respondents from all states can recognize natural, clinical, hereditary/ accidental cause as a reason for child disability in endline. In Bihar the figures increased from 85.6% to 98.4%, In Rajasthan it increased from 94.8% to 98.4% and in West Bengal it increased from 98.4% to 100%.

A significant change observed regarding need for proper sitting arrangement with appropriate light in the classrooms for CVI in endline results. In all the three states almost all the response of respondents increased to 100% showing a positive change in attitude of teacher.

Figure 8- Percentage Changes in teachers' perspective about importance of inclusive education for CwSN across intervention states



Teachers suggesting use of tricycle for coming to school if a child is disabled by both the legs were found to be 86.2% in the baseline while nearly same 86.9% teachers responded it in endline as well. However, endline witnessed some marginal increase in such response. State wise division reflects a positive change in Bihar and Rajasthan but a negative decline in West Bengal.

5.5 Feedback of Teachers Regarding Receipt of Training, Quality of Education, Methods, and Techniques of Training

This section summarizes the teacher's feedback on the training they have received on Inclusive education as well as their satisfaction on the training provided by Sightsavers only.

Table 8- Receipt of Training and Name of Organization/Institution/Department who provided the training across intervention states.

Background Characteristics	Bihar		Rajasthan		West Bengal		Overall	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Training on Inclusive Education in last 5 years								
Yes	29.5	96.7	22.4	96.7	36.5	100	29.6	97.3
Refresher Training on Inclusive Education in last 1 years								
Yes		3.3		23.3		63.3		23.4
Organization/Institution/Department who provided the training on Inclusive Education								
Education Department	71.8	19.7	53.8	96.8	60.9	10.0	65.3	49.0
Private Institution	2.6	1.6	.0	.0	4.3	.0	2.7	.7
NGO	.0	3.3	.0	.0	4.3	.0	1.3	1.3
Sightsavers India	25.6	91.8	38.5	96.8	4.3	100.0	21.3	95.4
Other	.0	.0	.0	1.6	17.4	.0	5.3	.7
Do not remember	.0	3.3	7.7	.0	8.7	.0	4.0	1.3
Total (N)	132	61	58	62	63	30	253	153

It is evident from the findings of above table that during baseline only 29.6% respondents attended any training on Inclusive education in last five years whereas, this percentage increased enormously in endline. 97.3% respondents in endline admitted that they have received training on inclusive education. State wise results of endline shows that West Bengal received 100% training on inclusive education followed by Bihar and Rajasthan i.e., 96.7% in both the states. It was further admitted by 23.4% of the respondents out of 97.3% that they received refresher training as well on inclusive education in last 1 year.

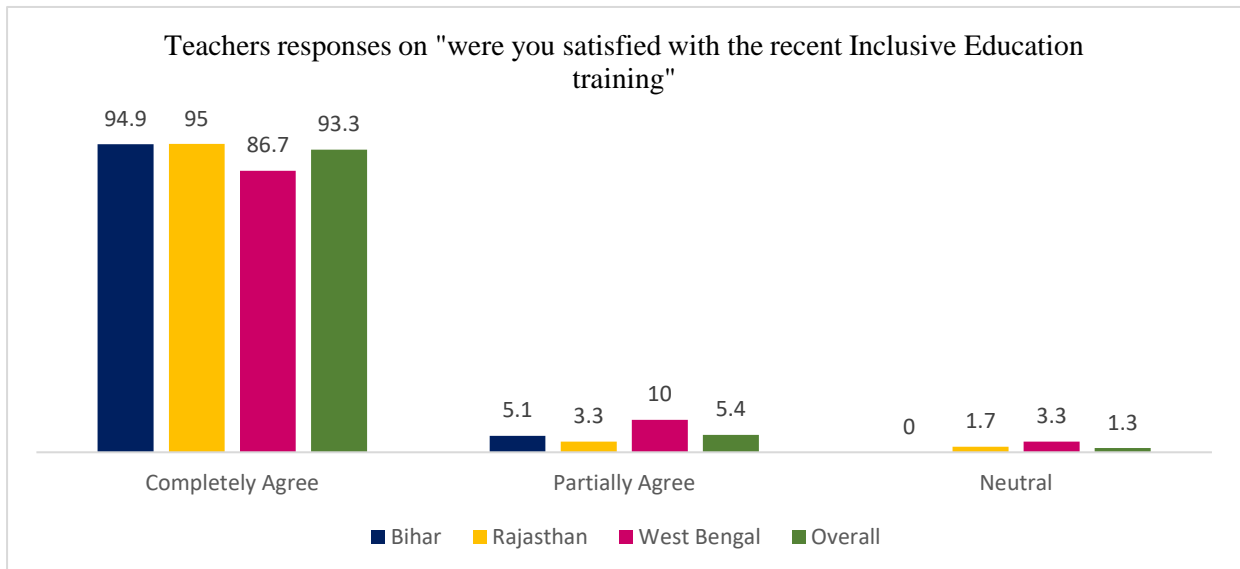
Based on the responses of teachers on name of Organization/Institution/Department who provided the training on Inclusive Education, only 21.3% teachers during baseline responded that they received training on inclusive education by Sightsavers India. Whereas in the endline results steep increase (from 21.3 to 95.4%) can be observed that Sightsavers India gave training on Inclusive Education. State wise findings shows that Sightsavers India provided 100 % training in West Bengal followed by 96.8% in Rajasthan and 91.8% in Bihar.

100% teachers admitted that the trainers used to conduct a test or quiz at the end of the training, for evaluating their understanding about inclusive education.

Participants' feedbacks on their on the important topics covered under the training sessions reveals that majority of the respondents admitted that all the mentioned topics were covered during the training. Multiple coded response was recorded over this component among which most of the teachers (97.4%) said that they were given training on Understanding the Teaching learning methodology of Children with disabilities, followed by 96.7% on Awareness on government policies and schemes for Children with disabilities, 95.4% on Awareness on legal provision for Children with disabilities, 94.8% on Introduction

on Inclusive Education, 93.5% on Subject wise curriculum adaptation, its use and practice, 89.5% on Simulation session, 87.6% on simulation sessions as well as monitoring and evaluation and 86.3% said that they were given training on classroom management.

Figure 9- Training satisfaction towards inclusive education training services provided under Sambalam Project across intervention states.



When teachers were asked whether they are satisfied with the training, overall, 93.3% teachers admitted that they are completely satisfied with the training provided by Sightsavers India. At the state level, 95% teachers from Bihar and Rajasthan and 86.7% from West Bengal admitted that they are completely satisfied with the training.

Chapter 6: Impact of Sambalam project in Inclusive Education System: Insights from State and District-level Stakeholders

6.1 Perception about Inclusive Education

Inclusive education is an approach to education that aims to provide equal opportunities for all students, regardless of their background, ability, or disability. It involves creating an environment that is welcoming and supportive of all students, including those with disabilities, and promoting their participation in all aspects of school life.

“Earlier it was about giving special training and education to especially abled children but since inclusive education system has come it is said that these children should not be looked different. The special children should be taught in same school as regular children. This is inclusive education. The special children will learn looking at the normal children. The attempt is to overcome their disability and come to the mainstream. For this reason, the concept of inclusive education has come up. We try to maintain this as much as possible” - Principal, Howrah, West Bengal

In an inclusive education system, students with disabilities are not segregated into special schools or classes but are instead educated alongside their peers in mainstream classrooms. This approach allows students with disabilities to benefit from the same educational opportunities and experiences as their peers and promotes greater social integration and acceptance.

Inclusive education is based on the principle that every student has the right to an education that is tailored to their individual needs and abilities. This may involve making adaptations to the curriculum or teaching methods, providing assistive technologies, or providing additional support such as specialized teachers or aides.

The benefits of inclusive education are numerous, including increased academic achievement, improved social skills and self-esteem, and greater social integration and acceptance. Inclusive education also benefits non-disabled students, who learn about diversity and gain empathy and understanding for their peers with disabilities.

Conclusively, inclusive education is an important approach to education that promotes equal opportunities and encourages the participation of all students in school life. It is essential to continue to promote and support inclusive education systems to create a more inclusive and equitable society.

6.2 Importance of Program and Policies for Promoting Inclusive Education

Inclusiveness in the Indian education system has been a topic of concern for many years. While there have been some efforts to make education more inclusive, there is still a long way to go.

One of the main challenges in achieving inclusiveness in the Indian education system is the lack of resources, particularly in rural areas. Many schools lack basic facilities such as toilets, electricity, and safe drinking water. This poses a significant barrier to disabled children who may require additional support and accommodations.

Another challenge is the lack of trained teachers and staff who are equipped to work with disabled children. Teachers may not have the knowledge or skills to provide appropriate accommodations and modifications to support the learning needs of disabled children.

However, there have been some positive developments in recent years. The Right to Education Act of 2009 mandated that all children, including those with disabilities, have the right to free and compulsory education. The act also requires schools to provide appropriate accommodations and support services to disabled students. The government has also launched several initiatives to promote inclusiveness in education, such as the Sarva Shiksha Abhiyan, the Inclusive Education for Disabled at Secondary Stage program, Samagra Siksha and New Education Policy-2020. These programs and policies aim to provide disabled children with access to education and support services such as assistive technology, special educators, and training for teachers and staff.

Education is an important tool for promoting social inclusion and helping children with disabilities to participate fully in society. With the support of these policies and acts it helps to create inclusive educational environments that promote acceptance, understanding, and respect for disabled students. It further addresses the social stigma and discrimination towards children with disabilities by promoting awareness and understanding of their needs and abilities. Additionally, by providing equal access to educational opportunities and promoting social inclusion, these acts/laws/policies and programs help to ensure holistic growth of all children and can provide quality education that further contributes to development of the Nation.

“Programs and policies play an important role in promoting inclusive education. For example, as per law it is a legal offense to address any children with their disability. But most of the population are not aware of this. So, spreading awareness in accordance with program and policies will exponentially help in promoting inclusive education”. - **Block resource Person, Bihar**

“The program and policies are important factors in government system to bring development in the country. As government formulates policies and programs to address the needs of socially backward communities are crucial for achieving social justice and equality. The Samagra Siksha Abhiyan program addresses the specific needs of children with disabilities that can help to reduce poverty, improve living standards, and promote inclusive growth. By creating a level playing field for all members of society, these policies can help to bridge the gap between different communities and foster social cohesion and harmony”. - **Teacher, Udaipur, Rajasthan**

6.3 Perception about Special Classroom Setting within General School

Special classroom settings within general schools are important for achieving better learning outcomes for children with disabilities. While inclusive education has become more common in recent years, some children with disabilities may still require specialized attention and resources to succeed in the classroom. Children with disabilities often require instruction that is tailored to their specific needs. A special classroom setting allows for more individualized instruction, which can help disabled children better understand and retain information. The classroom is also equipped with specialized resources such as assistive technology, adaptive equipment, and communication aids provided in their classroom that can help disabled children learn more effectively. Teachers and staff members of this school are often trained to provide emotional and behavioural support, which can help disabled children feel more comfortable and confident in their learning environment. Additionally, a special classroom setting can help improve their social skills and build their self-esteem.

“A special classroom setting within general schools are important for achieving better learning outcomes for children with disabilities. These classrooms offer individualized attention, specialized instruction, accessible facilities, integration with peers, and an inclusive environment to help children with disabilities succeed in the classroom”. - **District Program Officer, Jhalawar, Rajasthan**

6.4 Key Components of Sambalam Program

In 2018, with the support of HCL Foundation Sightsavers India, India collaboratively with State Department of Education across five districts of Bihar, Rajasthan and West Bengal have initiated an inclusive education project for children with visual impairment to make education more inclusive and accessible. The project aspired to ensure that children with visual impairment have access to quality education in mainstream schools. The activities listed under the project were identification and assessment, training and support, advocacy, monitoring and evaluation, and partnerships to promote inclusive education and provide holistic growth opportunity to children with visual impairment to reach their full potential.

During the initial days of the project implementation, Sightsavers India, India worked with schools and communities to identify children with disabilities who are not attending school. The district team of Sightsavers India, India conducted assessments to determine the educational needs of these children and develop individualized education plans. Thereafter, they provide counselling sessions to the parents of the school dropouts to motivate them to send their children to school.

Sightsavers India India also provided training and support to teachers, school management committees, and parents to ensure that they can provide appropriate support to children with disabilities. The organization also provided assistive technologies such as screen readers, magnifiers, and speech recognition software for supporting the children with visual impairment in accessing their educational materials.

The project also focused in strengthening the government established block level resource centres (BRCs). These centres were part of the Sarva Shiksha Abhiyan (SSA), which is a government program that aims to provide universal access to quality education. However, the awareness level about the functionalities of BRCs were insignificant within the community member.

“To support government, Sightsavers India provided training to special educators along with general teachers because general teachers are more responsible for identification of especially abled children. For example, if general teacher is not able to understand that particular child is suffering from learning disability, he will consider the children as duffer rather providing him education according to his special needs”. - **State Nodal Officer, Department of Inclusive Education, Rajasthan.**

“The block level resource centres are institutions that were created by the DPEP to address in local ways the training needs of teachers, school support and school community inter linkages, at the block level. These institutions also provide local level details for the purpose of academic planning and management of quality in the schools”. - **State Nodal Officer, Department of Inclusive Education, West Bengal**

Therefore, during the implementation of Sambalam project, Sightsavers India team focused in sensitizing the community about the functionalities of BRCs. These further resulted in increasing the accessibility of BRCs services among children with visual impairment. The BRCs were refurbish with latest technological devices including refreshable Braille display, Geometry Kit (for blind), mobile phones, Daisy players, Computer with INDO-NVDA and Smart/Interactive Board for promoting quality education children with disabilities.

6.5 Impact of Sambalam Program in Promoting Inclusive Education System

Project Samblam has yielded positive result through its child centric and system strengthening approach. This indicated that a positive outcome can be obtained, if along with child centric approach, system is strengthened through various approaches such as sensitisation of various stakeholders, training of Master trainers, schools' teachers and resource teachers, community awareness and parents' involvement. The stakeholders reported that Information Communication Technology (ICT) can be an enabler and has the potential to foster inclusive education for learners with disabilities. It played a significant role in improving the learning outcomes of the learners as well as improving their quality of life. The qualitative interviews further highlighted stakeholder's sensitisation and training of teachers/resource teachers as important components for the CVI to enhance their learning outcomes by acquiring knowledge and skills.

The qualitative findings also suggested that the capacity building programme designed and implemented by Sightsavers India India to train the teachers on Inclusive Pedagogy and Information and Communication Technology (ICT) has been of immense success. The training was effective in improving the knowledge attitude and practices of teachers about inclusive education system. This training resulted into developing positive mindset among teachers that further provide welcoming and supportive environment to children with disability with the intention to make them feel more comfortable and confident in their learning environment.

"Teacher's training has helped teachers to create a positive classroom culture that promotes acceptance, respect, and inclusion. This has been achieved through modelling positive behaviour, celebrating diversity, and creating opportunities for students to learn from each other". - Principal, Bhagalpur, Bihar

"Earlier these children used to feel socially inferior, which had a negative impact on their mind. But ever since the sambalam program has implemented, the children are growing interest towards education with the help of ICT devices and their confidence is also increasing". - Deputy Secretary, West Bengal.

"Overall, the Sambalam program has completely changed the life of visually impaired children. This is proving a boon for CVI children and CVI are growing with confidence". - Teacher, Bihar.

"There is a massive impact Sambalam program. Earlier CVI were not coming to schools but now I can see progress in school attendance". - Head teacher, West Bengal.

"Sambalam program has impacted a lot in overall development of CVI. Use of ICTs enhances independence and equal opportunity and are becoming more confident as well."- Teacher, Rajasthan

"Sightsavers is an organization which is doing really good work in providing direct benefits to CVI. The children who require special needs and society consider them as burden, organization like Sightsavers is playing a good role in making such children self-reliant. This will improve not only physical health of CwSN but also emotional and mental health."- Deputy Director, Rajasthan.

Chapter 7: Conclusion

India's National Education Policy, 2020 (NEP, 2020) has emphasized on the development of creative potential of everyone with the aim to provide universal access to quality education for all. The 2030 Agenda for the Sustainable Development states to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”. Fulfillment of such dreams requires reconfiguration of the existing education system. The Ministry of Education (MoE), Government of India (GoI) has launched 'Samagra Shiksha' that envisions to ensure inclusive and equitable quality education from pre-school to senior secondary stage across the country with the aim to contribute to the achievement of global sustainable development goals on education.

The Sightsavers India Sambalam project was implemented across five districts of Bihar, Rajasthan, and West Bengal to promote the improvement of learning levels among children with disabilities, particularly those with visual impairments. The project utilized a range of strategies to support inclusive education, including the provision of assistive devices, teacher training, and community engagement.

One of the key objectives of the Sightsavers India Sambalam project was to improve the quality of education for children with disabilities, particularly those with visual impairments. To achieve this, the project provided assistive devices such as Braille books, audio books, and special software that can help students with visual impairments access educational materials. The project also provided training and support for teachers to enable them to teach in an inclusive manner, adapting the curriculum and teaching methods to meet the needs of students with disabilities.

Another key component of the Sightsaver's Sambalam project was to conduct capacity building programme for teachers in three Indian states with the purpose to improve classroom transaction for the CwSN. Capacity building sessions were conducted under the project provided teachers with new information and skills related to inclusive education, including an understanding of the principles, policies, and practices related to inclusive education. This increased knowledge further help the teachers to better understand the needs of students with disabilities and how to create a more inclusive learning environment.

Additionally, the project team work closely with parents, community leaders, and disability rights groups to raise awareness about the importance of inclusive education and to promote the rights and needs of children with visual impairment. This engagement helped to build support for inclusive education and to address any stigma or discrimination that may prevent children with disabilities from accessing education.

Conclusively, the trends observed in the survey over five years are promising and the inclusive education' approach is now in need of a scale-up in terms of coverage and efforts for an exponential and sustainable growth.

Chapter 8: Way Forward

Inclusive education (IE) is an approach towards providing quality education to all children with a specific focus on those who are vulnerable to marginalization and exclusion. It implies all learners – with or without disabilities being able to learn together through access to common pre-school provisions, schools, and community educational setting with an appropriate network of support services. This is possible only in a flexible education system that assimilates the needs of a diverse range of learners. Looking into the needs of the educational system, the Indian education system has undergone several reforms over the years to make it more inclusive and accessible to children with disabilities.

Despite these efforts, there are still challenges to the implementation of inclusive education in India. One of the major challenges is the lack of infrastructure and resources to support inclusive education. Many schools in India are not equipped to accommodate students with disabilities, and there is a shortage of trained teachers and specialized support staff to provide the necessary assistance to these students. Another challenge is the social stigma attached to disability, which can make it difficult for children with disabilities to be accepted and included in mainstream schools. To address this issue, the government and Sightsaver, India is working collaboratively to raise awareness about disability and promote acceptance and inclusion in schools and communities.

The endline survey findings show that the intervention by Sightsavers team has been exponentially beneficial in creating positive attitude and awareness about nature and needs of CWSN among special educators and general teachers and improving the learning levels of CVI children through utilization of technology and ICT. It is commendable to note that in the success of program the contributing factors are – a vigilant monitoring structure, liaising with government departments, getting the community onboard with the proposed changes, and finally the level of intervention techniques specific to the stakeholders. The above-mentioned factors are important to scaling up of the program.

Largely, inclusive education in India is a work in progress, but there is growing recognition of the importance of providing equal educational opportunities to all children, and efforts are underway to make this a reality. The following are some ways forward for inclusive education:

- Inclusive learning environments should be created that accommodate the diverse needs of students, including those with disabilities, different learning styles, and cultural backgrounds. This includes providing appropriate physical accommodation, use of assistive technologies, and other support services.
- It is evident from the current study that Information Communication Technology (ICT) has the potential to foster inclusive education for children with special needs. It plays a significant role in improving the learning outcomes of the learners as well as improving their quality of life.
- ICT enables CwSN to overcome some of their barriers which causes exclusion. Therefore, an approach to ICT development must be adopted in the education sector to address differences in access to connectivity and digital learning and reduce the digital divide in order to enable all learners to reach their full potential.
- Schools should be made accessible to children with disabilities by improving physical infrastructure, such as ramps, elevators, and accessible toilets. Schools should also be equipped with assistive technologies, such as hearing aids and Braille devices, to support children with disabilities.
- Teachers should be provided with specialized training in inclusive education, including training on teaching methods, use of assistive technologies, and classroom management. Teachers should also be trained in identifying and addressing the needs of children with disabilities.

- Classroom observation to look at inclusive practices of trained teachers should be part of monitoring.
- The government should increase funding for Inclusive education programs, including resource rooms and specialized teaching staff, to support the education of children with disabilities.
- Schools should collaborate with health care providers to ensure that children with disabilities receive the necessary medical and therapeutic support.
- Awareness campaigns should be conducted to raise awareness about the rights of children with disabilities and the importance of inclusive education. These campaigns should target parents, peers, teachers, school administrators, and the community.
- For achieving optimal use of ICT in inclusive education, collaboration, coordination and partnerships between schools, government agencies, NGOs, and other stakeholders is required. This includes sharing best practices, pooling resources from intra and inter department, and working together to address the challenges of promoting inclusive education.
- Advocacy is an important way to promote inclusive education. This involves advocating for the rights of all children to access quality education, and working to create policy and legislative changes that support inclusive education.
- The government should regularly evaluate and monitor progress in inclusive education and make necessary reforms to the education system to ensure that it is meeting the needs of children with disabilities.

Conclusively, inclusive education requires a multi-faceted approach that addresses the diverse needs of learners, promotes teacher training and professional development, creates inclusive learning environments, involves the community, and engages in advocacy and collaboration. By adopting these strategies, we can work towards creating a more equitable and inclusive education system that provides equal opportunities to all children.

Annexures

Table 1: Demographic Characteristics of CVI assessed across intervention area during the baseline and endline study.

Background Characteristics	Rajasthan		Bihar		West Bengal		Overall	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Gender								
Male	54.4	63.0	50.6	55.6	45.5	43.9	50.9	56.2
Female	45.6	37.0	49.4	44.4	54.5	56.1	49.1	43.8
Educational Level								
Primary	33.6	2.5	56.1	9.9	21.8	2.4	47.4	5.4
Upper Primary	48.8	32.1	1.4	37.0	32.7	17.1	42.3	31.0
Secondary	17.6	18.5	1.7	16.0	34.5	29.3	8.7	19.7
Higher Secondary	0.0	46.9	0.8	37.0	10.9	51.2	1.7	43.8
Total (N)	125	81	362	81	109	41	542	203

Table 2: Economic profile of CVI assessed across intervention area during the baseline and endline study.

Background Characteristics	Rajasthan		Bihar		West Bengal		Overall	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Poor	69.6	38.3	79.8	82.7	50.9	58.5	74.5	60.1
Middle	24.8	37.0	16.3	13.6	45.5	29.3	21.2	26.1
Rich	5.6	24.7	3.9	3.7	3.6	12.2	4.2	13.8
Total (N)	125	81	362	81	55	41	542	203

Table 5- Accessibility of assistive educational materials by category of visual impairment children across intervention area during the baseline and endline study

Types of Visual Impairment	Background Characteristics	Rajasthan		Bihar		West Bengal		Overall	
		Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Blind children	Braille Kit	20.7	66.7	28.1	98.0	33.3	66.7	27.5	87.8
	ICT Device	20.7	93.3	18.2	100.0	4.8	100.0	17.0	98.6
	Braille Book/Material	17.2	73.3	19.0	100.0	28.6	33.3	19.9	86.5
	Plus Curriculum	10.3	53.3	23.1	96.0	23.8	77.8	21.1	85.1
Total (N)		29	50	121	15	21	9	171	74
Low Vision Children	Low Vision Devices	13.5	51.5	6.2	96.8	44.1	93.8	11.6	72.9
	ICT Devices	29.2	89.4	4.1	100.0	2.9	96.9	10.5	93.8
	Book Printed in Bold Letters/Materials Received	24.1	56.0	17.4	90.3	28.6	40.6	19.9	60.4
Total (N)		96	66	241	31	34	32	371	129

Table 4-Accessibility of non-educational services by category of visual impairment children across intervention area during the baseline and endline study

Background Characteristics	Rajasthan				Bihar				West Bengal				Overall			
	Baseline		Endline		Baseline		Endline		Baseline		Endline		Baseline		Endline	
	Blind Children	Low Vision Children	Blind Children	Low Vision Children	Blind Children	Low Vision Children	Blind Children	Low Vision Children	Blind Children	Low Vision Children	Blind Children	Low Vision Children	Blind Children	Low Vision Children	Blind Children	Low Vision Children
Medical Assessment of eyesight	93.1	96.9	100.0	98.5	87.6	68.9	100.0	96.8	100.0	97.1	100.0	100.0	90.1	78.7	100.0	98.4
Disability certificate	86.2	93.8	100.0	100.0	67.8	41.9	100.0	100.0	100.0	100.0	100.0	100.0	74.9	60.6	100.0	100.0
Govt. aids & benefits	55.2	58.3	100.0	92.4	39.7	33.6	100.0	100.0	81.0	94.1	100.0	93.8	47.4	45.6	100.0	94.6
Total (N)	29	96	15	66	121	241	50	31	21	34	9	32	171	371	74	129

Table 5- Age and gender distribution of teachers assessed across intervention area during baseline and endline study.

Background Characteristics	State							
	Bihar		Rajasthan		West Bengal		Total	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Age								
<30	6.8	1.6	25.9	6.5	9.5	6.7	11.9	4.6
30-39	52.3	31.1	22.4	32.3	55.6	26.7	46.2	30.7
40-50	35.6	39.3	29.3	32.3	27.0	50.0	32.0	38.6
>50	5.3	27.9	22.4	29.0	7.9	16.7	9.9	26.1
Gender								
Male	73.5	70.5	72.4	66.1	57.1	66.7	69.2	68.0
Female	26.5	29.5	27.6	33.9	42.9	33.3	30.8	32.0
Total (n)	132	61	58	62	63	30	253	153

Table 2 - Distribution of Respondents according to their type of school and working experience across intervention area during baseline and endline study.

Background Characteristics	State							
	Bihar		Rajasthan		West Bengal		Total	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Type of School								
Primary School	14.4	21.3	8.6	11.3	33.3	36.7	17.8	20.3
Upper Primary School	73.5	68.9	46.6	32.3	4.8	10.0	50.2	42.5
Secondary School	6.8	6.6	1.7	.0	7.9	6.7	5.9	3.9
Senior Secondary School	1.5	3.3	43.1	56.5	27.0	33.3	17.4	30.7
Other (Please specify)	3.8	.0	.0	.0	27.0	13.3	8.7	2.6
Working Experience								
<5	4.5	.0	27.6	32.3	19.0	3.3	13.4	13.7
4-14	87.9	57.4	37.9	29.0	65.1	43.3	70.8	43.1
15-24	6.1	41.0	13.8	14.5	14.3	50.0	9.9	32.0
25-35	1.5	1.6	20.7	21.0	1.6	3.3	5.9	9.8
>35	.0	.0	.0	3.2	.0	.0	.0	1.3
Total (n)	132	61	58	62	63	30	253	153

Table 3- Educational status of teachers assessed across intervention area during baseline and endline study.

Background Characteristics	State							
	Bihar		Rajasthan		West Bengal		Total	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Graduate	31.8	36.1	12.1	3.2	39.7	16.7	29.2	19.0
Postgraduate	15.9	44.3	6.9	24.2	6.3	20.0	11.5	31.4
Diploma in Education	31.1	3.3	29.3	11.3	19.0	16.7	27.7	9.2
B.Ed.	15.9	8.2	46.6	58.1	19.0	40.0	23.7	34.6
Other (Please specify)	5.3	8.2	5.2	3.2	15.9	6.7	7.9	5.9

Table 4: Knowledge of teachers on inclusive education across intervention area during baseline and endline study

Background Characteristics	Response	State							
		Bihar		Rajasthan		West Bengal		Total	
		Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
CWDs should only study in Special Schools	True	41.7	29.5	31.0	35.5	27.0	16.7	35.6	29.4
	False	58.3	70.5	69.0	64.5	73.0	83.3	64.4	70.6
CWDs studying in regular school, negatively impact the non-disabled children	True	19.7	11.5	10.3	19.4	14.3	10.0	16.2	14.4
	False	80.3	88.5	89.7	80.6	85.7	90.0	83.8	85.6
CVI have sixth sense	True	78.0	72.1	62.1	72.6	68.3	60.0	71.9	69.9
	False	22.0	27.9	37.9	27.4	31.7	40.0	28.1	30.1
Children with Disabilities can only study with the help of a special educator	True	58.3	39.3	43.1	56.5	79.4	43.3	60.1	47.1
	False	41.7	60.7	56.9	43.5	20.6	56.7	39.9	52.9
Total (N)		132	61	58	62	63	30	253	153

Table 5- Changes in teachers' perception on schools and curriculum for Children with Special Needs (CWSN) across intervention area during baseline and endline study

Background Characteristics		State							
		Bihar		Rajasthan		West Bengal		Total	
		Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Children with Disabilities should change themselves as per the school and curriculum	True	55.3	29.5	41.4	35.5	52.4	26.7	51.4	31.4
	False	44.7	70.5	58.6	64.5	47.6	73.3	48.6	68.6
Total (N)		132	61	58	62	63	30	253	153

Assessment Tool of Learning Level of Children with Visual Impairment

Primary information/ details		
Region_____ District_____ Block_____		
Respondent's name_____ Respondent's serial number_____		
Residential Address_____		
Landmark_____ Telephone_____		
Name / Address of School for blind children_____		
Journey of the interviewer		
	Date	Interviewer's name
Day/Month/Year of Interview		1 2
Time of Interview	Start Time (Hour/ minute)	End Time (Hour/ minute)
Result Code (Code) <ul style="list-style-type: none"> • Completed1 • Partially completed.....2 • Refused.....3 • Other (specify).....9 		

1.0 Household list (Please tell me about all the members usually living with you)

For persons aged 6 years or above								
Row No.	Name	Relation	Sex	Age	Education	Marital Status	Disability Status	
	Name of the Beneficiary	What is the relation to the head of the family?	Male or Female	What is the age?	Is he/she able to read or write?	What is the highest education level?	What is the current marital status?	Does he/she have any disability?

2.0 Indian Equity Tool

Serial No.	Question	Option-1	Option-2
Q. 1	Do you own a color TV?	Yes	No

Q. 2	Do you have a cable/ dish connection?	Yes	No
Q. 3	Do you own a pressure cooker?	Yes	No
Q. 4	Do you own a refrigerator?	Yes	No
Q. 5	Do you own a mixer grinder (grinding machine)?	Yes	No
Q. 6	Do you own an air cooler?	Yes	No
Q. 7	Do you own a motorcycle/ scooter?	Yes	No
Q. 8	Is kerosene oil used in your household for heating, lighting or cooking purposes?	Yes	No
Q. 9	Are wood / branches / dried cow dung used in your household for heating, lighting or cooking purposes?	Yes	No
Q. 10	Is LPG gas used in your household for heating, lighting or cooking purposes?	Yes	No
Q. 11	Do you have your own toilet inside your house?	Yes (Flush, semi-flush, latrine or any other facility)	This facility is not inside the house

3.0 General information about the child

S.N	Details	Response	
1.	Child's name		
2.	Class (Currently the child is studying in which class):		
3.	Disability Status:		
	a. As per S.M.S.A. list:	Blind.....1 Limited Vision.....2	
	b. Observed by the Surveyor	Blind.....1 Limited vision.....2 Single eye.....3 Other.....4	
4.	Age at which disability happened:		
5.	Who in the family helps the child in studies:	Brother.....1 Sister.....2 Mother.....3 Father.....4 Guardian.....5 Others.....6	

6.	Has there been an eye check-up by a doctor:	Yes.....1 No.....2	
7.	If classified as having limited vision: Was there an assessment of limited vision:	Yes1 No.....2	If 3 (a) or 3 (b)= 2
8.	Is there a Disability Certificate (issued by a medical authority):	Yes1 No.....2	
9.	Is the child getting any facility / educational benefit from the Government:	Yes1 No.....2	
10.	Has he/she ever received any special tools	Yes1 No.....2	
	a. Braille kit (for blind)	Yes1 No.....2	If 3 (a) or 3 (b)= 1
	b. Limited vision device (for limited vision)	Yes1 No.....2	If 3 (a) or 3 (b)= 2
11.	Has he/she ever received ICT device	Yes1 No.....2	
	a. If yes, mention the name of the device:		If 11= 1
12.	Did he/she ever receive Braille books / materials	Yes1 No.....2	
	a. (For blind) Braille books / materials received:	Yes1 No.....2	If 3 (a) or 3 (b)= 1
	b. (For limited vision) Books printed in bold letters / materials received:	Yes1 No.....2	If 3 (a) or 3 (b)= 2
13.	Has he/she received 'Plus curriculum' course / Braille training (for blind children)	Yes1 No.....2	If 3 (a) or 3 (b)= 1
	a. If yes, kind of training		If 13= 1
	b. Duration of training		If 13= 1
14.	Has he/she participated in some other training		
	a. If yes, kind of training	Yes1 No.....2	
	b. Duration of training		If 14=1
15.	Do you take assistance from a special teacher	Yes1 No.....2	

	a. If yes, mention the frequency of meeting the relevant teacher in a month.	In months	If 15=1
16.	Do you take any personal tuition	Yes1 No.....2	
17.	Your primary medium of reading and writing:	Braille.....1 Bold print letters.....2 Normal printed book.....3 Other.....4	
18.	Teaching medium at school:	Hindi.....1 English.....2 Local language.....3	
19.	Do you regularly go to school	Yes1 No.....2	
	a. Frequency (Days of average monthly attendance at school):		If 19=1

3.1 Assessment of Learning

Survey of children studying in classes 1 to 12 in Government schools will be done (using only the test provided with these tools).

Used Serial Test No.: 1 / 2

Medium of Assessment: Braille / Printed

3.21 Reading (Local Language) (Tick only the highest level)	Initial/ Starting.....1	
	Alphabet/ Letters.....2	
	Words.....3	
	Paragraph.....4	
	Story5	
Observation		
3.22 English reading (Tick only the highest level)	Yet to start.....1	
	Initial/ Starting.....2	
	Capital letters.....3	
	Small letters.....4	
	Words.....5	
	Sentence.....6	
3.23 Meanings (Of English words)	Able to point out / speak.....1	
	Unable to point out / speak.....2	

3.24 Meanings (Of English sentences)	Able to point out / speak.....1	
	Unable to point out / speak.....2	
Observation		
Medium of assessment of mathematics: Mathematics slate / printed / oral		
3.25 Mathematics (Tick only the highest level)	Start1	
	Recognizing numbers (1-9)2	
	Recognizing numbers (10-99)3	
	Subtraction4	
	Division5	
Observation		
General observation		

Name of the researcher	<u>Signature</u>	<u>Code</u>
1.		
2.		
Date of survey Day/ Month/Year	___/___/___	
Thank You		

Knowledge, Attitude & Practice of Teacher's on Educating CVI in Inclusive Environment

(Form No.): _____

(UID): _____

Part-1: General Information

(Subject)	(Details)	Further
Date of filling up form	D D/ M M/ Y Y <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>	
Place		
Teacher/Teacher educator Name		
Current Designation		
Age	<input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/>	
Current Address/contact no.		
Gender	M.....1 F.....2	
Type of School	Primary School.....1 Upper Primary School.....2 Secondary School.....3 Senior Secondary School.....4 Other.....8	
Schools full address		
Working Experience in years <i>(Please write 00, if experience is less than one year)</i>	<input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/>	
Education Qualification	Graduate1 Post Graduate.....2 Diploma in Education.....3 B.Ed.....4 Other (Please specify).....8 _____ _____	
Total student in School	Total student : _____ Student with Disability : _____	

	Student with Visual Impairment: _____ <ul style="list-style-type: none"> • Girl students with Visual Impairment: _____ • Boy students with Visual Impairment: _____ 	
--	--	--

Part-2: Information on Inclusive Education (IE)

Sl. No.	Comment	Circle the correct answer <input type="radio"/>	Skip Pattern
2.1	Do you have experience of teaching children with disability?	Yes.....1 No.....2	Ask all
2.2	Do you have experience of teaching children with visual disability?	Yes.....1 No.....2	If 2.1=1
2.3	How long have you been teaching the children with visual disabilities?	In months _____	If 2.2 =1
2.4	Do you think, Children with Disability (CWD) can go to any school?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.5	Do you think, Children with Disabilities (CWDs) should only study in special schools?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.6	Do you think, Disabled children are generally easier to get along with than non-disabled children?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.7	Do you think, severely disabled children are much harder to get along with than children with minor disabilities?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5	Ask all

		No Answer.....9	
2.8	Do you think, Children with Disability can perform at same level as non-disabled children?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.9	Do you think, the CWDs studying in regular school, negatively impact the non-disabled children?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.10	Do you think, Children with visual impairment can have a normal social life?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.11	Children with Visual Impairment (CVI) have a sixth sense.	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.12	Do you think, there should be a special education classroom for children with visual impairment?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.213	Do you think, Govt. is spending too much on education of Children with Disabilities?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5	Ask all

		No Answer.....9	
2.14	Do you think, General schools are totally inclusive for Children with Disabilities?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.15	Do you think, children with Disabilities should change themselves as per the school and curriculum?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.16	Do you think, needs of Children with Disabilities are totally different from a non-disabled child?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.17	Do you think, children with special educational needs could be integrated in mainstream schools?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.18	Do you think, children with Disabilities can only study with the help of a special educator?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.19	Do you think, children with Disabilities need expensive equipment's for their study	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5	Ask all

		No Answer.....9	
2.20	Do you think, children with visual impairment needs assistive device to support for writing tasks?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.21	Do you think, school with children with disabilities require to build extra storage room for their equipment?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.22	Do you agree, school infrastructure should be disability friendly?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.23	Can disability spreads from one person to another?	Yes1 No.....2 Don't Know.....3	Ask all
2.24	Is there any provision made for Children with Special Need in Right to Education Act?	Yes1 No.....2 Don't Know.....3	Ask all
2.25	Do you think, Children with visual impairment faces difficulty in understanding literature subjects as it consists of big paragraphs or picture-based concept	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.26	Do you think, children with visual impairment should be given extra time in exams.	Completely Agree1 Partially Agree.....2 Neutral.....3	Ask all

		Partially Disagree.....4 Completely disagree.....5 No Answer.....9	
2.27	Do you think, teachers do not have any role in providing various educational experience or opportunities to Children with visual impairment.	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.28	Do you think, there should be separate teaching learning methodology for visually impaired children?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all
2.29	What is the Proper methodology used to provide concept of cube to children with visual impairment?	photo of Cube1 Verbal explanation..... 2 Through real cube 3 Real cube and cube on a paper in 3 d format or verbal explanation..... 4 Dont Know.....9	Ask all
2.30	Do you think, there should be special Curriculum as per the need of CVI?	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all

Part-3: Perspective towards Inclusive Education

Sl. No.	(Comment)	Answer	Furhter
3.1	Children with Disabilities are burden on family and society	Completely Agree1 Partially Agree.....2 Neutral.....3 Partially Disagree.....4 Completely disagree.....5 No Answer.....9	Ask all

3.32	Amar is a Child with Disability. How do you look to the reason of his disability?	(a) Curse of previous birth/ curse of God)..... 1 (b) Other (Natural, Clinical, Hereditary/Accident etc).....2 ...2	Ask all
3.3	Malti is a child with visual impairment. Where she should sit in the classroom?	a. <u>On Back Bench with others</u>).....1 b. <u>On front bench where there is propoer light</u>2 c. On a separate bench in class)....3 d. Not in the classroom.....4	Ask all
3.4	Deepa is suffering from Cerebral Palsy due to which she cannot speak clearly. Also, she walks with help of stick. Classroom teacher asked Deepa to not to come to school because:	a. Teacher faces difficulty in understanding what deepa says).....1 b. It affects other children education.....2 c. No Special Educator available in school.....3	Ask all

Part-4: Implimentation of Inclusive Education

Sl. No.	Comment	Answer	Further
4.1	Janaki is a child hearing-impaired child by birth. During her admission in school:	a. Adaptation is must for Janaki).....1 b. School and cussiculum adaptation is must.....2 c. Both need not to do anything3	Ask all
4.2	Rahul (class 8) has polio in both legs and he cannot walk. What would you suggest Rahul to travel to school?	a. Rahul should leave school.....1 b. Rahul should get admission in a Special School.....2 c. Rahul should come to school on Try Cycle.....3 d. Should use other medium to come to school.....4	Ask all
4.3	Raman is a Child with visual impairment. During exams he:	a. Can write on his own.....1 b. Can take help of writer/scribe.....2 c. Can use Computer to write exam....3 d. Above all.....4	Ask all

Part-5: Training on Inclusive Education

SL.NO.	Comment	Answer	Further
5.1	Have you taken any training on Inclusive education in last 5 years?	Yes1 No.....2	Ask all If 5.1=2, End the intervi ew.

5.2	If yes, then please write training name and duration.	Name: Duration:	If 5.1=1
5.3	Have you received any refresher training on Inclusive education in last 1 years	Yes1 No.....2	If 5.3=2 End the interview
5.4	If yes, then please write training name and duration.	Name: Duration:	If 5.3=1
5.5	Who provided you training on inclusive education?	Edu. Department1 Private Institute2 NGO.....3 Sightsavers India4 Other5 Do not remember.....8	If 5.1 or 5.3=1
5.6	What were the thematic area covered under the training sessions	Introduction on Inclusive Education.....1 Awareness on legal provision for Children with disabilities.....2 Awareness on government policies and schemes for Children with disabilities.....3 Understanding the Teaching learning methodology of Children with disabilities.....4 Simulation session5 Educational need of CVI.....6 Subject wise curriculum adaptation, its use and practice7 Monitoring and evaluation.....8 Classroom Management.....9 Others specify.....10	If 5.1 or 5.3=1
5.7	Did this training helped in give clarity on your quires related to Inclusive Education?	Completely Agree1 Partially Agree.....2 Neutral.....3	If 5.1 or 5.3=1

		Partially Disagree.....4 Completely disagree.....5 No Answer.....9	
5.8	Were the trainers being able to answer to your queries	Yes.....1 No.....2 No Answer.....9	If 5.1 or 5.3=1
5.9	Have they conducted any test/quiz at the end of the training for evaluating your understanding about Inclusive education	Yes.....1 No.....2 No Answer.....9	If 5.1 or 5.3=1
5.10	Were you satisfied with the recent Inclusive Education training	Completely satisfied.....1 Partially Satisfied.....2 Neutral.....3 Partially dissatisfied.....4 Completely dissatisfied.....5	If 5.1 or 5.3=1
5.11	Mention the reason for dissatisfaction	Open ended	If 5.10=4 or 5
5.12	List down your expectation from Inclusive Education Training	Open ended	If 5.1 or 5.3=1

Sambalam District Project Team

State	District	District Project Coordinator	ICT Coordinator
Bihar	Bhagalpur	Rajan Kumar	Ram Singh Yadav
	Jehanabad	Vinayak Sandhavar	Srikanta sarkar
Rajasthan	Jhalawar	Om Prakash Choudhary	Ashok Jangid
	Udaipur	Sunil Kumar	Md Azam
West Bengal	Howrah	Sudip Roy	Gourab Banerjee

Notes



Share **SightsaversIndia**



Follow **@SightsaversIN**



Watch **SightsaversIN**

Registered office

A-3, Shivdham, New Link Road,
Kanchpada, Malad (west)
Mumbai - 400 064
Phone: +91 22 28820808/ 1919

Country office

45, Second Floor,
Okhla Industrial Estate, Phase III
New Delhi - 110 020
Phone: +91 11 42267202 / +91 11 42384572
Email: indiaweb@sightsaversindia.org

Other offices

No.86, II Floor, Platinum Project
Coles Road, Frazer Town,
Bangalore - 560005

GC 104, Sector III, Salt Lake
Kolkata - 700 106
Phone: +91 33 40086225

E -1/136, Arera Colony
Bhopal - 462016
Phone: +91 755 4292807