

UPGRADING BRAILLE PRESSES IN INDIA: ITS EFFECTIVENESS AND IMPACT ON VISUALLY-IMPAIRED COMMUNITIES

Tapas Kumar Sarangi*

ABSTRACT

The Department of Empowerment of Persons with Disabilities, Ministry of Social Justice and Empowerment, has implemented the central scheme of Establishing/Modernization/Capacity Augmentation of Braille Presses in India with an aim to provide textbooks free of cost to the visually impaired persons across the country under Sarva Siksha Abhiyan (SSA), Rashtriya Madhyamika Siksha Abhiyan (RMSA) and Integrated Education for the Disabled at Secondary Stage with the collaboration of state governments. The broad objective of this paper is to examine the usefulness and progress of the scheme and other related issues pertaining to its implementation. The scheme has been implemented in 33 Braille presses in the country out of which 90 per cent sample institutions have been covered under the study. All Braille presses and beneficiaries were appreciative of the scheme and felt that the GoI-initiative to provide Braille books free of cost is the best step towards empowering children with visually impairments. Also, it is recommended that the scheme should continue further and it should be ensured that the printing and distribution of Braille material should start immediately at all relevant sites.

Keywords: *Blind, Braille, Community, Disability, Empowerment*

* Assistant Director, National Institute of Labour Economics Research and Development, Narela, Delhi; E-mail: sarangi.tapas@gmail.com

1. Introduction

The International Community has set a historic plan of 17 Sustainable Development Goals (SDGs) that aim to build a more prosperous, equal, and secure world by 2030. At the core of this global agenda for 2030 is the principle of universality: ‘Leave No One Behind’. The Government of India through Department of Empowerment of Persons with Disabilities has embarked on achieving the SDG-4 aiming at guaranteeing equal and accessible education to visually impaired. The National Policy for Persons with Disabilities (2006) recognizes that Persons with Disabilities (PwDs) are a valuable human resource for the country and seeks to create an environment that provides them equal opportunities, protection of their rights and full participation in the society. The National Policy also recognizes the fact that a majority of persons with disabilities can lead a better life if they have equal opportunities and effective access to rehabilitation measures.

The mandate of the Constitution of India is to ensure equality, justice, and dignity for all individuals, which implies an inclusive society for all, especially the disadvantaged. Article 41 of Part IV (Directive Principles of State Policy), which is particularly relevant with regard to Persons with Disabilities, reads as follows:

“41. Right to work, to education and to public assistance in certain cases: *The State shall, within the limits of its economic capacity and development, make effective provision for securing the right to work to education and to public assistance in cases of unemployment, old age, sickness, and disablement, and in other cases of underserved want.*”

The Central Government enacted The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation Act), 1995 which came into force with effect from 1st January, 1996. This Act is the basic legislation that deals with the rights and empowerment of Persons with Disabilities. Clause 27 (f) of Chapter V (Education) of the Act provides that the appropriate Governments and the local authorities shall by notification make schemes for providing every child with disability free of cost special books and equipment needed for their education.

The two most vital aspects of empowerment of differently abled persons are education and employment. According to Census 2011 data, there are 65.7 lakh disabled people in the age group 5-19 years out of which 17.5 lakh (26.7 per cent) disabled population has never attended any school, eight lakh (12.1 per cent) has dropped out of schools in the last decade, while 40.2 lakh (61.2 per cent) are attending educational institutions. Among the differently abled persons, imparting education to visually impaired is a big challenge. As per Census 2011, out of 2.68 crore disabled persons, 19 per cent are visually impaired. Among

the visually impaired 18 per cent are male and 20 per cent female. According to Census 2001, 67.7 per cent children with visual impairment were receiving education and the number increased to 68 per cent by 2011. It is further noticed that visually impaired are the second highest among the disabled in attending educational institutions. The proportion of visually disabled to persons with disabilities for all age-groups is higher in rural areas for both males and females (Statistical Profile of India, 2016). As a part of achieving educational empowerment of the visually impaired the Department of Empowerment of Persons with Disabilities (DoEPwD) has launched a central sector scheme: Support for Establishment/Modernization/Capacity Augmentation of Braille Presses in 2014. The aim of the scheme is to supply Braille books free of cost to the school-going visually impaired children through Sarva Shiksha Abhiyan (SSA) and Rashtriya Madhyamika Siksha Abhiyan (RMSA) of the Ministry of Human Resource Development (Department of School Education), Government of India.

Two most important aspects of education for persons with visual impairment are reading and writing; the invention of Braille language made it easy for blind children/students to acquire reading and writing skills and it empowered them to think critically and creatively. Education acquired with the medium of Braille has developed self-confidence and self-reliance amongst persons with visual disability.

1.1. National and International Efforts for the Education of the Blind in India

The visually handicapped have passed through various phases of being treated as unwanted, burdensome, and pitied persons to being accepted and recognized as equals to other able-bodied persons in the society.

1.1.1. International Experience

The French society was the first one to start looking at the blind with new attitudes and to recognize their competence. In 1784, Valentine Haüy established an Institution for blind youth. He emphasized on reading for blind people and promoted the development of embossed print. The blind people did not have any systematic reading and writing equipment until Louis Braille developed embossed dot code, which bears Braille's name, in 1834. After Valentine Haüy's Institute a school for blind was established in Liverpool, England in 1971. In the first half of the 18th century three private schools -- Perkins School for the Blind (1829), The New York Institute for the Blind (1831) and Overlook School for the Blind (1833) were established in the United States (Visual impairment-RCI book).

1.1.2. Indian Experience

The first school for visual disability was established in India by Miss Annie Sharp, a Christian missionary from England, in Amritsar in 1887. With the efforts of voluntary organizations and Christian missionaries there were 32 schools in the country by 1944. Between 1951 and 1979, 104 schools were established for the disabled. On the recommendations of the expert committee the first Braille press was established in 1951 at Dehradun and the first school for the blind was established in 1959 in Dehradun. Later, non-governmental organizations also started establishing Braille printing units. In 1958, National Association of Blind established Sir Jamshedji Duggan Braille press in Mumbai with machinery received in donation from the American Foundation for Overseas blind. Later, in 1963, it was designated as Regional Braille Press for the western region by the Government of India and in 2008 a Regional Press was established in Chennai. Three small-scale units were established in 2009-10 at Shillong, Aizawl and Agartala and the fourth small scale Braille printing unit was established in Guwahati in 2013. With the combined efforts of these presses, Braille literature is being brought out in English, Hindi, Sanskrit, Urdu, Tamil, Telugu, Kannada, Punjabi, Bangla, Assamese, Garo, Khasi, Lusai, Nagamese. These Braille Press units together produce 1,07,287 Braille volumes and serve over 50,709 individuals and Institutes.

The country's first large Braille printing press was established in 2012. This press provides school textbooks in large print fonts to low-visioned children in the states of Uttarakhand, Haryana, Chandigarh, and Delhi. Though technological advancements have brought in various visually-impaired-friendly equipments, yet the Braille print still holds importance in the life of visually impaired children/students. According to the Census 2001, there are 12, 06,601 visually impaired children in the school-going age group. About 68 per cent of the children in the age group 5-19 years are attending educational institutions (Census of India, 2011) who need reading and writing materials.

In order to provide braille textbooks and other reading materials, it is essential to modernize and augment the existing presses and establish new presses. In this direction the Department of Empowerment of Persons with Disabilities (DoEPwD) has launched in 2014 a central sector scheme to provide support for Establishment/Modernization/Capacity Augmentation of Braille presses with an aim to provide braille books to the school-going visually impaired children through Sarva Shiksha Abhiyan (SSA) and Rashtriya Madhyamika Siksha Abhiyan (RMSA).

As per the Census 2011, there are 2.68 crore persons with disability in India which constitute 2.21 per cent of the total population. If we intend to build an inclusive society, it is essential to empower differently-abled persons also. In order to bring this segment of population into the mainstream and give

a meaningful thrust to the activities aimed for empowerment of the persons with disabilities, the Government of India carved out a separate Department from the Ministry of Social Justice and Empowerment in 2012 and renamed it as the Department of Empowerment of Persons with Disabilities in 2014. The Department's mission is to empower persons with disabilities through its various Acts/Institutes/Organizations and schemes for rehabilitation and to create an enabling environment that provides such persons with equal opportunities, protects their rights and enables them to participate as independent and productive members of the society. The Department's main objectives are:

- Physical rehabilitation: Services like early detection and intervention, counselling, and medical rehabilitation, Research and Development for technological advancement for Persons with Disabilities (PwDs), Increasing accessibility through supply of aids and assistive devices;
- Educational Empowerment;
- Economic empowerment through skill development and financial assistance;
- Social Empowerment;
- Development of rehabilitation professionals/personnel;
- Advocacy and awareness generation among normal as well as differently-abled people.

To achieve its objectives, the Department has launched various central schemes for the empowerment of differently-abled persons. One such scheme is "Support for Establishment/ Modernization/Capacity Augmentation of Braille Press". The scheme envisages enhancing the existing infrastructure of Braille printing presses across the states. The foci of the scheme are:

1. To establish 18 new Braille presses in the states where strong organizations are already present;
2. To modernize 12 old Braille presses using traditional and low-speed printing equipment;
3. To augment braille printing capacity of 3 modern Braille printing presses by adding printing infrastructure.

Department of Empowerment of Persons with Disabilities, under the Ministry of Social Justice & Empowerment, is the anchor in coordinating the implementation of the scheme. The National Institute for the Empowerment of Persons with Visual Disabilities (NIEPVD) at Dehradun, set up in 1979, is a premier Institute in the field of visual disability, with the prime objective of empowering and enabling persons with visual impairment. It functions as the 'Nodal agency' in the implementation of the scheme. The scheme is being

implemented in 33 Braille presses across the country; and there are 3 institutes with the mandate of Capacity Augmentation of the existing Braille presses, Modernization of 12 existing Braille presses and Establishment of 13 new Braille presses spread over the country. As per the terms of reference of the study, 90 per cent of the institutions has been covered where the scheme is under implementation and a minimum of 20 individual beneficiaries and Institutional beneficiaries were surveyed.

1.2. Mechanism of Implementation

Department of Empowerment of Persons with Disabilities under the Ministry of Social Justice & Empowerment is the main national agency to coordinate the implementation of the scheme for “Support for Establishment/ Modernization/Capacity Augmentation of Braille Presses”. As mentioned earlier, the National Institute for the Empowerment of Persons with Visual Disabilities (NIEPVD) at Dehradun is the premier Institute in the field of Visual disability having its primary objective as the empowerment and enablement of persons with visual impairment. In order to monitor and evaluate the initiatives taken and to ensure that the achievement of targets and corrective measures of the scheme being implemented by the Ministry in 33 Braille presses across the country, the Ministry entrusted the responsibility of a third party evaluation to National Institute of Labour Economics Research and Development (NILERD) in the year 2020.

National Institute for Empowerment of Persons with Disabilities (*Divyangjan*) through Braille Council of India (BCI) shall be the Nodal Agency of the scheme that shall be entrusted with the following tasks:-

- ❖ Issue advertisement in the newspapers as well as in its websites inviting proposals for establishment/modernization of Braille presses and also send letters to various state governments and UT administrations inviting proposals/applications;
- ❖ Screening of applications;
- ❖ Technical evaluation of applications;
- ❖ Recommending improvements and additional inputs in the applications;
- ❖ Mentoring role in the entire process of establishing a new Braille press or augmenting capacity of an existing Braille press;
- ❖ Act as a monitoring body and submit regular reports in the prescribed format to the Government;
- ❖ The BCI to formulate guidelines for establishing Braille presses and a checklist for preparing and processing the project proposals.

- ❖ BCI could also be tasked with feasibility study or evaluation study after receiving proposals from the applicant agencies on the pattern of inspection of agencies being conducted by RCI where special education and rehabilitation courses are proposed to be started.
- ❖ To process the applications and submit the same before the following Committee for consideration and recommendation to the Hon’ble Minister of Social Justice and Empowerment by the States/UTs/implementing agencies for his/her approval for providing grant under the Scheme for establishment/ modernization/augmentation of Braille Presses:-

Composition of the Committee

(i)	Joint Secretary, DEPwD	Chairman
(ii)	Director, NIEPVD, Dehradun	Member
(iii)	Representative of BCI	Member
(iv)	Director (Finance), DEPwD	Member
(v)	Concerned Director/DS	Member Convener

- ❖ To make recommendation to the Government for release of funds to the Braille presses established/modernized/augmented under the Scheme on the basis of the number of Braille pages printed by such Braille presses; The NIEPVD shall also submit to the Government the relevant documents confirming production level of the Braille Presses for which grant is recommended.
- ❖ 5 per cent of the actual expenditure on the Scheme shall be earmarked for various activities to be undertaken by the NIEPVD or BCI or its members. Engagement of one Consultant and one MTS and their remuneration may also be met out of the 5 per cent of the actual expenditure earmarked for various activities under the Scheme.

The present paper attempts to further examine the issues thoroughly going beyond the recognition of the problem and to probe the issues in depth by taking into confidence all the stakeholders, via brainstorming discussion, structured questionnaires, focused group discussions etc.

With this background the next section gives a brief description of the criteria of selection of the Braille presses for the scheme, and Objectives and Methodology in detail.

1.3. Criteria for Selection of Braille Presses under the Scheme

1.3.1. For Modernization of Capacity of Printing: The Braille presses established by the state governments or registered societies or charitable trusts under Societies Registration Act, 1986 shall be modernized. The criteria for

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selection of Braille presses for modernization shall be:

- (i) It should have been in existence for more than five years;
- (ii) It should have at least two small-scale computerized Braille printers with minimum speed of printing of 100 pages per hour or has an old Braille printing machine on which printing is done using Zinc plates;
- (iii) It should have one Braille Press Manager, one Machine Operator, one Data Entry Operator and one Proofreader on its strength and;
- (iv) It should have proper system of maintaining an auditing of accounts.

1.3.2. For Establishment of New Braille Press:

- (i) There should be no high-speed computerized Braille press in the concerned state/UT. However, this condition can be relaxed in the case of large states.
- (ii) The state/UT concerned should have at least two running educational programmes covering school-age blind children, either in the form of government recognized/funded residential schools, or schools providing inclusive education to blind children under SSA or RMSA, or under Integrated Education for the Disabled at the Secondary Stage scheme (IEDSS);
- (iii) A minimum of 1500 sq. ft. of built-up area should be available for the establishment of the Braille press along with an additional built-up area of at least 400 sq. ft. for storage of Braille paper and Braille books.
- (iv) Also, in the case of state government/UT administration, there should be clear evidence of the existence of a strong organization working with the blind in the concerned area; such an organization could be a state-level association of/for the blind or a national blindness organization or its Chapter/Branch in the area for a minimum of five years;
- (v) In the case of the application originating from a voluntary organization, the applicant should have been in existence as a registered organization for the last five years and should have been running educational programmes for the blind continuously for the last five years;
- (vi) There should be a proper system of auditing of accounts in the case of NGOs.

1.3.3. For Augmentation of Printing Capacity of the Existing Braille Presses: The Braille Presses established by the state government or registered societies under the Societies Registration Act, 1986 or a charitable trust will be augmented. The criteria for selection of Braille presses for augmentation of Braille printing capacity shall be:

1. It has successfully undertaken printing of school textbooks in Braille for 5 years.
2. It has the experience to operate high-speed Braille printers having minimum speed of printing 1200 pages per hour.
3. It should have a separate Building block or built area in which Braille press is established.
4. It has an additional built area of 400 sq.ft. to install two additional high-speed Braille printing machines.
5. Two proofreaders, Two Braille editors, Two copy holders, Two data entry operators and Two mechanic operators on roll;
6. Proper storage space for storage of paper, braille books and spares of machine;
7. Proper system of maintaining and auditing of accounts.

2. Objective and Methodology

The present study is intended to evaluate the implementation status of the scheme and to develop insights into reasons for success and shortcomings of design, institutional arrangements, and economic considerations, and to identify the remedial measures and suggest action plan.

The key objectives of the study are as follows:

1. To examine the status of Establishment of New Braille Presses;
2. To examine the status of Modernization of Braille Presses;
3. To examine the status of Capacity Augmentation of Braille Presses;
4. To assess the effectiveness of the scheme in terms of Financial and Physical performance and achievements of target;
5. To assess the quantitative and qualitative impact of the scheme on the overall empowerment of visually impaired; and
6. To suggest measures to improve effectiveness of the scheme.

The study has adopted both quantitative and qualitative methods to analyze the objectives of the study as specified above. In this context an in-depth understanding of the three components of Establishment, Modernization and Capacity Augmentation of Braille presses, the procedures adopted in implementation, the problems associated with its implementation and the beneficiary-level impact of the scheme have been analyzed. For this, relevant data and information have been collected from various stakeholders associated

with the scheme through locally constructed questionnaire. Personal Interviews as secondary tools of research have been conducted and documentary analysis have been used to gather important information necessary for addressing the study's objectives. The study consists of two main components:

a) Key Informant Interviews

The key informant interviews with Ministry/Department officials at central level, implementing bodies, state-level and nodal-agency officials and Institution heads were held. Besides, the other stakeholders supporting implementation directly or indirectly and involved in the scheme's success have been contacted.

b) Beneficiary Survey

Selected samples of students as well as parents were surveyed to assess the beneficiary-level impact of the scheme on the individual beneficiary and at national level. The feedback from the beneficiary has been obtained through telephonic interview.

The study has been conducted in 29 states across the country covering the three schemes viz. Establishment of new Braille Press, Modernization, and Capacity Augmentation of Braille presses. However, the survey was conducted in 24 organizations only, as organizations in Faridabad and Kolkata have not established Braille presses. Moreover, the CRC, Sundernagar, Himachal Pradesh has been closed and the machine was shifted to NIEPVD. Similarly, Government Braille Press at Raipur has been closed and merged with Government Braille Press, Bilaspur due to lack of demand. Proper care has been taken to give due representation to cover institutions governed by the Government, Universities, and NGOs.

The Sampling Units for the Impact study among beneficiaries/potential beneficiaries have been calculated with the assumption that minimum sample size required at the state level should be able to estimate the true value with 5 per cent margin of error at 95 per cent confidence level. The true value of a given indicator was assumed at 50 per cent. As per the TOR we have arrived at a total of 384 beneficiaries/potential beneficiaries (at 5 per cent precision level) who are proposed to be covered in each selected institution/state. Hence, a total of 6,144 beneficiaries/potential beneficiaries have been proposed to be covered across the 29 sampled institutions. The beneficiaries/potential beneficiaries have been selected following a systematic random sampling method. However, due to travel restrictions and other Covid-norms beneficiaries were interviewed through telephonic mode.

While evaluating the scheme we have interacted with two types of beneficiaries -- individual beneficiary and institutional beneficiary. Most of our individual sample beneficiaries are students ranging from class one to graduate

and above. Again, due to the Covid-19 pandemic, face to face interaction was not possible; our study team requested each sample Braille Press to send us a list of both types of beneficiaries along with their contact details. Then, we conducted a telephonic interview with around 47 individual beneficiaries from different states and 62 institutions dealing with persons with visual disability. Similarly, 5 organizations were visited and in-depth interviews of the head of the organizations were taken.

The study has used the 360^o evaluation method to analyze different objectives of the study as specified above. In this context, an in-depth understanding of the schemes and the problems associated with its implementation has been analyzed. For this, various stakeholders associated with the scheme have been interviewed using different sets of questionnaires. The stakeholders include Head of the Braille Press, the students/beneficiaries, officers at the Nodal Agency etc.

Overall, this paper gives a critical analysis of the effectiveness of the scheme in terms of performance, achievements of targets, quality and delivery of the services and the impact of the schemes on the overall development of the PwDs. In this regard, analysis has been done using different indicators. The paper has come out with certain recommendations to improve effectiveness of the scheme towards the end of this paper. This paper has also made an assessment of the present status and future need of the Braille Presses and technology up-gradation for different operations. This assessment can be used as baseline information for future research or substantial improvement in the scheme by the Ministry of Social Justice and Empowerment.

3. Effectiveness of the Scheme in terms of Physical Performance, Financial Performance and Achievements of Targets

In our sample Braille presses under Modernization component of the scheme, majority of the presses are governed by NGOs. Around 73 per cent of the sample presses come under the NGO-type of governance followed by State Government (18 per cent) and Central Government (9 per cent). Similarly, the process of modernization has been completed in almost 45 per cent presses and in the remaining 55 per cent of presses, it is under progress.

3.1 Profile of Braille Presses under Modernization

In total, 11 Braille presses received funds for modernization and all the 11 Braille presses have responded to our survey and the responses have been tabulated and presented in this section. Details on the basic profiles of the Braille presses under modernization category are given in the table below:

Table 1: Basic Profile of Braille Presses under Modernization

Sl. No.	Name of the Braille Press	District	State	Rural/Urban	Year of Establishment	Type (Govt/NGO)	Status of Modernization
1	Ramakrishna Mission Regional Braille Press	Kolkata	West Bengal	Urban	1967	NGO	Completed
2	National Association For the Blind, S.J.D. Braille Press	Mumbai	Maharashtra	Urban	1958	NGO	Under Progress
3	Kerala Federation of the Blind	Thiruvananthapuram	Kerala	Urban	1986	NGO	Under Progress
4	Government Braille Press	Ludhiana	Punjab	Urban	1996	State Govt.	Under Progress
5	Braille Press, Telangana Vikalangula Cooperative Corporation	Hyderabad	Telangana	Urban	1986	NGO	Under Progress
6	Rajasthan Netraheen Kalyan Sangh	Jaipur	Rajasthan	Urban	2000	NGO	Under Progress
7	Mitra Jyothi	Bangalore	Karnataka	Urban	2003	NGO	Completed
8	Central Braille Press	Dehradun	Uttarakhand	Urban	1951	Central Govt.	Completed
9	Government Braille Press	Bilaspur	Chhattisgarh	Urban	1985	State Govt.	Completed
10	National Association For the Blind	Ahmadabad	Gujarat	Urban	1968	NGO	Completed
11	Red Cross Computerized, Braille Press	Behrampur	Odisha	Urban	1986	NGO	Under Progress

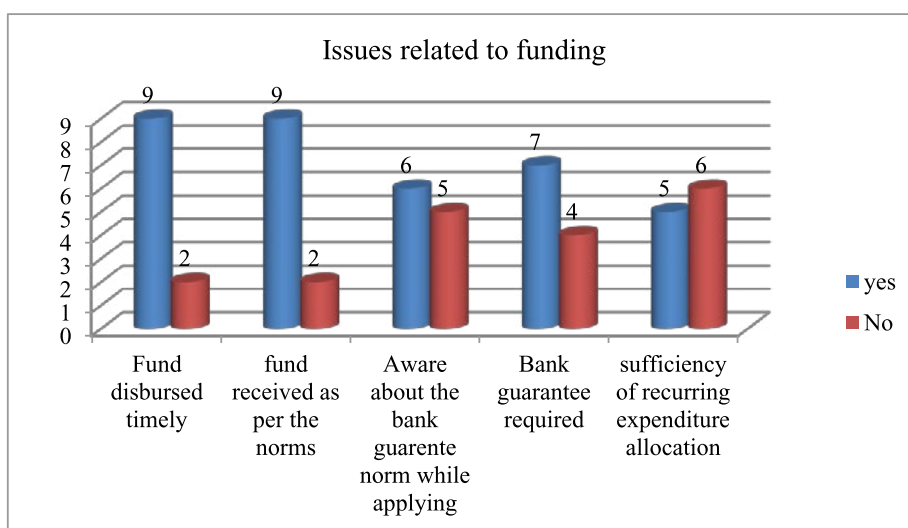
Source: NILERD Survey, 2020

3.2 Issues related to Funding Pattern

Funds availability in general and timely availability in particular play a crucial role in the successful implementation of any scheme. The responses of the implementing agencies are presented in Figure 1 given below. On issue like timely disbursement of fund, 9 out of 11 Braille presses responded that the funds are disbursed on time. However, 2 responded that there is some delay in disbursement of fund in their case. On another issue related to fund such as fund provided as per norms: majority of the presses reported that the funds have been provided as per the norms. With regard to recurring expenditure, 6 out of 11 felt

that there should be an increase in the recurring expenditure, while 5 Braille presses felt that there is no such requirement. Similarly, with regard to the issue of Bank guarantee, 7 out of 11 reported to have provided Bank guarantee for receiving funds while 4 agencies expressed no such requirement of providing Bank guarantee. It is observed that those implementing agencies which have responded that there is no requirement of Bank guarantee are Government-run Braille presses and hence, there is no such requirement in their case. Regarding Bank guarantee as a necessary condition to avail the scheme, almost 50 per cent of the Braille presses are not aware about this at the time of application for the scheme as it was not mentioned in the scheme document.

Figure 1: Issues related to Funding Pattern



Source: NILERD Survey, 2020

Table 2 below presents the estimated budget, budget sanctioned, and budget released to each implementing agency. Five agencies out of 11 have received full sanctioned amount. However, the press in Ludhiana though received full amount of funds is yet to start functioning. Four agencies reported having been received more than 80 per cent of the sanctioned amount and one agency reported to have received about 50 per cent of the approved fund.

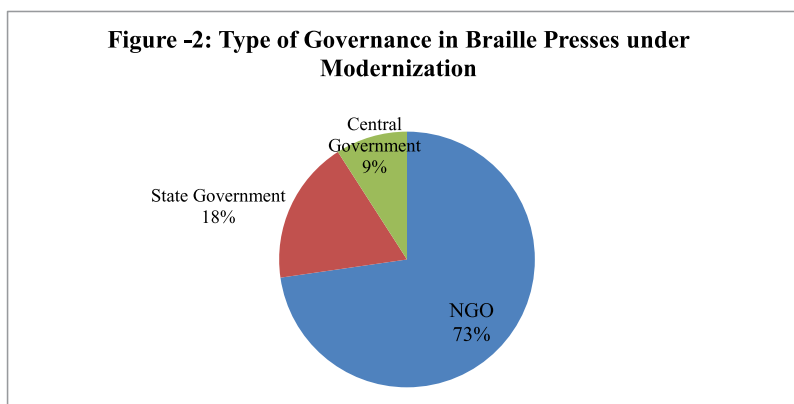
Table 2: Details of Funds sanctioned and released

Sl. No.	Implementing Agencies	Estimated Budget	Fund Sanctioned	Fund Released
1	Ramakrishna Mission Regional Braille Press (Kolkata)	9435209	9417605	9417605
2	National Association For the Blind, S.J.D. Braille Press (Mumbai)	17,313,578	17,313,578	8,656,789

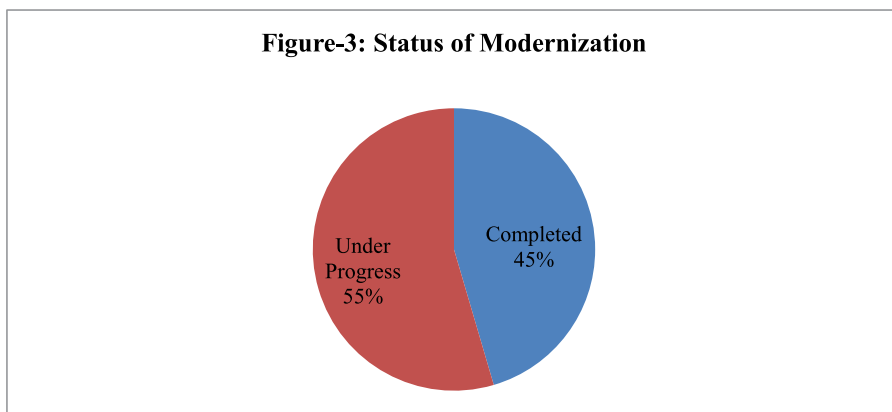
3	Kerala Federation of the Blind (Thiruvananthapuram)	18,281,000	9,140,500	8,157,274
4	Government Braille Press (Ludhiana)	10,000,000	10,000,000	10,000,000
5	Braille Press, Telangana Vikalangula Cooperative Corporation (Hyderabad)	3,08,00,000	12,400,000	9,200,000
6	Rajasthan Netraheen Kalyan Sangh (Jaipur)	15,000,000	15,000,000	14,955,018
7	Mitra Jyothi (Bangalore)	18,319,450	18,319,450	18,319,450
8	Central Braille Press (Dehradun)	0	0	0
9	Government Braille Press (Bilaspur)	0	18,990,000	18,990,000
10	National Association For the Blind (Ahmadabad)	6,720,390	6,720,390	6,720,390
11	Red Cross Computerized, Braille Press (Berhampur)	14,651,000	14,506,000	7,253,000

Source: DEPwD, Ministry of Social Justice & Empowerment, Government of India

Out of the 11 Braille presses that were given funds for modernization, 73 per cent presses were run by NGOs, 18 per cent are state government agencies and one (9 per cent) Central Government agency (Figure 2). Out of these Braille presses four presses have been providing braille material prior to 1970s. The oldest presses are Central Braille Press, Dehradun (1951) and S.J.D. Braille Press, Mumbai (1958). Almost all Braille presses run by NGOs are established prior to 1990s indicating the social awareness towards the educational empowerment of visually disabled. Similarly, the process of modernization is completed in almost 45 per cent presses and in the rest 55 per cent modernizations are under progress (Figure 3). Out of 8 presses run by NGOs, 3 have completed the modernization and 5 are yet to complete the stage. Out of 2 Braille presses run by the state governments, modernization of the Ludhiana press is not complete, though the machine has been installed, as the printing processes has not been started due to non-availability of accessories.



Source: NILERD Survey, 2020



Source: NILERD Survey, 2020

3.3 Impact of the Scheme on the Supply and Demand of the Braille Material

It is very essential to assess how far the aims of the scheme are successfully implemented and how far the scheme has accomplished its objectives for which the expenditure has been incurred. To understand the impact of modernization of Braille presses on the supply of the Braille material, a comparative statement of the pages printed per day prior to modernization of the press and pages printed during the year 2019-2020 is prepared and provided in Table 3.

The details furnished by the implementing agencies are not comparable as prior to the implementation of the scheme the information pertains to pages printed per day but for the year 2019-2020 the information is furnished for the whole year. However, it can be observed from the information provided by the agencies on the aspects like capacity of the machine, books distributed etc., it can be inferred that the number of pages printed is higher when compared to prior to modernization in general as almost all the agencies have procured Norway make Brailo 650 machine which has a capacity of 12,000 pages per day and in the initial stages of the implementation of the scheme, the agencies reported that they have used the full capacity of the machine. The non-comparable information provided by the agencies indicates the shortcomings of the record keeping.

Table 3: Comparative Statement of Pages printed before and after Implementation of the Scheme

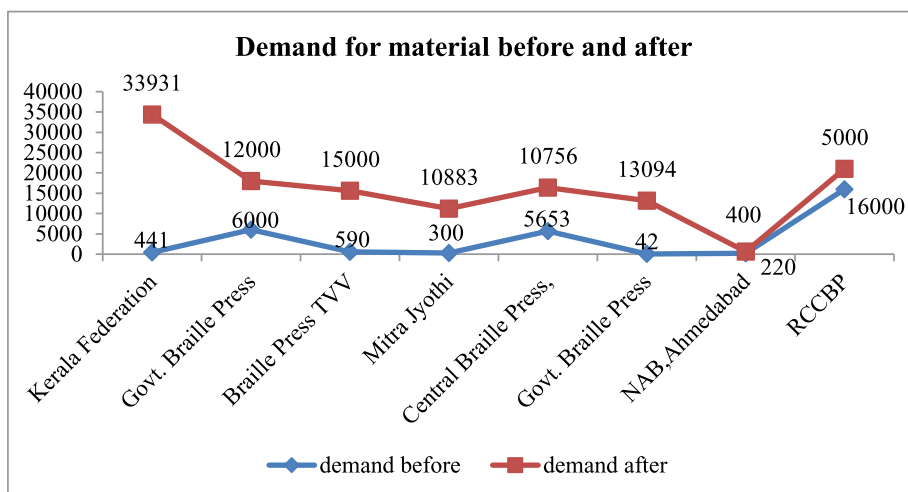
S. No.	Implementing Agency	No. of pages printed per day prior to Scheme	No. of pages printed in 2019-2020
1	Ramakrishna Mission Regional Braille Press (Kolkata)	9000	3,53,478
2	National Association For the Blind, S.J.D. Braille Press (Mumbai)	15000	NR
3	Kerala Federation of the Blind (Thiruvananthapuram)	900	12360
4	Government Braille Press (Ludhiana)	1200	NR
5	Braille Press, Telangana Vikalangula Cooperative Corporation (Hyderabad)	3000	664 books
6	Rajasthan Netraheen Kalyan Sangh (Jaipur)		NR
7	Mitra Jyothi (Bangalore)	800	857745
8	Central Braille Press (Dehradun)	3000	1603930
9	Government Braille Press (Bilaspur)	10000	1456849
10	National Association For the Blind (Ahmadabad)	1500	110,000
11	Red Cross Computerized, Braille Press (Berhampur)	12000	81,600

Note: NR-No Response

Source: NILERD Survey, 2020

The success of the Scheme implemented can be assessed only based on the demand by the beneficiaries, especially in the case of visually disabled, as the general societal attitude towards the educational empowerment of visually impaired is not very proactive. In such a scenario it is pertinent to see if the scheme has made any dent into the educational empowerment of school-going visually impaired children especially from low economic group. One of the indicators for this is demand for the books. To understand the demand side, a comparative figure is prepared and given below in Figure 4.

Figure 4: Demand for Braille Materials before and after Implementation of the Scheme



Source: NILERD Survey, 2020

Out of the 11 implementing agencies 3 agencies i.e. R.K Mission Press, Kolkata, NAB, SJD Press, Mumbai and RNKS, Jaipur did not provide information pertaining to the demand for Braille material before and after implementation of the scheme. As can be seen from the figure on the whole, all the implementing agencies have reported an increase in the demand for Braille material. Kerala Braille presses reported the highest demand, followed by TVV Press, Hyderabad and Government Braille Press, Bilaspur after the implementation of the scheme.

3.4 Distribution of Braille Material to PWDs

Distribution of Braille books/materials is an indicator of the achievement of physical target of the scheme. To assess this issue the study enquired into areas such as, the books/material distributed between 2016-17 to 2018-19, whether able to meet the demand, transportation, record keeping etc. and the responses have been presented in Table 4. As can be seen from the table, in 2017-18 almost all implementing agencies have distributed higher number of books/materials when compared to previous year (2016-17). Highest number of books (14,908) were distributed by Mitra Jyoti (Bangalore) followed by Central Braille Press, Dehradun (13,356) and Kerala Federation (8,304). In 2018-19 an increase in the number of books distributed was found in R.K. Mission, Kolkata Press (9,077) followed by Kerala Federation (9,819). Among the rest of the agencies the books distributed has indicated a reduced number when compared to previous two years. With regard to the query on whether the agencies are able to meet the demand, 7 out of 11 responded that they have met the demand and 4 presses were not able to meet the demand.

Table 4: Distribution of Books from 2016-17 to 2018-19 by the Implementing Agencies after Implementation of the Scheme

Sl. No.	Implementing Agency	Number of Books distributed during the years		
		2016-17	2017-18	2018-19
1	Ramakrishna Mission Regional Braille Press (Kolkata)	7607	8222	9077
2	National Association for the Blind, S.J.D. Braille Press (Mumbai)	NR	NR	NR
3	Kerala Federation of the Blind (Thiruvananthapuram)	6805	8304	9819
4	Government Braille Press (Ludhiana)	2229	4547	928
5	Braille Press, Telengana Vikalangula Cooperative Corporation (Hyderabad)	3670	1784	478
6	Rajasthan Netraheen Kalyan Sangh (Jaipur)	NR	NR	NR
7	Mitra Jyothi (Bangalore)	7457	14908	10883
8	Central Braille Press (Dehradun)	6395	13356	10756
9	Government Braille Press (Bilaspur)	15413	14993	13094
10	National Association For the Blind (Ahmadabad)	76	370	228
11	Red Cross Computerized, Braille Press (Behrampur)	380	380	380

Note: NR-No Response

Source: NILERD Survey, 2020

Majority of the presses have linkage with the institutions dealing with PwDs, so fair amount of demands are coming from them and as per their demand, presses are printing the materials and finally distributing to the institutions. However, the state government under the SSA is the major end user of the braille materials as major demands come from the state government. Still, 8 Braille presses feel that there is a gap between the demand and supply of the braille materials due to various reasons like transportation and lack of fund for printing. Regarding the record keeping of the distributed materials, none of our sample Braille presses keeps record of cast-wise beneficiaries. The only record available with them is the list of beneficiaries from the institutions to whom they have distributed the Braille materials. Majority of the agencies expressed that they are experiencing difficulty in getting trained Machine operator, Proofreader and data entry operators.

The major challenges faced by the Braille presses in the implementation of the scheme and suggestions provided by the implementing agencies which are modernized are presented in Box 1 and Box 2.

Box 1: Opinion about Major Challenges faced in Implementation of the Scheme

- ✓ Irregularity regarding the availability of funds. Hurdles faced in delivering the books in remote areas by post;
- ✓ No recurring financial support, provides spare parts in the country, need for appointing more effective Nodal Agency;
- ✓ Major challenges faced are lack of paper rolls, maintenance and service of machines, proper financial assistance, Unicode for regional languages, postage delay etc.
- ✓ Selection of equipment (embosser), funds provided for equipment (embosser) only and not for improving the overall infrastructure;
- ✓ Timely release of funds and proper monitoring by Central Government;
- ✓ Financial hardship faced by the braille presses;
- ✓ The government's issuance of the instruction that the work-order should be given through state government department does not work well with the Braille presses.
- ✓ The provision of Bank Guarantee is a hindrance for braille presses.

Box 2: Suggestions for Improving the Scheme

- ✓ The Braille Printer being highly sophisticated and sensitive, requires expert attendance for its quick recovery in the case of its dislocation, which is not easily available. Hence, presence of some well-equipped agency is urgently needed for its repairs and re-installation.
- ✓ The Braille presses should be provided recurring financial support, spare parts should be manufactured in the country, more effective Nodal Agency should be appointed.
- ✓ For improvement of publishing and distribution of Braille books there should be a provision from the NIEPVD to allot more grants every year.
- ✓ The machinery should be given to the Braille Press rather than providing funds, the machine should be ready to run (give output).
- ✓ Training of Braillo 650 SW and Interpoint 55 Machines mechanism may be conducted.
- ✓ Bank guarantee provision and state government approval for work-order should be withdrawn, maintenance and spare parts cost should be given by NIEPVD. Braille paper should be provided by the Nodal agency. Recurring amount should be released in time.

On the other hand, a total of 13 agencies were approved for establishing new Braille presses out of which only 5 have responded to the survey; 2 agencies were contacted telephonically; 2 have not responded even after repeated mails, while 2 have returned the funds released to them. More than 50 per cent of the agencies are state-run agencies which were given funds for establishing new Braille presses. The remaining agencies are run by NGOs. Out of 13, only 6 agencies have completed the establishment of the new press. The Braille press established in CRC, NIEPVD, Sundarnagar was closed and merged with NIEPVD, Dehradun, as there is no demand for the Braille material. Similarly, Government Braille Press, Raipur was closed and merged with Government Braille Press, Bilaspur for the same reason. The Braille presses in Aizawl, Mizoram and Lucknow could not be started as they are still in tendering processes. Two agencies namely National Association for Blind, Faridabad, and Blind Persons' Association, Kolkata went back and did not proceed with the establishment of the press due to the Ministry's insistence on bank guarantee till the machine reaches '0' value. As per the information provided by the telephonic interview by the Braille Presses in Chitrakoot, the machine was purchased but due to non-release of funds by the Ministry the agency did not start the printing work. A total of 3 Braille presses received funds for Augmentation component of the scheme and all the 3 Braille presses have responded to our survey and their responses have been tabulated and presented in this section. Among the 3 implementing agencies 2 are NGOs which have been helping visually impaired for more than 25 years. The Regional Centre, Chennai is the only one agency in this area for the last 12 years. All the three agencies have completed the Augmentation process and started printing.

In the case of Modernization component of the scheme, 5 agencies out of 11 have received full sanctioned amount. However, the press in Ludhiana, though received the full amount of funds, is yet to start functioning. Four agencies reported having received more than 80 per cent of the sanctioned amount and one agency received about 50 per cent of the approved fund. Whereas, in the case of new Establishment component of the scheme, 2 agencies out of 6 responding agencies received the full sanctioned amount. All the responding agencies felt that the fund sanctioned is sufficient. All the 4 agencies have issues with respect to release of recurring expenditure. Similarly, all the agencies run by NGOs have issues with regard to the bank guarantee amount. Finally, in the case of Augmentation, none of the 3 agencies received the full sanctioned amount. The regional Centre, Chennai received about 90 per cent of the sanctioned amount. NFB, Bahadurgarh received about 60 per cent of the approved fund. But AICB, Delhi received only 40 per cent of the sanctioned amount.

4. Overall Impact of the Scheme and Its Shortcomings

Braille books are very expensive and without subsidy it is not affordable for economically weaker sections. All the Braille presses and beneficiaries

appreciated the scheme and felt that the Government of India's initiative to provide free of cost books is the best step towards empowering the visually impaired children. However, certain shortcomings are observed by the study team during discussion and suggestions are provided by the implementing agencies.

- There are three main agencies/entities namely, DEPwDs, nodal agency (NIEPVD) and implementing agencies, which are actively engaged/involved in the implementation of the scheme with specified roles and responsibilities. However, it has been observed that there is a lack of coordination among these agencies in monitoring the progress of the scheme and supervising the implementation for its efficacy. The monitoring system is also not properly maintained and the database of NIEPVD is not updated. Therefore, there is a need for strengthening the coordination mechanism through frequent interactions and meetings between the various stakeholders.
- There is ambiguity in the scheme document and the norms are not well defined. The Grantee committee takes up issues and decisions on case-by-case basis which are implemented as per the minutes of the meeting. Hence, there is no uniformity of norms among implementing agencies.
- The role of NIEPVD is not well defined as a Nodal Agency. NIEPVD can play a more proactive role as a nodal agency by imparting training to implementing agencies in maintaining records related to books distribution, financial records, thorough scrutiny of the recurring expenditure bills before forwarding these to the Ministry for reimbursement. There is also a need for organizing Training/workshops for machine operating mechanics.
- As per the scheme, the nodal agency is to receive 5 per cent administrative charges. But there is no clarity whether 5 per cent is for all administrative works pertaining to the scheme or for each Braille press.
- The states that each press will supply books to are not defined, due to which the newly established presses are not having the demand for the Braille material. As per the scheme, there should not be more than one high-speed computerised Braille press in the state. But in some places, it is exempted and approval was given to start new Braille presses. Due to lack of demand these centres were closed and merged with the other Braille Presses like Sundernager Government Braille Press in Himachal Pradesh was merged with NIEPVD at Dehradun and Government Braille Press at Raipur got merged with Government Braille Press at Bilaspur. But the same is not possible with private/NGO-run Braille presses.
- All the centres expressed that packing is proving costly and transportation is taking time due to which there is a delay in making the Braille material available to the beneficiaries.

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- There are no clear guidelines with respect to maintaining records regarding free distribution of books. Many centres claim to have distributed free books to individual beneficiaries. But the database is not properly maintained. The address and contact details are incorrect. This creates an element of doubt.
 - As per General Financial Rules (GFR), non-government agencies must provide bank guarantee for release of advance. Further, the bank guarantee should be valid till the depreciation value of the machine becomes zero. This clause should be relooked as the scheme's objective is for social welfare and the NGOs are also functioning in providing helping hand to the visually disabled persons. The machines will never reach zero value as it will have scrap value. Further, some NGOs pledged the individual properties of the staff working in the NGO to raise the required funds and if they have to wait for zero value their properties will not get released from mortgage.
 - Some centres have been exempted from providing bank guarantee; in some cases, the bank guarantee amount is returned after inspection while in some cases the centres were asked to provide bank guarantee till the machine reaches zero value. Hence, certain centres did not establish the presses.
 - The recurring costs are reimbursed irregularly. Two rupees per page payment includes paper, printing, packing, maintenance of the machine and salaries of the staff. But lakhs of rupees spent by the agencies are not reimbursed by the Ministry in spite of submitting relevant documents and receipts. Due to non-release of recurring expenditure, some Braille presses established by NGOs stopped printing and distribution of free books, while some are distributing books but by charging nominal cost. This defeats the very purpose of the scheme.
 - The NGOs expressed their concern that the Ministry does not trust them which is de-motivating them from extending their services to the scheme.
 - The Braille presses expressed concern over timely availability of spare parts of the machine, printing Braille paper and mechanics for maintenance of the machine. As only one company caters to all the Braille presses in the country and spare parts have to be procured from Norway/Belgium, the paper and spare components are proving to be expensive and are not readily available due to monopoly of the market.
 - The Government Braille presses are able to sustain as the salary component, manpower component and maintenance are taken care of by the government. Additionally, they get other work-orders such as election assignments and thus they receive demand from all nearby states. Whereas the presses run by NGOs are not able to sustain as the scheme does not cover salary of the manpower required for the machine, non-availability of trained persons to run the machine, non-reimbursement of recurring expenditure, and non-receipt of advance payments.

- During telephonic interviews and personal interaction some Braille presses expressed their anguish that differential treatment is given to some implementing agencies regarding bank guarantee and release of recurring expenditure. For some organizations, the grantee organisation returned the bank guarantee amount after installation of machine, while for some, it is insisted that the amount will be kept till the machine reaches zero value. Similarly, as regards the release of recurring expenditure, some implementing agencies are getting their bills cleared timely whereas bills for some agencies are pending for more than one year. This is causing resentment among implementing agencies and they feel that everything is not above board.
- Looking at the occupational category of the parents or guardians of the beneficiaries, it is clear that a majority of the parents' main occupation is either agriculture or daily wage labour. Around 39 per cent parents/guardian of the beneficiaries are daily wage labourers followed by 23 per cent who are either farmers or involved in agricultural activities. Whereas only 10 per cent are service holders and another 6 per cent are self-employed or working as auto drivers and only 3 per cent parents are small entrepreneurs, whereas other 19 per cent parents are doing some small or petty trades.
- During our telephonic interviews with the beneficiaries, we asked various questions on the distribution of Braille books. The responses of the beneficiaries were recorded in our questionnaire. Based on the responses it was found that 35 out of 47 beneficiaries got the books free of cost and the other 12 got the books on payment basis. Payments towards the books were also very nominal. Around 41 beneficiaries received the books under the SSA or RMSA scheme of the government. We also asked questions on whether they got the books on time or not? A majority of them get the books on time. Questions on the quality of the paper used in the Braille books also give a similar picture as most of the beneficiaries are satisfied with the quality of the paper used in the books. As regards the quality of binding of the books, most of the beneficiaries were satisfied with the binding quality. Most interestingly, cent per cent of our sample beneficiaries never faced any difficulty in getting the books free of cost. Hence, almost all the beneficiaries were satisfied with the benefits they were getting under the scheme and strongly recommended for the continuity of the scheme in future.

Based on the interaction with the beneficiaries it is found that the scheme is very helpful as most of the beneficiaries/students to whom the implementing agencies (NGOs) catered belonged to economically weaker sections.

5. Conclusion and Suggestions

The Rights of Persons with Disabilities Act 2016 provides various rights and entitlements for persons with disabilities and aims to foster inclusive development. It recognizes the needs of Persons with Disabilities and mandates the Government to take appropriate measures for their empowerment and inclusion in the society so that they can live a dignified life independently. Persons with Disabilities are one of the most marginalized segments in the society. Most of them do not have access to education and training and thus remain deprived of gainful employment.

Development in all its dimensions must be inclusive of all people in a country and should be built up through the participation of everyone, especially the most vulnerable and marginalized people. Empowerment of the disabled or differently abled is very essential for achieving the Government of India slogan “*Sabka Sath Sabka Vikas*”. As a step towards educational empowerment of *Divyangjan*, the Department of Empowerment of Persons with Disabilities, Ministry of Social Justice and Empowerment, has implemented the central scheme of Establishment/Modernization /Capacity Augmentation of Braille presses with an aim to provide textbooks free of cost to the visually impaired across the country under *Sarva Siksha Abhiyan (SSA)*, *Rashtriya Madhyamika Siksha Abhiyan (RMSA)* and Integrated Education for the Disabled at Secondary Stage with the collaboration of state governments.

The scheme has been implemented in 3 institutes with a mandate of Capacity Augmentation of the existing Braille presses, Modernization of 12 existing Braille presses and Establishment of 13 new Braille presses spread over the country. However, the Braille presses expressed concern over the timely availability of spare parts of the machine, printing Braille paper and mechanics for maintenance of the machine. As only one company caters to all the Braille presses in the country and spare parts have to be procured from Norway and Belgium, the paper and spare components are proving to be expensive and are not readily available due to monopoly of the market. The Government Braille presses are able to sustain as the salary component, manpower component, and maintenance are taken care of by the government; in addition, they get other work-orders such as election assignments and also receive demands from all nearby states. However, the presses run by the NGOs are not able to sustain as the salaries of the manpower required for the machine is not covered by the scheme, there is non-availability of trained persons to run the machine, the system of reimbursement of recurring expenditure is not timely and non-receipt of advance payments is a regular feature.

The Braille books are very expensive and without subsidies the price is not affordable for economically weaker sections of the society. All the Braille presses and beneficiaries have appreciated the scheme and felt that the

Government of India's initiative to provide free of cost books is the best step towards empowering visually impaired children.

The roles and responsibilities of the nodal agency NIEPVD should be well defined. NIEPVD should play a more proactive role in the implementation of the scheme. On the other hand, the NIEPVD should be strengthened with adequate manpower so that the implementation of the scheme is monitored effectively by periodic visits and time to time verification of the records maintained by the implementing agencies/Braille presses. Further, for the better delivery of the scheme component, the NIEPVD should organize periodical training/workshops for all machine operating staff, record keepers, accountants, and assistants in implementing agencies to ensure adoption of all rules as per GFR and to maintain transparency in the activities of the scheme.

A well-defined mechanism should be established to release the recurring expenditure in time so that the NGOs which are implementing the scheme are not compelled to stop the welfare activity due to lack of funds. As far as bank guarantee is concerned, the ministry may consider keeping bank guarantee for a period of two years, i.e. the warranty period of the machine, or the machines may be procured by the ministry itself and got installed in the implementing agency institute by taking 50 per cent of the cost of the machine. This will help the implementing agencies as well as the ministry in achieving the objective of the scheme. It is recommended that the scheme should be continued and it should be ensured that wherever the printing and distribution of Braille material has not started, it should be started immediately.

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