# Resource Guide For Persons With Low vision

# SUBHASH A. DATRANGE

NATIONAL ASSOCIATION FOR THE BLIND, INDIA

11, KHAN ABDUL GAFFAR KHAN ROAD,

WORLI SEAFACE, MUMBAI – 400 025.



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#### FOREWORD

It will come as quite an eye opener to most readers, that in India there are more people with Low Vision than even those who are blind. With their number at a staggering 28 million, the problem is worse compounded because of the very lack of awareness of their identity. They belong to no specific category of the handicapped. They are relegated to a limbo, being neither totally blind, nor possessing normal vision and more so as their handicap is not openly disfiguring or evocative of pity or sympathy.

The realization has dawned that they must be helped in every possible manner to train and enhance whatever vision that is left, so that their normal activities can be restored as much as possible. The services they need, include clinical and functional assessment of vision, prescription of Low Vision Aids, provision of optical and non-optical devices, training in Orientation & Mobility, supply of large print books, environmental access, counselling and the like.

The National Association for the Blind, India, has taken an initiative, and is now concentrating its efforts on setting up a countrywide network of Low Vision Services while at the same time, stressing the importance of utilizing the existing available devices to the fullest though insufficient in extent and scope. Recently it has undertaken a survey of these services and the present Resource Guide is its outcome. I have no doubt that professionals, persons with Low Vision, their families and eye care providers, will find this handbook extremely useful and utmost benefit.

DR. T.N. URSEKAR CHAIRMAN NAB PLAN OF ACTIN COMMITTEE VISION '98 – NATIONAL CONFERENCE ON LOW VISION

#### PROLOGUE

This publication is the result of "Vision '98 – National Conference on Low Vision" organized by National Association for the Blind, India. The handbook provides essential information regarding a wide range of services e.g. Education, Rehabilitation, Independent Living, besides medical/health care services available for persons with Low Vision.

It is hoped that this Publication with lead to better and fuller utilization of these services.

On behalf of the National Association for the Blind, India I express a deep sense of gratitude to the Royal Danish Embassy, New Delhi for their generous grant towards printing of this guide.

My sincere thanks are also due to Dr. T.N. Ursekar, Dr. Rajendra T. Vyas, Dr. (Mrs.) Asha A. Bhende, Mr. Nawal Baliwalla and Mrs. Hema Upendra for their valuable suggestions and comments on this Guide.

I am grateful to Dr (Ms.) Meera Gharpure for her assistance in the preparation on this handbook. My thanks are also due to Mrs. Radha Manwani, Miss Bibiana Vaz and Mrs. S. Gopinath for their valuable assistance.

> SUBHASH A. DATRANGE EXECUTIVE DIRECTOR NATIONAL ASSOCIATION FOR THE BLIND, MUMBAI INDIA

#### INTRODUCTION

Coping with Low Vision is a challenge both for the family and caregivers besides the person himself.

In recent times the discipline of Low Vision care is therefore receiving increasing attention of those engaged in work with the Blind and the Visually impaired, the world over. There is also a growing realization that the concerns and issues faced by persons with Low Vision are not quite the same as those affecting the Blind. This has led to development of special programmes and services in our country for this particular group.

The following pages provide valuable information about these services, and answer queries such as "Who is a person with Low Vision?" and "Where does one go in order to avail of various facilities and acquire suitable Low Vision devices and aids for independent living?"

#### DEFINITION

"Person with Low Vision means a person with impairment of visual functioning even after treatment or standard refractive correction but who uses or is potentially capable of using for the planning or execution of a task with appropriate assistive device". SOURCE:- Persons with Disabilities, (Equal Opportunities, Protection of Rights and Full Participation Act 1995, chapter 1, Page 3).

This definition is proposed to be amended thus; "Person with Low Vision is a person with impairment of vision between 6/60 to 6/18 with best correction in the better eye or impairment of field in any one of the following categories: -

- 1. Reduction of fields to 10 degrees.
- 2. Hemianopia with macular degeneration.
- 3. Altitudinal defect involving lower fields."

SOURCE: - (Final report of amendment Committee of Persons with Disabilities Act, March 1999, page 39)

# **PROFILES OF LOW VISION CENTRES IN INDIA**

#### ANDHRA PRADESH

# MEERA & L.B. DESHPANDE CENTRE FOR SIGHT ENHANCEMENT

L.V. Prasad Eye Institute, L.V. Prasad Marg, Banjara Hills, Hyderabad 500 034.

Tel. No. 91 – 040 – 360 8262

Fax No. 91 – 040 – 354 8271

E-mail <u>safaraz@lvpeye.stph.net</u>

Working hrs: 8.00 a.m. to 6.00 p.m.

Contact person: Dr. Sarfaraz Ali Khan

Services: Free / Paid

A separate Paediatric service is available.

<u>Clinical Services</u>: Clinical Assessment, Prescription of L.V. Devices, Instruction in the use of L.V. Devices, Referrals and Follow-up services.

<u>Educational / Rehabilitation Services</u>: Client – Teacher and Parental Counselling, Orientation & Mobility Training, Vocational Guidance, Research/Development (L.V. Devices) and Production/Demonstration of electronic/computer operated L.V. equipment.

#### GUJARAT

#### **1. BLIND PEOPLE'S ASSOCIATION OF INDIA**

Dr. Vikaram Sarabhai Road, Vastrapur, Ahmedabad 380 015.

Tel. No. 079 – 644 0082 / 644 2070

Fax No. 079 – 656 0106

E-mail <u>bpa@vsnl.com</u>

Working hrs: 10.00 a.m. to 6.00 p.m.

Contact person: Dr. Bhushan Punani

Service: Free

<u>Clinical Services</u>: Eye Screening, Clinical Assessment, Prescription of L.V. Devices and Instruction in the use of L.V. Devices and Referrals.

<u>Educational / Rehabilitation Services</u>: Rehabilitation Counselling, Parental Counselling and Orientation & Mobility Training.

#### 2. RETINA FOUNDATION

Asopalov Eye Hospital, Near Shahibag Underbridge, Shahibag, Ahmedabad 380 004.

Tel. No. 079 – 286 5537 Fax No. 079 – 286 6381

E-mail <u>retina@vsnl.com</u>

Working hrs: 3.00 p.m. to 7.00 p.m.

Contact Person: Dr. P.N. Nagpal

Services: Subsidized / Paid

<u>Clinical Services</u>: Eye Screening, Clinical Assessment, Prescription of L.V. Devices, Instruction in the use of L.V. Devices, Referrals and Follow-up services.

<u>Educational / Rehabilitation Services</u>: Large Print library services and Display/Demonstration of electronic /computer operated L.V. equipment.

#### **KERALA**

# NATIONAL ASSOCIATION FOR THE BLIND KERALA STATE BRANCH

Shalom Building, Pattom P.O., Trivandrum, Kerala 695 004.

Tel. No. 0471 – 541595

E-mail: <u>nabkeral@vsnl.com</u>

Working hrs: 10.00 a.m. to 5.30 p.m.

Contact Person: Mr. P. George

Services: Free

<u>Clinical Services</u>: Eye Screening, Clinical Assessment, Prescription of L.V. Devices, Referrals and Follow-up services.

<u>Education / Rehabilitation Services</u>: Client – Teacher and Parental Counselling, Orientation & Mobility Training, Vocational Guidance, Large Print library services and Display/Demonstration of electronic/computer operated L.V. equipment.

#### MADHYA PRADESH

# **VISION RESOURCE CENTRE**

Smt. Shantaben & Shri Vrajlal Mehta Memorial Charitable Low Vision Centre, Shree Jalaaram Swaasthya Vihaar, Ground Floor, CM – 74, Pt. D.D.L. Nagar, Sukalya, Indore 452 010.

Tel. No. 0731 – 552903

Working hrs: 9.30 a.m. to 11.30 a.m.

Contact Person : Dr. Smita Mehta

Services: Subsidised

<u>Clinical Services</u>: Eye Screening, Clinical Assessment, Prescription of L.V. Devices, Instruction in the use of L.V. Devices, Referrals and Follow-up services.

<u>Educational /Rehabilitation Services</u>: Research / Development (L.V. Devices), Production/Distribution of aids for independent living.

# MAHARASHTRA

# 1. HAPPY HOME & SCHOOL FOR THE BLIND

Dr. Annie Besant Road, Worli, Mumbai 400 018

Tel. No. 022 – 492 3198

Working hrs: 9.30 a.m. to 5.00 p.m.

Contact Person : Ms. M.J. Banaji

Services: Free

A separate Paediatric service is available.

<u>Clinical Services</u>: Eye Screening, Clinical Assessment, Prescription of L.V. Devices, Instruction in the use of L.V. Devices, Training of L.V. Professionals, Referrals and Follow-up services.

<u>Educational / Rehabilitation Services</u>: Client – Teacher and Parental Counselling, Orientation & Mobility Training, Vocational Guidance, Large Print library services and Production/Distribution of Large print Literature.

# 2. INDIAN ASSOCIATION FOR THE VISUALLY HANDICAPPED

87 – B, Moruddin Chambers, Broach Street, Masjid (East), Mumbai 400 009.

Tel. No. 022 – 371 8446

Fax No. 0091 –373 8499

E-mail <u>iavh@hotmail.com</u>

Working hrs: 10.00 a.m. to 6.00 p.m.

Contact Person: Mr. P. Didwania

Educational / Rehabilitation Services: Parental Counselling.

Note: A full-fledged Low Vision Centre is proposed to be established shortly.

#### 3. NATIONAL ASSOCIATION FOR THE BLIND, INDIA

11-12, Khan Abdul Gaffar Khan Road, Worli Seaface, Mumbai 400 025.

Tel. No. 022 – 493 5370 / 493 6930

Fax No. 022 – 493 2539

E-mail <u>nab@giasbm01.vsnl.net.in</u>

Working hrs: 9.30 a.m. to 5.15 p.m.

Contact Person: Mr. Subhash A. Datrange

Services : Free / Subsidized <u>Clinical Services</u>: Eye Screening

<u>Educational / Rehabilitation Services</u>: Client – Teacher and Parental Counselling, Orientation & Mobility Training, Vocational Guidance, Large print library services, Production/Distribution of Large print literature, Distribution of aids for independent living, Training of L.V. Professional, Display and Demonstration of electronic/computer operated L.V. equipment.

#### 4. NAB KANTABEN & VARJIVANDAS SARAIYA LOW VISION CENTRE (An activity of NAB Workshop for the Blind) Unit I

NAB Workshop for the Blind, Dr. Annie Besant Road, Opp. Passport Office, P.O. Prabhadevi, Mumbai 400 025.

Tel. No. 022 – 430 4347 / 422 1147

Fax No. 022 – 430 4347 / 422 1147

Working hrs : 9.30 a.m. to 4.30 p.m.

Contact Persons: Mr. U.T. Syed, Principal/ Mr. Suresh Jollani, Optometrist.

Services: Free

A separate Paediatric service is available.

<u>Clinical Services</u>: Eye Screening, Clinical Assessment, Prescription of L.V. Devices, Instruction in the use of L.V. Devices, Training of L.V. Professionals (Technical), Referrals and Follow-up services. <u>Educational / Rehabilitation Services</u>: Orientation and Mobility Training, Vocational Guidance, Distribution of L.V. Devices and Distribution of Aids for independent living.

# 5. NAB KANTABEN & VARJIVANDAS SARAIYA LOW VISION CENTRE (An activity of NAB Workshop for the Blind) Unit II

C/o. M.N.B. Industrial Home for the Blind, Chateau Dieu, 280 S.V. Road, Jogeshwari (West), Mumbai 400 102.

Tel. No. 022 – 679 1487

Working hrs : 9.30 a.m. to 4.30 p.m.

Contact person: Mrs. Sheryl Rodrigues

Services: Free

<u>Clinical Services</u>: Eye Screening, Clinical Assessment, Prescription of L.V. Devices, Instruction in the use of L.V. Devices, Training of L.V. Professionals (Technical) and Follow-up services.

<u>Educational / Rehabilitation services</u>: Orientation & Mobility Training, Vocational Guidance, Distribution of L.V. Aids and Distribution of Aids for independent living.

# 6. NAB MATA LACHIMI NURSERY FOR THE BLIND

Mata Lachmi Hospital Building, 218, Sion East, Mumbai 400 022. Tel. No. 022 – 490 5170

Working hrs: 10.00 a.m. to 2.00 p.m.

Contact Persons: Mrs. Banoo Tarapore and Mrs. Moleen Parsram

Services: Free

A separate Paediatric service is available.

<u>Educational / Rehabilitation Services</u>: Low Vision Children from 2 ½ to 6 years age are trained in pre-reading and pre-writing and functional vision.

# 7. BAL KALYAN SANSTHA LOW VISION AID CENTRE

Near Raj Bhavan, Ganeshkhind Road, Pune 411 007

Tel. No. 020 – 565 5953

Working hrs: 11.00 a.m. to 5.00 p.m.

Services: Free

A separate Paediatric service is available.

<u>Clinical Services</u>: Eye Screening, Prescription of L.V. Devices, Training of L.V. Professional (Technical) and Follow-up services.

<u>Educational / Rehabilitation Services</u>: Rehabilitation Training for L.V. Clients, and recreational services.

#### 8. LAXMI EYE INSTITUTE

Panvel – Uran Road, Panvel, Dist. Raigad 410 206.

Tel. No. 022 – 745 2228 / 745 3147/ 745 4060

Fax No. 022 – 749 1199

Working hrs: 9.30 a.m. to 5.00 p.m.

Contact Person: Mr. Mohan Hindupur

Services: Subsidized / Fully paid.

<u>Clinical Services</u>: Eye Screening, Clinical Assessment, Prescription of L.V. Devices, Instruction in the use of L.V. Devices, Referrals and Follow-up services.

# 9. EYE CLINIC & HOSPITAL

Vishrambag, Sangli 416 415

Tel. No. 0233 – 300862

Fax No. 0233 – 300665

E-mail <u>eyehospital@vsnl.com</u>

Working hrs: 10.00 a.m. to 1.00 p.m. and 3.30 p.m. to 6.30 p.m.

Contact Person: Mr. Ajit S. Limaye.

Services: Free/ Subsidized / Fully paid

A separate Paediatric service is available.

<u>Clinical Services</u>: Eye Screening, Clinical Assessment, Prescription of L.V. Devices, Instruction in the use of L.V. Devices, Training of L.V. Professionals (Technical), Referrals and Follow-up services.

<u>Educational / Rehabilitation Services</u>: Research / Development of L.V. Devices, Production / Distribution of L.V. Aids, and Display / Demonstration of electronic / Computer operated L.V. equipment.

# **NEW DELHI**

# DR. RAJENDRA PRASAD CENTRE FOR OPHTHALMIC SCIENCES

All India Institute of Medical Sciences, New Delhi 110 028.

Tel. No. 91 – 011 – 651 4095

Fax No. 91 – 011 – 685 2819

E-mail <u>eyehospital@vsnl.com</u>

Working hrs: 9.00 a.m. to 5.00 p.m. However, the special L.V.A. Clinic is open only on Tuesdays and Fridays from 2.00 p.m. to 5.00 p.m.

Contact Person: Mrs. Monica Choudhary

Services: Free Check-up and subsidized dispensation.

<u>Clinical Services</u>: Eye Screening, Clinical Assessment, Prescription of L.V. Devices, Instruction in the use of L.V. Devices and Follow-up services.

Educational / Rehabilitation Services: Parent Counselling

# PUNJAB

# VOCATIONAL REHABILITATION TRAINING CENTRE FOR BLIND/DISABLED

Habowal Road, Opp. Kitchlu Nagar, Ludhiana 141 001.

Tel. No. 0161 – 471425 / 471642

Fax No. 0161 – 471642

Working hrs: 8.30 a.m. to 5.00 p.m.

Contact Person: Dr. E.M. Johnson

Services: Free

A separate Paediatric service is available.

<u>Educational / Rehabilitation Services</u>: Clients, Teacher and Parent Counselling, Orientation & Mobility Training, Large print library services, Production / Distribution of Large print literature and L.V. Aids.

# RAJASTHAN

#### **RUPAL GAJJAR LOW VISION CENTRE**

Tarabai Desai Eye Hospital, E-22, Shastri Nagar, Jodhpur 342 002.

Tel. No. 0291 – 430714 / 432288

E-mail <u>sanjiv.desai@vsnl.com</u>

Working hrs: 9.00 a.m. to 2.00 p.m.

Contact Person: Dr. Sanjiv Desai

Services: Subsidized

<u>Clinical Services</u>: Eye Screening, Clinical Assessment, Prescription of L.V. Devices, Instruction in the use of L.V. Devices and Follow-up services.

<u>Educational / Rehabilitation Services</u>: Production / Distribution of L.V. Aids and Display / Demonstration of electronic/computer operated L.V. equipment.

#### TAMILNADU

#### **1. SANKARA NETHRALAYA**

(A Unit of Medical Research Foundation)

18, College Road, Chennai 600 006

Tel. No. 044 – 827 1616

Fax No. 044 – 825 4180

E-mail mrf@md3.vsnl.net.in

Working hrs: 9.00 a.m. to 5.00 p.m.

Contact Person: Dr. Krishna Kumar

Services: Free

<u>Clinical Services</u>: Eye Screening, Clinical Assessment, Prescription of L.V. Devices, Instruction in the use of L.V. Devices, Referrals, Follow-up services and training of L.V. Professionals and Genetic Counselling.

# 2. ARAVIND EYE HOSPITAL

1, Annanagar, Madurai 625 020.

Tel. No. 0452 – 2532653 (5 lines)

Fax No. 0452 – 530984

E-mail <u>p.vijayalakshmi@aravind.org</u>

Working hrs: 9.00 a.m. to 6.00 p.m.

Contact person: Dr. P. Vijayalakshmi

Services: Free or Fully paid.

<u>Clinical Services</u>: Eye Screening, Clinical Assessment, Prescription of L.V. Devices, Instruction in the use of L.V. Devices, Referrals and Follow-up services.

<u>Educational / Rehabilitation Services</u>: Orientation & Mobility Training, Parent Counselling and Vocational Guidance.

#### 2. INTEGRATED EDUCATION IMPLEMENTATION COMMITTEE

St. Mary's Higher Secondary School, Post Box No. 56, Madurai 625 001.

Tel. No. 0452 – 2336576 / 2337273

Working hrs: 9.00 a.m. to 5.30 p.m.

Contact Person: Mr. L. Shanmugam

Services: Free

<u>Clinical Services</u>: Eye Screening, Instruction in the use of L.V. Devices, Training of L.V. Professionals (Technical), Referrals and Follow-up services.

<u>Education / Rehabilitation Services</u>: Clients, Teachers and Parent Counselling, Orientation & Mobility Training and Vocational Guidance.

# UTTARPRADESH

#### NATIONAL INSTITUTE FOR THE VISUALLY HANDICAPPED

116, Rajpur Road, Dehra Dun 248 001.

- Tel. No. 0135 744491
- Fax No. 0135 748147
- E-mail <u>nivhddn@nde.vsnl.net.in</u>

Working hrs: 9.00 a.m.m to 5.30 p.m.

Contact person: Dr. S.R. Shukla

Services: Free

<u>Clinical Services</u>: Eye Screening, Clinical Assessment, Prescription of L.V. Devices, Instruction in the use of L.V. Devices, Referrals and Follow-up services.

<u>Educational / Rehabilitation Services</u>: Clients, Teachers and Parent Counselling, Orientation & Mobility Training and Vocational Guidance.

# WEST BENGAL

# SHAH & SHAH LOW VISION AIDS CENTRE AND LABORATORIES

2, Rusell Street, Calcutta 700 071

Tel.No. 033 – 266 5328 / 246 4687

Fax No. 033 – 226 1730 Working hrs: 1.30 p.m. to 7.00 p.m.

Contact Person: Dr. H.M. Shah

Services: Subsidized Fully paid

A separate Paediatric Service is available.

Clinical Services: Eye Screening, Clinical Assessment, Prescription of L.V. Devices, Instruction in the use of L.V. Devices, Training of L.V. Professionals (Technical), Referrals and Follow up services.

#### LOW VISION CENTRES DETAILS OF WHICH ARE NOT AVAILABLE

#### ANDHRA PRADESH

School of Optometry Institute of Ophthalmology Sarojini Devi Eye Hospital Hyderabad 500 028

#### KARNATAKA

Minto Ophthalmic Hospital Bangalore 560 002

#### MAHARASHTRA

Premila Vithaldas Thackersey Polytechnic SNDT Women's University Juhu Santacruz (W) Mumbai – 400 049

Panacea Eye Centre C/o. Aditya Jyoti Research Foundation 168-D, Vikaswadi, Dadar T.T Mumbai 400 014 K.B. Haji Bachooali Ophthalmic & ENT Hospital Parel Mumbai – 400 012 Municipal Eye Hospital Kamathipura Trimbak Parshuram Street Mumbai 400 008

National Institute of Ophthalmology 1187/30, Off Gokhale Road, Shivaji Nagar, Pune 411 005.

# AIDS AND APPLIANCES

The type of devices listed here are only indicative. Many of these items may only be procured by importing them from manufacturers overseas. However, the purpose of listing these devices is mainly to educate the reader about their availability. For details, readers may please refer the latest edition of Indian Guide to Aids & Appliances for the Blind published by NAB Louis Braille Memorial Research Centre, Rustom Alpaiwalls Complex, 124 - 127, Cotton Depot, Cotton Green, Mumbai – 400 033.

# A) OPTICAL DEVICES

#### Monoculars:

Monoculars of different powers/types – Rubber coated, Tasco and Clipon monoculars.

#### **Binoculars:**

Binoculars of different sizes / types – folding, wide angle, roof prism, opera, sport glasses "Hands-free" and telescope binoculars.

#### Magnifiers:

Illuminated and non-illuminated, pocket, hand-held, stand & mirror magnifiers. Folding type, hands-free round the neck and bar / book magnifiers, Clip-on magnifying lenses and full-page magnifiers.

# **B) NON-OPTICAL DEVICES**

Close Circuit Television with magnifier:

ECIL (Hyderabad), TVI Classic, Zoom, liberty and Alladin CCTVs.

# Vis-ability:

# A system that turns scanner into CCTV.

# Educational Aids:

Tactile and large print maps of the world, Map Eyes – 'Wear-on-head' magnifier, Talking Globes, Braille World Atlas, Tangible Graphs, Talking Compass, Audio Self Teaching Manual for Touch Typing, Seated Parquetry Set for enhancing residual visual capacity, Talking Dictionary.

# Low Vision:

Utilization of Low Vision (ULV) Teachers Kit: To help in determining if a person's residual vision is being fully utilized.

#### Individual Study Screen:

Light Box – helps in achieving efficiency in visual functioning. Light Box material that is provided, helps to teach basic visual skills, eye hand co-ordination and simple matching skills.

#### Games:

Low Vision Scrabble Game, Large Print Playing Cards, Cross-word Puzzles and Bingo Cards, Braille scrabble, Braille Chess.

# Personal Devices:

Caller ID – Telephone Answering Machine, Low Vision Digital Talking Blood Pressure Kit, Glucose Monitor System, Clinical Talking Thermometer, Parrot Plus Electronic Diary

#### Kitchen Aids:

Low Vision Cutting Board, Slicer, Talking Kitchen Scale, Spice Auto Measure Dispenser, Liquid Level Indicator

#### Writing Aids:

Nite Writer – illuminates writing area, Signature Guide, Envelop Addressing Guide, Letter Writing Guide, Typoscope Reading & Writing Guide, Large Print Address Book, Telephone Diary and Large Print Dials, Low Visio Rulers, Embossed Pencil Writing Paper, Bold Line Paper, Rules (Bold Line) Exercise Books, Jotter Pens and Marker Felt Pens.

#### Clocks, Watches and Calculators:

Big Display Digital Wall Clocks, LCD Alarm Clocks, Talking Alarm Clocks & Wrist Watches, Large Print Desk Calculators.

#### Software Solutions:

Optical Braille Recognition Software (OBRS)

Jaws, Magic 6.0, Wynn, Screen Reading Softwares with varying magnification capabilities.

#### Text Reading Machines:

KRM, Rainbow and Galileo (Robotron) Reading Machines.

# **C) MANUFACTURERS AND DISTRIBUTORS**

# I) INDIA

# ANDHRA PRADESH:

Electronic Corporation of India Ltd. (Department of Atomic Energy) ECIL P.O. Hyderabad 500 762

#### MAHARASHTRA

Baliwalla & Homi Private Ltd. 614, Jagannath Shankarseth Marg Dhobi Talao Mumbai 400 002

Braille World 132, Maker Tower 'B' Cuffe Parade Mumbai 400 005

Karishma Enterprises 132, Maker Tower 'B' Cuffe Parade Mumbai 400 005

S.S. Enterprises 49/6 Ashram, 1 st Floor Bhagat Gully L.J. Road. Mahim Mumbai 400 016

Techno Sight Systems

132, Maker Tower 'B' Cuffe Parade Mumbai 400 005

#### **II) UNITED KINGDOM**

Partially Sighted Society Doncaster 2 U.K.

Royal National Institute for the Blind 224, Great Portland Street London WIN 6AA U.K.

#### III) U.S.A.

American Printing House for the Blind 1839 Frankfort Avenue Louisville Kentucky 40206 – 0085

Light House International 11 East 59 th Street, (Between Part & Lexington Avenue) New York NY 10022 – 1202

# **D) PRICE SUBSIDY**

Government of India, Ministry of Social Justice and Empowerment has a scheme of assistance to disabled persons for purchase and fitting of aids and appliances. Under this scheme, L.V. Devices included are hand held, stand (lighted and unlighted) magnifiers besides speech synthesizers or Braille attachments for computers. Low Vision persons with a monthly income of upto Rs. 5000/- can obtain these devices free of charge, whereas those with an income upto Rs. 8,000/- p.m. are offered 50% of price subsidy. Only those Aids/Appliances, which do not cost less than Rs. 50/- and more than Rs. 6000/- fall under this scheme.

# **E) CUSTOMS DUTY EXEMPTION**

Certain medical equipments concerning Low Vision are fully exempt from payment of Customs Duties. The details are given below: General Exemption No. 121 Serial No. 274 : (a) Medical Equipment specified en list 22)

(Source: Customs Tariff of India 1999 – 2000, R.K. Jain, Centax Publications Pvt. Ltd., New Delhi, 1999 – pp. 399/443).

# LARGE PRINT PUBLICATION

Centre for Services to People with Low Vision of the National Association for the Blind, Inida brings out every 4 months, a journal in large print called "Vishal", since 1995. This 48-page journal is published in Marathi for persons having difficulty in reading normal text. Annual subscription is Rs. 60/-. The price for a single issue is Rs. 25/-.

The magazine covers literature of general interest for readers of every taste and age. The type size used for printing is 30 pts. Senior citizens having vision problem may find this journal of particular interest.

For subscription and other details, readers may please contact at the following address:-

Editor "Vishal" Centre for Services to People with Low Vision National Association for the Blind C/o. NAB Workshop for the Blind Dr. Annie Beasant Road, Prabhadevi, Mumbai – 400 025 Tel.No. 422 1192

# TALKING BOOK SERVICES

# GUJARAT

Blind People's Association of India Dr. Vikram Sarabhai Road, Vastraur Ahmedabad 380 015 Gujarat

# **KERALA**

Kerala Federation of the Blind Kunnukuzhi Thiruvananthapuram 695 034 Kerala

# MAHARASHTRA

NAB M.P. Shah All India Talking Book Centre 11 – 12, Khan Abdul Gaffar Khan Road, Worli Seaface Mumbai 400 025

Poona Blind Men's Association 82 Rasta Peth Pune 411 011

# **BRAILLE PRODUCTION CENTRES**

#### **ANDHRA PRADESH**

- Andhra Pradesh Vikalangula Co-ope. Corporation Deaf & Dumb School Campus Malkapet Hyderabad 500 036
- 2. Regional Braille Press Malkapet Hyderabad 500 036
- Caring Aids for the Visually Impaired Gokul, 5-9-32/3 Basheerbag Hyderabad 500 029

# DELHI

 All India Confederation of the Blind Braille Production Unit Sector V Rohini Delhi

# **GUJARAT**

 Makim Memorial Braille Press Blind People's Association of India Dr. Vikram Sarabhai Road, P.P. Polytechnic Ahmedabad 380 015

- Mrs. R. S. Kalaria Braille Computerized Press Blind Men's Welfare Association
   P. D. Malavia College Campus Gondal Road, Rajkot 360 004
- NAB Surat District Branch C/o. Andhjan Shikshan Mandal Ghoddoud Road, Surat 395 007

# HARYANA

 National Federation of the Blind Braille Press Near Atam Sudhi Ashram Delhi Road, Bahadurgarh 124 507

# KARNATAKA

- Governent Braille Press Government Blind School Campus Tilak Nagar Sayaji Rao Road, Mysore
- Braille Transcription Centre Canara Bank Relief & Welfare Society 27th Cross, Banashankari 2nd Stage Bangalore 560 070

# **KERALA**

Shri Karthika Thirunal Shashtyabdapoorthy Memorial Braille Press Kerala Federation of the Blind Thiruvananthapuram 693 037

# MADHYA PRADESH

- Government Braille Press

   M. P. State Government Panchayat & Social Welfare
   Directorate
   Marwari Lane
   Sadar Bazar
   Bilaspur
- 2. NAB M. P. State Brach Braille Press Building Scheme No. 54
  A. B. Road, Behind Satya Sai Vihar School Indore 452 010
- Computerized Braille Production Centre Arushi E-7/793 Arera Colony Bhopal 711 340

## MAHARASHTRA

- NAB Sir J. Duggan Braille Press 11, Khan Abdul Gaffar Khan Road Worli Seaface Mumbai 400 025
- Indian Association for the Visually Handicapped IAVH Electronic Reading Centre for the Blind University Club House
   'B' Road, Churchgate Mumbai 400 020
- Poona Blind Men's Association Braille Production Centre TTI Complex, 109, Dr. Helen Keller Road, Hadapsar Pune 411 013
- 4. IAVH Reading Centre University of Pune Ganeshkhind Pune 411 007
- 5. IAVH Reading Centre for the Blind Nagur University Library Nort Ambazari Road, Nagpur 440 010.

## ORISSA

Red Cross School for the Blind Dist. Ganjam Berhampur 760 001

## RAJASTHAN

L. K. C. Jagdamba Andh Vidyalaya Samiti Hanumangarh Sriganganagar 335 001

### TAMIL NADU

- 1. Regional Braille Press Government School for the Blind Poonamallee Chennai 600 056
- 2. Christian Foundation for the Blind Braille Press Pallavaram Chennai 600 043
- Little Flower Convent 127, G. N. Road, Cathedral P.O. Chennai 600 005
- 4. Sri Ramakrishna Mission Vidyalaya College of Education P.O. Coimbatore 641 020
- Indian Association for the Blind Higher Secondary School & Rehabilitation Centre Sundarajanpatti Arumbanoor Post Madurai 625 107

# UTTAR PRADESH

- National Institute for the Visually Handicapped 116, Rajpur Road Dehra Dun 248 001
- 2. Shri Hanuman Prasad Andh Vidyalaya Durakund Varanasi

# WEST BENGAL

Regional Braille Press Ramakrishna Mission Ashram P. O. Narendrapur Dist. 24 Pargnas

# **ORIENTATION & MOBILITY TRAINING CENTRES**

## **ANDHRA PRADESH**

- D. M. School for the Blind Near Law College Visakapattanam – 19
- Andhra Blind Model High School Rajapet Narsapur West Godawari 534 275
- Saint Francis High School Assist Nagar, Venkatagiri Town (Post) Dist. Nellore 524 132

## BIHAR

- Sri Adinath Andh Vidyalay for the Blind Dhampura Arrah Bhojpur
- 2. St. Michel's School for the Blind Old Hazaribagh Road Ranchi 834 001
- 3. Sewa Sadan Andh Vidyalaya Bara Telpa Chapara Saran

 4. Netraheen Chatra Vidyalaya Bhikhanpur Bhagalpur' Bihar

## **CHANDIGARH**

Society for the Care of the Blind Sector 26 Chandigarh 160 026

# GUJARAT

- Adult Training Centre for the Blind (School) Dr. Vikram Sarabhai Road Vastrapur Ahmedabad 380 015
- 2. Light House for the Blind Near Manav Mandir Memnagar Ahemedabad 380 052
- Smt. M. K. Mehta School for the Blind Mamta Mouri Vidya Mandir Palanpur Banaskantha
- 4. Andha Kanya Vikas Gruh 50-B, Middle Class Society Opp. Jayesh Colony Fatehgunj Baroda 390 002
- 5. Governement School for the Blind Pensionpura

Baroda 2

- 6. Krishna Kumar Singh Ji Andh Udyog Shala Near New Filter Bhavnagar 364 002
- 7. Andhjan Mandhyamic Shala Gandhi Nagar
- 8. Andhjan Vividhlaxhi Talim Kendra Aerodrome Road Jamnagar 361 006
- 9. Shree Andh Vidyarthi Bhuvan Visavadar Dist. Junagadh
- 10. V. D. Parekh Andh Mahila Vikas Gruh Dheberbhai Road Rajkot

## HARYANA

- 1. Sanatan Dharam Institution for the Blind Jagadhari Road Ambala Cantonement 133 001
- 2. Government Institute for the Blind Panipat Karnal 132 103

# KARNATAKA

1. Minto Ophthalmic Hospital Bangalore 560 002

- Government School for the Blind Near Chandra Shekar Patil Stadium I. Van-E Shani Road Gulburga
- Government School for the Blind Siddharnadhamutt Hubli Dharwar 580 024
- 4. NAB Mobility Training Centre National Association for the Blind NAB Rehabilitation Complex
  B. A. Site No. 4 Jeevan Bima Nagar Bangalore 560 075

## **KERALA**

- Calicut School for the Blind Post Kolathara Calicut
- 2. Government School for the Blind & the Deaf-Dumb Thrichur Road Kunnam Kulam Thrichur 680 503
- 3. Light to the Blind Christugiri
  P. O. Sinivasapuram Varkala Trivandrum 695 145
- 4. Kerala Federation of the Blind Kunnukuzhi Thiruvananthapuram 695 034

# MADHYA PRADESH

- Government Deaf, Dumb and Blind School Opp. Santhosh Lodge Daagam Hospital Juni Bilapur
- M. P. Welfare Association for the Blind Drishtiheen Kanya Vidyalaya Yamuna Niwas Bada Bazar Dewas 455 001

- Chandra Shekhar Azad Adiwasi Gramin Drishtiheen Punarvasan Kendra Bhabra Dist. Jhabua
- 4. Netraheen Avam Viklang Mahavidyalaya (Blind & Disabled School) Topkhana Rewa 486 001

#### MAHARASHTRA

- School for the Blind
   P. O. Karnji, Tal. Pathardi
   Dist. Ahmednagar
- Dr. Narendra Bhivapurkar andh Vidyalaya Wadali Road Near Jail Quarters Amravati Camp 2
- Smt. Kamla Mehta Dadar school for the Blind 160, Dadasaheb Phalke Road Dadar Mumbai 400 014
- Happy Home and School for the Blind Dr. Annie Besant Road Worli Mumbai 400 018
- 5. Blind Boys Institute South Ambazari Road Nagpur 400 022

- 6. School for the Blind At Post Bodhdi Tal. Kinwat Dist. Nanded
- 7. The Poona School & Home for the Blind 14-17, Koregaon Park Pune 411 001

#### MANIPUR

Government Ideal Blind School Takyal Social Welfare Complex P. O. Imphal 795 001

#### NAGALAND

Government Blind School B. P. O. Pherima Kohima 797 106

### **NEW DELHI**

- 1. Government School for the Blind Kingsway Camp New Delhi 110 009
- 2. Rashtriya Virjanand andh Mahavidyalaya Senior Secondary School New Rajendra Nagar New Delhi 110 060

## RAJASTHAN

Government Higher Secondary School for the Blind Adarsh Nagar Ajmer

## TAMIL NADU

- 1. T. E. L. C. School for the Blind Berugur Dist. Dharmapur 635 104
- 2. C. S. I. School for the Blind Irenipuram Kanyakumari 629 171
- 3. Government Higher Secondary School for the Blind Poonamallee Chennai
- 4. Little Flower Convent School for the Blind Cathedral Post, Teynampet Chennai 600 006
- 5. Amalarakini School for the Blind Husainagar, Via Arani Dist. North Arcot 632 336
- T. E. L. C. School for the Blind S. M. Hospital Post Tiruppattur Dist. Pasumpon-Muthuramalingam

7. School for the Blind Palayamkottai Dist. Tirunelveli

# UTTAR PRADESH

- 1. Ahmadi School for the Blind Shamsad Marg Aligarh Muslim University Aligarh 202 001
- 2. Government Blind Girls School Saharanpur
- National Institute for the Visually Handicapped 116, Rajpur Road Dehra Dun 248 001

## WEST BENGAL

- The Salvation Army Mary Scott Home for the Blind 9th Mile Kalimpong Darjeeling 734 301
- 2. Ananda BhawanVill. JagatpurP. O. BrindabanpurHowrah 711 315
- Louis Braille Memorial School for the Blind Birla Road Makhla Hoogly

4. Calcutta Blind School Behala
24 Parganas Calcutta 700 034

## LOW VISION ADVISORY SERVICES ABROAD

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2) Ms. Ann Corn Professor Dept. of Special Education Peabody College Vanderbelt University Box 328 Noshvilla TN 37208, U. S. A.

3) Lighthouse International
11 East, 59th Street
(Between Park and Lexington Avenue)
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N. Y. 10022-1202
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4) Perkins School for the Blind175 North Beacon StreetWatertownMassachusetts 02172U. S. A.

5) Mr. Sherry Raynor President Blind Children Fund 4740 Okemos Road Okemos MI 48864-1637

## U. K.

Royal National Institute for the Blind 224, Great Portland Street London WIN 6AA U. K.

### THE NETHERLANDS

International Society for Low Vision Research and Rehabilitation (ISLRR) C/o. Amersfoortsestraatweg 180 1272 R R Huizen The Netherlands

# **GLOSSORY OF TERMS**

**ACCOMODATION:** The power of the eye to alter the size of its lens in order to adjust the focus of the eye for distance and near seeing.

**AMBLYOPIA:** A terms used to describe a condition of the inability of an eye to see well.

**AMBLYOPIA EX ANOPSIA:** Amblyopia acquired through lack of use.

**AMETROPIA:** Imperfection in the refractive power of the eye so that images are not brought to a proper focus on the retina.

**ASTIGMATISM:** An irregularly shaped eye in which the refractive power in the several meridians is different, preventing light rays from coming to sharp focus on the retina.

**BINOCULAR:** Using both eyes simultaneously.

**CATARACT:** Opacity of the crystalline lens.

**CONCAVE LENS:** Lens having the power to diverge rays of light, also known as diverging, reducing, negative, myopic or minus lens, denoted by the sign (-).

**CONVEX LENS:** Lens having power to converge rays of light and to bring them to a focus, also known as converging, magnifying, hyperopic or plus lens, denoted by the sign (+).

**CONES:** These are one of the two types of light-sensitive nerve endings that constitute the retina and make it possible for it to transmit visual impulses to the brain. Forum sense and colour sense are learned through the cones.

**CONJUNCTIVA:** The covering of the eyeball and lining of the lids.

**DARK ADAPTATION:** The power of the eye to adjust itself to a dim light.

**DIOPTER:** The amount by which a lens can bend a light ray within a distance of one meter. A term used to describe the strength (focal length) of a lens.

**DIPLOPIA:** Double vision.

**FIELD OF VISION:** An area which can be seen at one time without shifting the head or eyes, while fixing the gaze at central point in the field.

**FOOT CANDLE:** Unit of measurement of light intensity; the amount of light shed by a standard candle at a distance of one foot.

**FUSION:** Co-ordination of the images, seen by each eye individually, into one picture.

**GLARE:** A quality of light which causes discomfort; it may result from a direct light source within the field of vision or from a reflection of a light source not in the field of vision.

**GLAUCOMA:** Disease of the eye marked by increased pressure in the eye resulting in hardness of the eyeball; can cause blindness.

**HYPEROPIA:** Far sightedness. Short or undeveloped eye in which light rays are focused behind the retina.

**IRIS:** Coloured, circular membrane, which regulates the amount of light entering the eye by changing the size of the pupil.

**LUMEN:** A unit of measurement of the light output of a light source, Morden lamps are rated in lumens. MICROPHTHALMOS: A very small eyeball.

**MYOPIA:** Near-sightedness, a long eye in which rays of light comes to a focus in front of the retina, resulting in blurred distant vision.

**NYSTAGMUS:** Involuntary rotating on oscillating movements of the eyeball.

**OCCLUSION:** The method of obscuring the vision of good eye, so as to force the use of the weaker eye.

**OPTIC ATROPHY:** Atrophy of the optic nerve.

**PRESBYOPIA:** Lessening of the elasticity of the lens and ciliary muscle of the eyeball. This brings about some degree of loss of the power to accommodate or focus a clear image on the retina for near work.

**REFRACTION:** Clinical measurement of the bending of the rays of light in the eye.

**REFRACTIVE ERROR:** Innermost crust of the eye. Made up of 10 layers of neural cells and neural tissues.

**RETINAL DETACHMENT:** Separation of the retina from the back of the eye.

**RETINIS:** Inflammation of the retina.

**RETINITIS PIGMENTOSA:** A form of hereditary degeneration of the retinal pigment epithelium, which produces a gradual loss of vision at first in dim light or at night and later progresses to day blindness leading to total blindness.

**RODS:** Together with cones, are receptors for the optic nerve, rods perceive light and motion.

**SCOTOMA:** A blind spot in the field of vision other than the true blind spot. There may be more than one present and then they are called scotomata, the plural form of the term.

STRABISMUS: Cross-eyes.

**STEREOPSIS:** Depth perception.

**TELESCOPIC LENSES:** Special lenses for persons with advanced degrees of sight impairment. They consist of two lenses (of the usual kind), properly ground and mounted in a frame with one a short distance in front of the other, in effect they form a sort of telescope or, more properly, the whole set of glasses makes a kind of binoculars.

**TRACHOMA:** Chronic conjunctivitis with keratites leading to corneal blindness if not treated properly.

**VISION:** The ability to see and to interpret what is seen.

**VISUAL ACUITY:** Sharpness of vision in respect to ability of the eye to distinguish details as an object is placed further away or as it becomes smaller in size.

**XEROPHTHALMIA:** Dryness of the eye due to vitamin A deficiency.

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