

**41 Years  
of Excellence**

Nepal Netra Jyoti Sangh  
Lahan Eye & Ear Care System  
Sagarmatha Choudhary Eye Hospital, Lahan  
Biratnagar Eye Hospital, Biratnagar

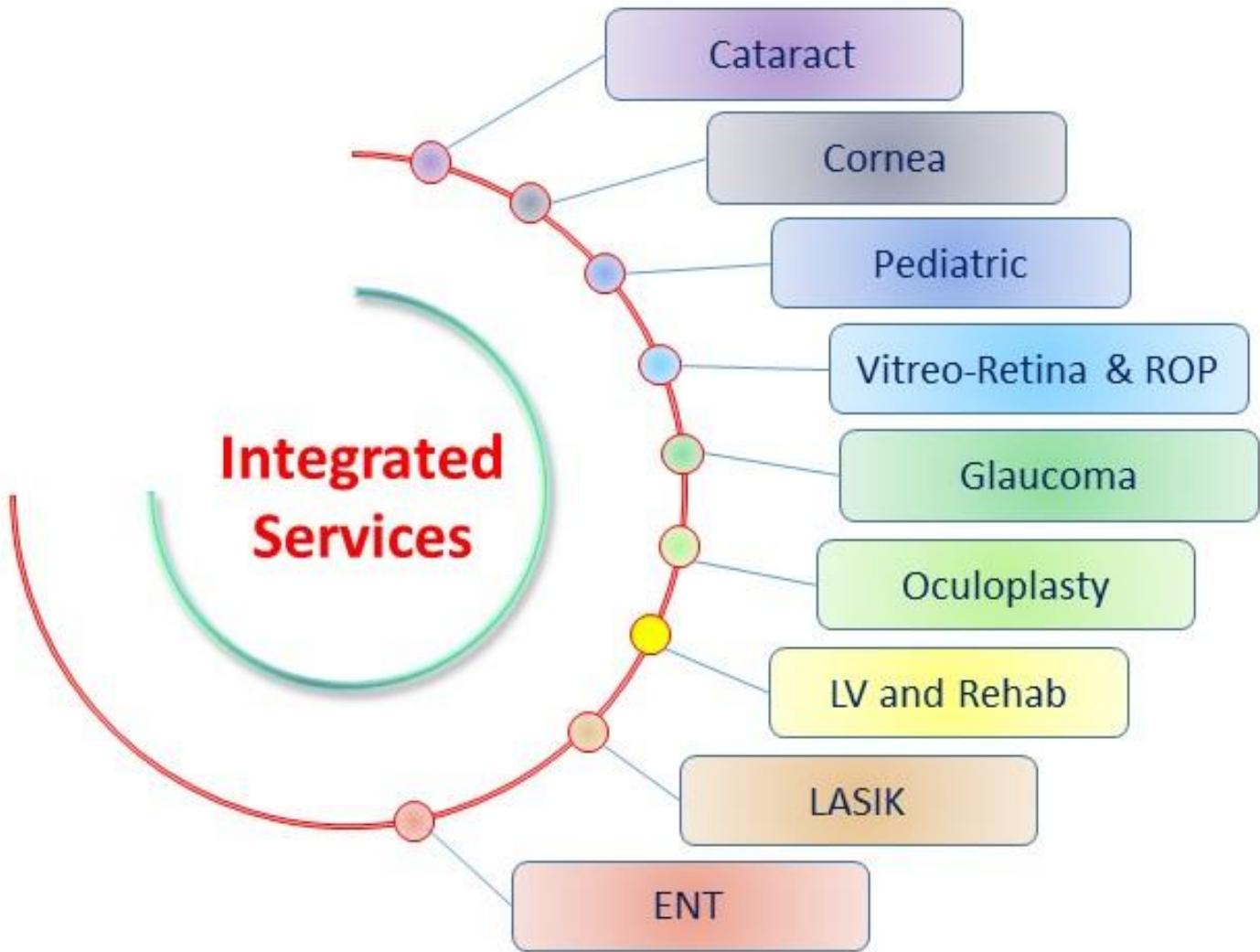
# ANNUAL REPORT 2023



## LEECS at a glance



## SPECIAL SERVICES at LEECS



Nepal Netra Jyoti Sangh, Eastern Regional Eye Care Programme (EREC-P) is a non-profit organization providing high-quality eye care services along with comprehensive approach in the eye and ear care. The services are very much accessible and affordable for people of all socioeconomic backgrounds. EREC-P is an umbrella of 2 tertiary level hospitals (Sagarmatha Choudhary Eye Hospital and Biratnagar Eye Hospital) and 35 Eye and Ear Care Centres. The program is providing services to a large number of populations of Koshi, Madhesh and Bagmati Province of Nepal and neighbouring countries. **The name of EREC-P has now changed to Lahan Eye & Ear Care System (LEECS).**

## HIGHLIGHTS

**1,363,325 examinations & 133,426 surgeries**  
*Highest number of OPD & surgeries since its establishment.*



## SCEH New OPD Building

The new building of Sagarmatha Choudhary Eye Hospital, Lahan was inaugurated by Prof. Dr. Ram Prasad Pokhrel who is also known Father of Eye Care Service in Nepal on 11<sup>th</sup> Feb 2023 in the occasion of 41<sup>st</sup> Annual Day. The building is being used for multiple medical services and educational purposes like fast track outpatient, subspecialty, laboratory, community ophthalmology, research, administration departments, and deluxe cabins to provide effective and efficient services to the community. Various functionalities have been enhanced so that seamless flow of patient care can be provided. With the use of new building, the hospital can continue its operation without disruption even in post disaster emergencies using its modern equipments and technologies.



## NOSCON 2023

Biratnagar Eye Hospital successfully hosted 25<sup>th</sup> Nepal Ophthalmic Society Annual Conference and 15<sup>th</sup> Eastern Regional Ophthalmic Conference in 2023 on 13-14 October 2023 at Biratnagar. The conference carried a powerful theme: “Enhancing Quality Eye Care.” Through this conference, we aim to foster collaboration, exchange knowledge, and explore innovative strategies that will revolutionize eye care in our country. Various scientific sessions, workshops, and interactive discussions were highlight of the programme. This conference provided opportunity to broaden horizons, learn from esteemed experts, and share valuable insights and experiences. This event enhanced professional skills, deepened the understanding of emerging trends and technologies.

A total of 300 Ophthalmologists, Ophthalmic paramedics and distinguished national and international faculties participated in the conference. In the conference, more than 120 scientific papers, case reports and 50 posters were presented. Two distinguished Nepali Ophthalmologists, Prof. Dr. Badri P Badhu and Prof. Dr. Govind Prasad Paudyal were felicitated with lifetime achievement award for their contributions in ophthalmology in Nepal, similarly 27 other Ophthalmologist received Silver Jubilee NOSCON Award and 2 received Silver Jubilee NOSCON Special Award.



## 40 Years of Transformative Journey: Honoring Our Past, Shaping Our Future

CBM Global and Nepal Netra Jyoti Sangh (NNJS) celebrated the 40 years of partnership for sight and hearing on September 04, 2023, in Kathmandu. The event was aimed to promote the efforts, results and impact for 40 years of partnership for sight and hearing among government, I/NGOs, media and other people and celebrate 40 years' achievements.

CBM and NNJS partnered for eye care services in Eastern Region of Nepal establishing Sagarmatha Choudhary Eye Hospital under NNJS in 1982. Dr. Albrecht Hennig from CBM has worked for more than 30 years and contributed to establish and growth of the hospitals in Lahan and Biratnagar. EREC-P has grown now with 2-subspecialty hospital and 35 Eye and Ear Care Centres in Koshi and Madhesh province of Nepal and reaches more than 13.7 million people and 2.2 million eye and ear surgeries in 41 years.

More than 200 people from government counterparts, stakeholders and media houses, founder, and executives of NNJS and EREC-P joined hand to celebrate the event and develop understanding for the future efforts. Hon’ble Surendra Raj Acharya, Minister, Ministry of Women, Children and Senior Citizen as chief guest along with representative from Ministry of Health and Population, National Planning Commission, I/NGOs, OPDs and founder and executive of NNJS and EREC-P were participated in the program.

NNJS felicitated different 10 people and organizations for their outstanding contributions during the 40 years of journey. Mr. David Bainbridge, Executive Director and Robert Donelly, International Director from CBM Global shared the importance





of partnership and how CBM Global wants to move ahead in future. Representative from Ministry of Health and Population and National Planning Commission acknowledges the contribution of CBM and NNJS for blindness prevention in Nepal and highlighted the further need to prevent the preventable blindness in Nepal. They also highlighted the openness for further joint efforts with government to implement the national eye health strategy 2022-2029 in collaborative approaches. Dr. Albrecht Hennig, who worked for more than 30 years in Lahan shared his work experiences and conveyed best wishes message for further progress in future. EREC-P shared different informative documentaries to reflect their efforts and impact for 40 years of dedicated services.

Apart from the formal program, a panel discussion on “Sustainable and

Comprehensive Eye Care: Today’s Priority” was held to share the importance of eye health in new context and how current program and national eye health strategies to strengthen quality services.

The event went very well and remain as an example of celebration like as CBM-NNJS partnership for sight and hearing for more than 40 years. It conveyed a very strong message to Government of Nepal and other stakeholders as an example of continued collaboration for a cause.

## Lahan School of Health Science

Diploma in Ophthalmic Science (DOS) program was running in collaboration with Lahan Technical School (CTEVT). Academic program has been further strengthened by establishing Lahan School of Health Science registered as a part of Sagarmatha Choudhary Eye Hospital, Lahan for proficiency certificate-level academic programs in the health science discipline. The school is furnished with classrooms, laboratory, library, separate academic department and faculties. In 2023, the school has received DOS program affiliated by CTEVT. There are 39 students enrolled in the year and 78 in the second and third year.

## Myopia Clinic

Myopia (near sightedness) is most common problem in children and young adults leading to blurred vision for distance viewing and becoming a serious public health concern of the 21<sup>st</sup> Century. It is projected that half of the global population (5 billion) will be myopic by 2050AD whereas one billion population will be at the risk of developing myopia related complications that has potential to lead to visual loss.

Biratnagar Eye Hospital has started myopia clinic in 2021 has been further strengthened and developed as a full-fledged specialty clinic to treat and investigate various aspects of myopia. The clinic is equipped with Open Field Auto Refractor for Peripheral Refraction to assess myopia progression risk, IOL master 700 and others. Providing holistic and evidence-based anti-myopia treatment to prevent the onset of myopia and reducing its progression in children through use of pharmacological therapy, Peripheral defocus spectacle, Ortho-K lenses, environmental and lifestyle modifications. A total of 1023 patients upto 20 years of age have been examined and treated.

Mr. Anil Kumar Shah has received 3 month clinical training in Myopia management at LVPEI, from Hyderabad, India.



## RARE Research Project

The Prevalence of visual impairment, uncorrected refractive errors and effective refractive error coverage in Koshi Province, Nepal - Rapid Assessment of Refractive Errors (RARE) study was done in 2022-2023 with the support of One Sight USA and LV Prasad Eye Institute, Hyderabad India and has been published in Eye (London) Journal. The objective of the study was to estimate the prevalence of uncorrected refractive errors and presbyopia, spectacle coverage and barriers to uptake of eye care services. This study included participants aged 15-50 years randomly selected from the population. The findings of the study suggest prevalence of Visual Impairment and Uncorrected refractive error was low, attributed to the availability and uptake of services in Koshi province in Nepal. The prevalence of VI was 3.52% (95% CI:2.89–4.13; n=143), Prevalence of URE in the better eye was 1.95% (95% CI:1.54-2.42; n=79). Effective Refractive Error Coverage (eREC) was 31.3% and Spectacles coverage was 34.8%.

RARE can be used to monitor eye care services which will help to determine the progress toward achieving universal eye health in the region. This study provides crucial baseline information as plans are made toward achieving the WHO-endorsed target of a 40% increases in effective coverage of refractive error by 2030. This study was the first study conducted in Nepal using RARE methodology which can be accessed from <https://doi.org/10.1038/s41433-023-02786-4>.

## School Screening: Sundar Sansar



Biratnagar Eye Hospital implemented Sundar Sansar Project in partnership with CBM in 16 municipalities of Morang district from 2022-2023. The objective of the project was to reduce visual and hearing impairment among School going children between (3-18) years of age. Ophthalmic Assistant along with other paramedical staffs visited schools and community. They performed eye and ear examination, refraction and prescribed glasses. 120,185 children received eye screening among them 3,228 received spectacles, 985 received medicines, and 25 children were referred to base hospital for eye surgery. Likewise, over 1,661 teachers and community workers were oriented on ocular diseases occurring in children. Similarly 120,185 children ear screening was done, out of which 6,800 children with ear problem were identified and were referred to base hospital or Eye Care Centre for further evaluation and treatment. Total 866 children visited the base hospital/ECC and received treatment.

Similarly, Sagarmatha Choudhary Eye Hospital, Lahan conducted 135 School Screening camps at Saptari district where 23,423 children were screened. 1,414 children with eye and 1,184 children with ear problems were referred to nearby ECC and 487 children received spectacles.



## SURGERIES

<b>Cataract:</b>	<b>88,268</b>
Sutureless ECCE/IOL (SICS):	50,250
On children:	1,393
Phaco with IOL:	34,750
Other lens removal procedures:	1,875
<b>Glaucoma:</b>	<b>3,362</b>
Trabeculectomy:	381
Combined (Cat&Trabeculectomy):	386
Trans scleral cyclo photocoagulation:	178
Nd. YAG iridotomy:	2,340
Surgical PI & other:	77
<b>Corneo-Scleral Surgical Procedures:</b>	<b>6,819</b>
Keratoplasty:	290
Amniotic Membrane Graft (AMG):	1,414
Corneo Scleral Repair:	730
Pterygium:	3,309
Corneal Cross Linking:	147
LASIK:	35
Other Corneal Procedures:	894
<b>Vitreo-Retinal Surgery:</b>	<b>11,879</b>
Pars plana Vitrectomy:	1,273
Scleral Buckling:	371
Intravitreal Injections:	682
Inj. Avastin:	8,553
Others:	1,000
<b>Oculoplasty Procedures:</b>	<b>3,872</b>
Dacryocystorhinostomy:	1,857
Dacyrocystectomy:	612
Entropion / Ectropion:	312
Evisceration / Enucleation:	417
Ptosis:	25
Other oculoplasty procedures:	649
<b>Laser procedures:</b>	<b>10,319</b>
Retinal Laser:	5,165
Nd. YAG capsulotomy:	5,154
<b>Squint:</b>	<b>221</b>
<b>Others:</b>	<b>2,554</b>
<b>SUB TOTAL:</b>	<b>127,294</b>
<b>ENT Surgeries:</b>	<b>6,132</b>
C.M.-Tpasty:	19
MRM:	72
Myringoplasty:	896
Nose Surgery:	92
Head/Neck Surgery:	5
Minor:	5,048
<b>TOTAL:</b>	<b>133,426</b>

## Surgeries:

SCEH, Lahan & its Surgical Centers:	58,052
Biratnagar Eye Hospital:	68,427
6 Cat.Surg.Camps:	<u>815</u>
<b>SUB TOTAL:</b>	<b>127,294</b>
Ear Department, SCEH:	4,610
Ear Department, BEH:	<u>1,522</u>
<b>GRAND TOTAL:</b>	<b>133,426</b>

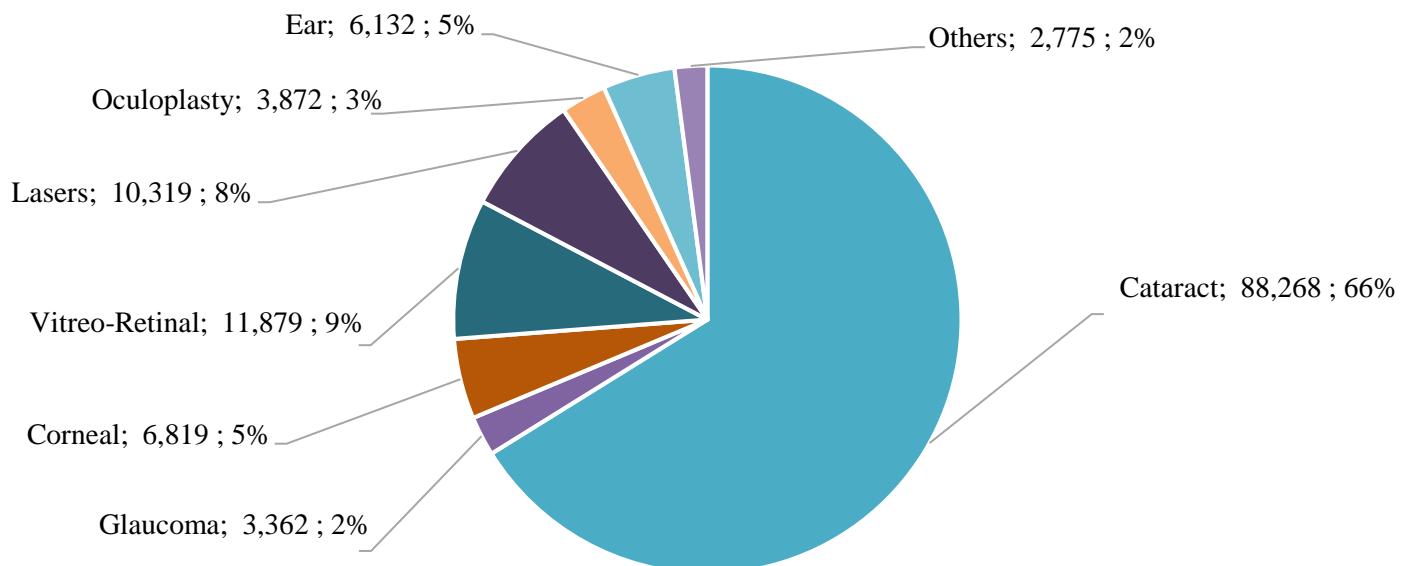


## OUTPATIENTS

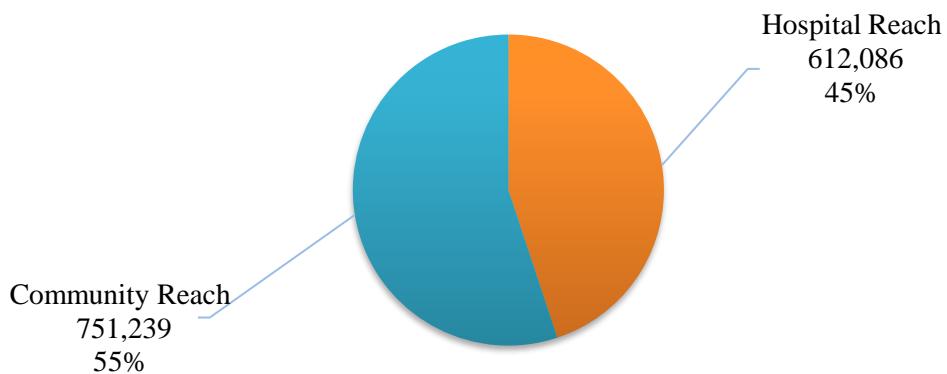
<b>SCEH, Lahan:</b>	<b>225,168</b>
<b>Biratnagar Eye Hospital:</b>	<b>313,581</b>
<b>35 ECCs:</b>	<b>219,880</b>
<b>Screening Camps' Patients:</b>	<b>75,372</b>
<b>COR Household:</b>	<b>59,177</b>
<b>School Screening:</b>	<b>154,706</b>
<b>Surg. Camps' Outpatients:</b>	<b>6,462</b>
<b>EYE SUB TOTAL</b>	<b>1,054,346</b>
Ear Department, Base:	73,337
Ear OPD in ECCs:	30,696
Ear Screening Camp Patients:	1,733
Ear School Screening:	150,486
<b>COR Household:</b>	<b>52,727</b>
<b>EAR SUB TOTAL</b>	<b>308,979</b>
<b>GRAND TOTAL:</b>	<b>1,363,325</b>



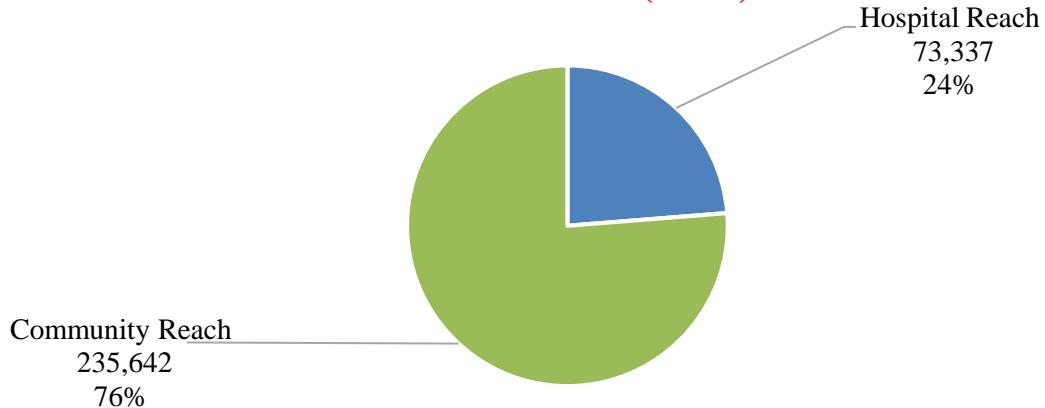
## **Surgeries at LEECS (2023)**



## **EYE Services (2023)**



## **ENT Services (2023)**



# Reach from 1983 to 2023

**13,793,792**

Patients  
Treated



**5,279,809**

Community  
Care



**2,221,309**

Eye  
Surgeries  
Done



**1,764,007**

Cataract  
Surgeries  
Done



**11,113**

Eye  
Surgeries  
at Hills



**1,201,448**

Ear  
Patients  
Treated



**175**

Publications

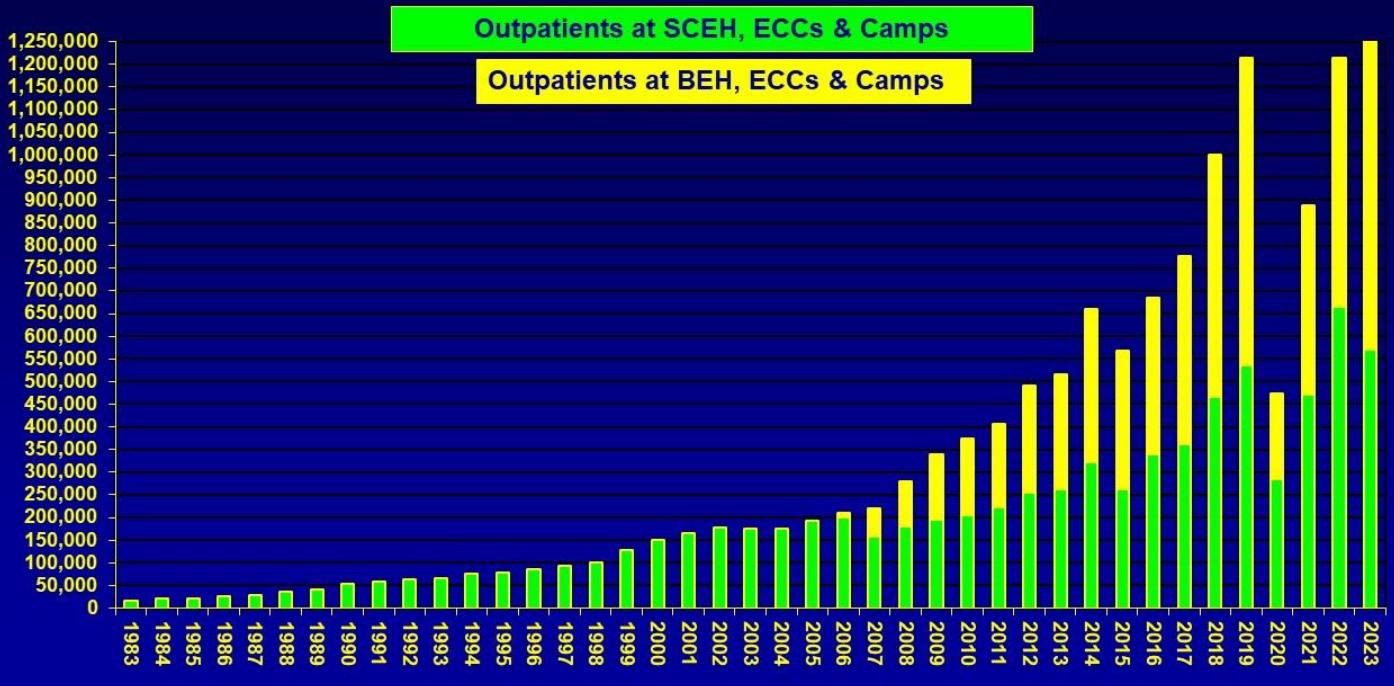


**20,094**

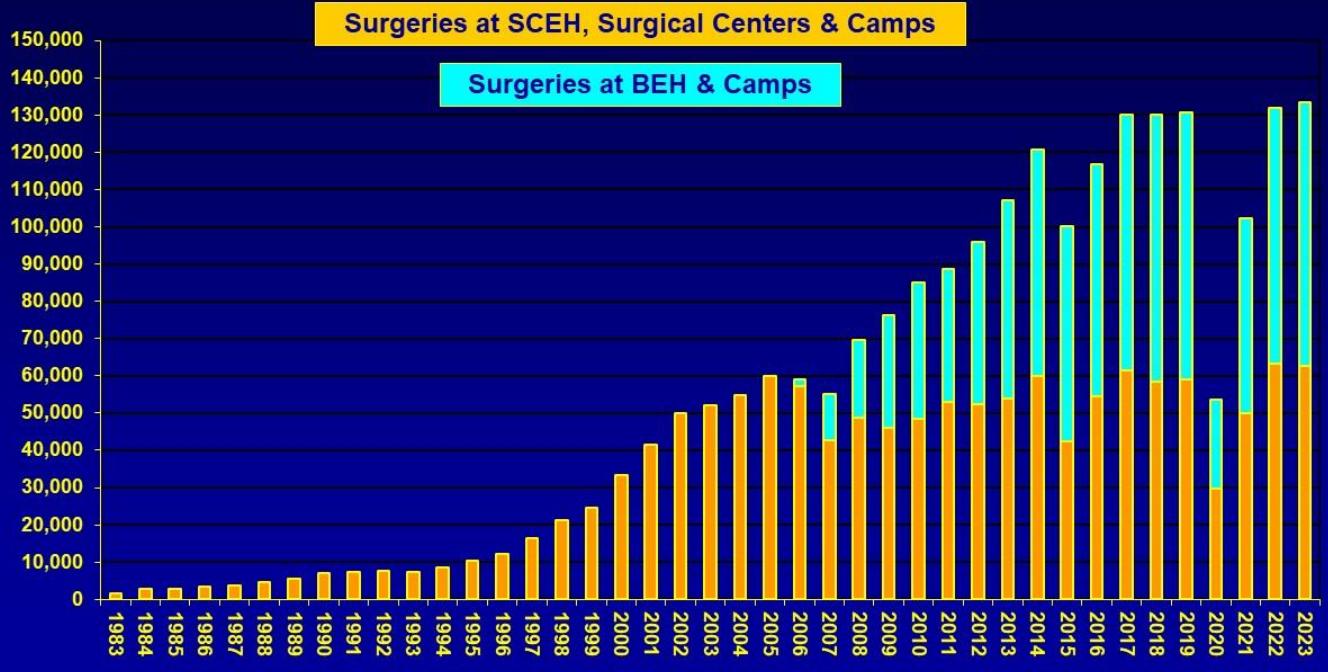
Ear  
Surgeries  
Done



## LEECS: Outpatients



## LEECS Surgeries



## SPECIAL SERVICES at LEECS

### Cataract Services

The primary cause of bilateral blindness in Nepal is still un-treated cataract. Increased longevity and low uptake of cataract surgical services are contributing to an ever-increasing number of untreated cataract patients.

A total of 88,268 patients underwent cataract surgery out of which 34,750 (39%) surgeries were performed through modern cataract surgery method Phacoemulsification, which is increasing over the years. Cataract surgery was 69.3% out of total eye surgeries. Phacoemulsification with Mono-Focal, EDOF, Multi-Focal, Toric, Multifocal Toric, Tri-Focal lenses are available and regular procedures at both hospitals.

**88,268**

Cataract Surgeries

**34,750 (39%)**

Phacoemulsification



### Cornea Department

Both hospitals have highly qualified, specialized teams with the latest advanced equipment like corneal topography, specular microscope and collagen cross linking to treat the entire range of corneal disorders and infections.

A total of 42,346 patients were examined as outpatient and 6,819 corneal surgeries were performed, including 290 corneal transplantation surgeries {TPK: 191, PK: 86; DSEK: 12; DALK: 1}, 1,414 Amniotic Membrane transplantation, 3,309 Pterygium surgeries along with 1,334 modified PERFECT technique and 1,595 pterygium surgery with autograft. 147 collagen crosslinking, 730 corneal and scleral repairs whereas 704 received corneal topography, 1051 specular Microscopy, 489 anterior segment OCT and 138 confocal microscopy services.

Dr. Manish Pandey and Dr. Maheshwor Chaudhary participated four days DMEK workshop at TIO organized by Sightlife International. Dr. Maheshwor Chaudhary completed 1-year cornea fellowship from TIO and joined SCEH.

**42,346**

Examinations

**6,819**

Corneal Surgeries

**1,334**

PERFECT

**1,595**

Autograft



**Contact Lens:**

Contact lens department of both eye hospitals are referral units in eastern Nepal equipped with advanced equipments and varieties of therapeutic and cosmetic contact lens. A total of 530 contact lens patients (355 males, 175 females) with different eye disorders mostly Keratoconus and Myopia received services from the contact lens department. 189 Soft Spherical, soft toric contact lens, 50 Prosthetic contact lens, 126 RGP (Rigid Gas Permeable), 55 Rose K2, 106 Scleral and Orthokeratology contact lens trials were done and 401 contact lenses were dispensed to patients.

Mr. Pankaj Ray Adhikari received fellowship on ‘Specialty Contact Lenses Fitting and Dispensing’ for 1 week from Silverline Laboratories, New Delhi, India.



**Refractive Surgery Department:**

The refractive Surgery Department of BEH started in 2019 has been further strengthened and running smoothly. Patients from different parts of Nepal and neighbouring countries are coming for LASIK (laser) eye surgery to treat their farsightedness and astigmatism. This year 35 patients received LASIK and PRK (Photo Refractive Keratectomy) laser surgeries.



**Paediatric Ophthalmology and Strabismus Department**

Both eye hospitals have highly qualified and experienced team of paediatric ophthalmologist, anesthesiologist, ophthalmic assistant, optometrists, paediatric orthoptics and counselors trained in paediatric counselling. In the Paediatric Ophthalmology and Strabismus Department of both eye hospitals, 62,682 children were examined. 4,197 children underwent surgery at both eye hospitals including 1,393 paediatric cataracts, 221 squint surgeries out of which 80 were children. Similarly, 4,150 patients with neuro-ophthalmology problems were examined and treated which saved their time to receive early treatments.

A child-friendly environment with a child play area is available at both hospitals enhancing the growth of the children by providing a multifunctional and comfortable space for children.

Dr. Vidisha Gupta joined as paediatric ophthalmologist and strabismus surgeon after completing 1-year fellowship.

**62,682**

Children Examined

**4,197**

Surgeries on Children

**1,334**

Paediatric Cataract





### Orthoptic Department:

The units of both hospitals are referral unit for management of different non-strabismus binocular vision disorders related to convergence and accommodation as well as squint evaluation, diplopia and hess-charts, cycloplegic refraction and others routinely. A total of 4,424 patients received services from this unit among them 518 orthoptic evaluation and 614 strabismus evaluation was done , 1,968 vision therapy exercises kit were explained and dispensed.

### Vitreo-Retinal Department

The Vitreo-Retina departments are equipped with the latest diagnostic technologies and provide minimally invasive treatment by a specialized team of experienced retina surgeons, optometrists and retina counsellor.

In the department of both eye hospitals, 40,237 patients were examined, 11,879 patients underwent VR procedures out of which 2,274 were Vitreo-Retinal surgeries, 8,553 Inj. Avastin, 682 other Intra-vitreal Injections, and 370 other surgeries. 5,165 received retinal laser, 28,530 received B-scan services, 1,088 received FFA services and 17,895 received OCT services. Dr. Khushbu Keyal has completed 2-year VR fellowship.

**40,237**

Examinations

**11,879**

VR Procedures

**5,165**

Retinal Laser



### ROP- Retinopathy of Prematurity



Retinopathy of Prematurity (ROP) is a potentially blinding eye disorder that primarily affects premature infants born before 34 weeks of gestation and/or weighing 1750 grams or less. If diagnosed on time and treated early, it can prevent vision loss in infants and can save them from the pain of lifelong blindness. To improve neonatal care by providing timely ROP screening and treatment services in neonatal intensive care units (NICU) of Koshi Province, BEH has been doing ROP screening since Nov 2020 by a team of trained staffs. In 2023, 330 babies (167 boys, 163 girls) were screened several times in NICU and Biratnagar Eye Hospital ROP clinic. ROP was detected in 168 (50.9%) babies. 3 babies were treated with laser therapy and 11 babies with Inj. Avastin.

Dr. Lily Rajbanshi VR consultant has received 1-month training on management of ROP from LVPEI, Hyderabad. An awareness training on ‘Oxygen Management in NICUs’ was provided to NICU nurses of several hospitals.



### Glaucoma Department

Glaucoma is the world's second most common cause of blindness, and it is becoming more prevalent in Nepal as well. Both hospital's glaucoma departments offer highly qualified, specialized teams that use cutting-edge technology to diagnose and treat glaucoma disease. In the glaucoma department of both eye hospitals, 33,038 glaucoma patients were examined among them Primary open angle glaucoma was the commonest. 3,362 glaucoma surgeries were performed including 21 children, 6,776 patients underwent computerized Visual Field Testing and 2,340 received Nd. YAG Iridotomy service.

**33,038**

Examinations

**3,362**

Surgeries

**6776**

Visual Field Testing

**2340**

Nd. Yag Iridotomy



### Orbit, Plastic and Lacrimal (OPAL) Department

In both eye hospital, the OPAL Department examined 19,171 patients and 3,872 surgeries were performed. Among them, 1,857 DCR including 117 Endoscopic DCR, 25 Ptosis, 45 Injection Botox, 352 Evisceration with orbital implants, 65 Enucleation; and other different types of Orbitotomy, Lid reconstruction, various therapeutic and cosmetic eyelid surgeries such as Blephareplasty and orbital tumor.

In the Ocular Prosthesis Unit, 536 patients received artificial eyes and among them, 33 were custom made which has improved quality of life by restoring normal appearance to the face.

Dr. Leena Jha had completed 6-month Fellowship in Orbit and Oculoplastic from TIO.

**19,171**

Examinations

**3,872**

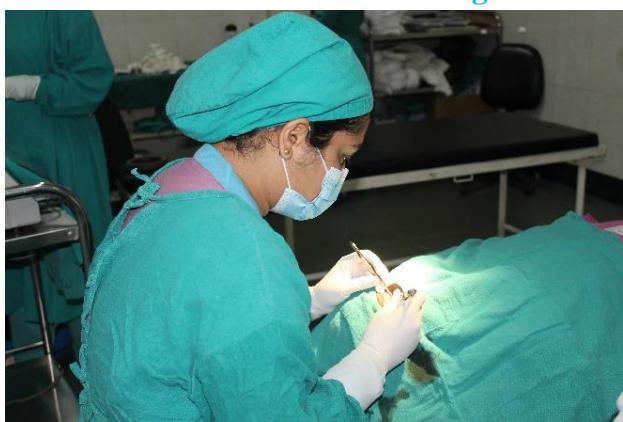
Surgeries

**1,857**

DCR

**157**

Endoscopic DCR



### Low Vision & Rehabilitation Department:

Person suffering from Low Vision problem cannot fix vision or reverse vision loss, but low vision management can help patient to adjust their life with limited sight. Both hospitals Low Vision & Rehabilitation department providing comprehensive low vision and rehabilitation services. Different types of Low vision examination tools and devices (optical, non-optical and electronic) are available. In the department a total of 714 patients including 127 children with Low-Vision were assessed. Special Low-Vision devices were dispensed to 159 visually impaired patients for improving their vision. Total 226 incurable blind patients underwent counseling as well as orientation and mobility training to move independently,



and 361 patients with low vision were oriented on environmental modification such as kitchen, toilet, and different lighting conditions to make their basic living activities easy.

**714**

**LV Patients**



**159**

**Visually Impaired**



**226**

**Incurable Blind**



#### **Physician Consultation Services**

Full time physician consultation service are available at both hospitals to manage the pre-operative, post-operative and other eye patients with medical conditions like diabetes mellitus, hypertension, heart disease etc. Total of 9,274 patients with different medical conditions were examined and treated. This has helped to improve comprehensive care of patients, reduced cost and waiting time for faster ophthalmic treatment.

#### **Optical Unit**

Optical departments of both hospitals of LEECS have a highly qualified, specialized team with the latest advanced equipment dedicated to providing quality services and affordable spectacles. The latest enhancement in the optical department includes the introduction of peripheral defocus lenses, a pioneering clinical solution aimed at stopping the progression of myopia. This innovative treatment indirectly addresses parental concerns regarding the progression of myopia in their children. Optical department counselling unit established a welcoming environment where patients feel at ease to voice any issues with their spectacle service, provides guidance on appropriate lens design and measurement. A new refraction setup has been established at the optical counselling unit to address patient concerns about vision discrepancies with prescribed glasses or dissatisfaction with their current pair. Ultraviolet, photochromic, and blue light cutoff checkers are installed at lens fitting and delivery sections to verify that patients receive the correct coated lenses as per the order. The pediatric optical department is committed to offering a kid-friendly environment that makes it easy for kids to pick eyeglasses. This year 105,330 patients have received spectacles from SCEH and BEH optical dispensing units.





### **Ophthalmic Pathology and Laboratory Medicine at BEH**

Ophthalmic Pathology and Laboratory Medicine department has been established to provide all Biochemistry, Haematology, Microbiology and Histopathology services and is the first ocular histopathology lab in Nepal. It consists team of full time pathologist, microbiologists, medical lab technologist and others. This year 56,855 patients received laboratory services out of which 187 patients received histopathology test.



### **Ocular Microbiology Laboratory at SCEH**

The Ocular Microbiology Laboratory was established in collaboration with the London School of Hygiene and Tropical Medicine in 2019 at SCEH, Lahan. The laboratory is well equipped with a Fluorescent Microscope, Bacteriology (aerobic and non-aerobic) and mycology incubator, -78°C ultra-low temperature Freezer, Biological Safety Cabinet II and a digital bench top Autoclave and others including full time microbiologists, medical lab technologist and others. The hospital also built sheep house to keep sheep for sheep blood required for culture. It has performed 77,788 lab test out of which 1,755 KOH; 1,755 Gram stain and 133 culture test.



### Integrated ENT Service

A total of 308,979 patients with various ENT problems were examined out of which 73,337 were examined at the hospitals and 235,642 in outreach activities (ECCs, School Screening, Screening camps, District Project and Door to Door visit). 17,713 Pure Tone Audiometry (PTA) examinations and 6,132 surgeries were performed; and 585 patients with hearing loss received hearing aids and 922 patients received nasal evaluation service for their DCR and DCT surgeries.

LEECS has integrated Ear Care Services at Eye Hospitals, Eye Care Centers, School Screening, Screening camps, District Project and Door-to-Door visit programs to diagnose ear problem from 2013.

**308,979**

ENT Patients

**6,132**

ENT Surgeries

**17,713**

PTA Examination



#### ENT Surgeries:

Modified Radical Mastoidectomy (MRM):	72
Cortical Mastoidectomy with Tympanoplasty:	19
Myringoplasty:	896

#### Nose Surgery:

Nasal Bone Reduction:	82
Septo Plasty:	9
Papiloma Nose:	1
<b>Head/Neck Surgery:</b>	
Parotid Cyst Excision:	1
Ranula	4
Minor Surgery:	<u>5,048</u>
<b>Total:</b>	<b>6,132</b>



### OUTREACH ACTIVITIES:

#### Peek Vision Program:

LEECS' eye hospitals have implemented Peek Vision Program in 11 municipalities of Mahottari, Dhanusha, Sarlahi, Saptari, Sunsari, Morang, Ilam and Bhojpur districts in association with Portable Eye Examination Kit (Peek), Vision Limited, UK and CBM Global. The program used the Peek Capture validated vision test App within wider data capture system. The Peek Vision Program sends out automated, customized SMS reminders to patients who have been referred for follow-up, encouraging them to attend the Eye Care Centres. Through peek screening total of 71,682 patients have been screened. Among these, 11,597 (16.2%) have found eye problems, treated locally and/or referred for further treatment at nearby Eye Care Centers. This has improved referral versus service access.



### **Community Outreach and Rehabilitation Program (COR):**

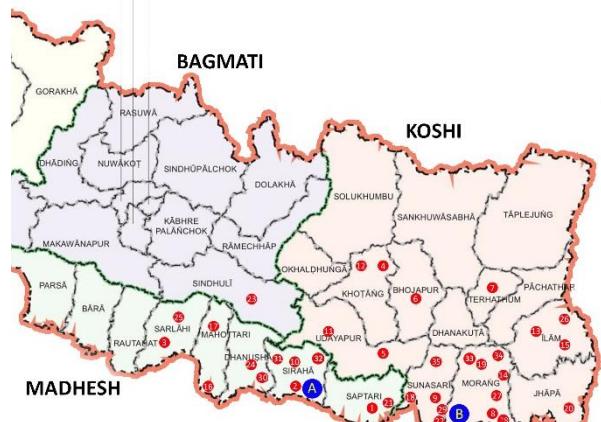
Despite of eye care centers and screening camps in community, the vulnerable population - the elderly, woman, children, and person with disabilities have no access to such service due to lack of awareness, accompanying person, and cost implied. Screening conducted at doorsteps are important initiatives towards strengthening Universal Eye Health Coverage in making quality eye and ear care service affordable and accessible for all. This has helped early detection and timely treatment of eye and ear related problems at community level and link the community to local level eye and ear care service centers. The program has been started in Dhanushadham, Jaleshwor, Bhojpur, Rangeli Municipalities, Sunvarshi and Kerabari Rural Municipalities. Total 42,590 people screened out of which 6,202 people referred for further treatment. 1,812 received medicine and 867 people received spectacles. Persons identified with visual impairment and ear problem were referred to the nearest ECC or base hospitals for further treatment and surgery. In addition, the community workers conducted community awareness activities.



### **Establishment of New Eye and Ear Care Center:**

Besides running 30 Eye and Ear Care Centers (Malangwa, Rajbiraj, Siraha, Gaighat, Diktel, Bhojpur, Terhathum, Rangeli, Inaruwa, Mirchaiya, Katari, Haleshi, Illam, Urlabari, Fikkal, Jaleshwor, Bardibas, Beltar, Letang, Arjundhara, Kanchanpur, Duhabi, Khalte, Dhanushadham, Mangalbare, Biratchowk, Lalbandi, Ratuwamai, Jumka and Mahendranagar), 5 new Eye Care Center were established at Fattepur, Sukhipur, Pathari, Sundarharaicha and Itahari in Partnership with the Municipality and financial support from CBM.

These centers ensure care for the poorest and the most unreachable patients. A Full-Time Ophthalmic Assistant/Optometrist provides wide range of eye and ear care services as well as referrals for patients who need specialized care. From 35 Eye & Ear Care Centers, 219,880 patients received eye treatment, and 30,696 received ear care service.



A Sagarmatha Choudhary Eye Hospital, Lahan (SCEH)

B Biratnagar Eye Hospital, Biratnagar (BEH)

Eye Care Centers (ECC)



### **Surgical Eye Camps:**

LEECS' hospitals have conducted 11 surgical camps in hilly and mountain areas (Khotang-2, Sarlahi-1, Bhojpur-5, Terhathum-2, Ilam-1). Patients identified in surgical eye camps for eye surgery were operated in a well-setup operation theater prepared inside the premises of government hospitals taking all aseptic precautions. 6,462 patients were screened and 815 underwent surgery with the majority being cataract surgery (778). Follow-up eye examination of operated patients were done at the campsite and eye care centers. Conducting surgical eye camps provide effective and accessible eye care, which help in reducing the burden of eye disease.



### **Cataract Screening Camp:**

Screening eye camps offer efficient and accessible eye care for people living in rural places. LEECS' eye hospitals conducted 182 Cataract Screening Camps in rural areas. 45,479 patients received eye examinations & treatment at the community level. 8,068 patients were brought to SCEH and BEH for surgery and were operated free of cost.



### **District Eye Health Program:**

District Eye Health Program also called “Sunaulo Bihani” started with the aim to screen 50 years and above age population at Primary Health Centers and school going children at their school as well as awareness to local leaders and health workers in collaboration with local government. The program provides a comprehensive eye and ear examination at local level by a dedicated ophthalmic team. The program has been implemented at Ilam and Sarlahi district and screened 3,335 persons of 50 years and above age, 7,299 children at schools. Awareness trainings provided to 127 local leaders and health workers.

## **EYE/EAR HEALTH EDUCATION:**

### **Community awareness programs on Eye and Ear health:**

Preventive and pro-motive eye care is optimum importance in a country like Nepal with lower per capita income, where majority of the blinds reside in remote and rural areas with less accessibility to eye care services. LEECS is promoting eye health education in community to increase the level of awareness and knowledge about common eye conditions by broadcasting jingles on various local radio & FMs about eye problems including myopia, eye infection, cataract, diabetic retinopathy in local languages. Posters, pamphlets, handbills of different eye and ear diseases are distributed. Different awareness messages were painted on walls at the school to create awareness among children. Hospitals provided primary eye and ear care training to 76 Government Health Centers Health workers, 222 Female Community Health Volunteers (FCHVs), 25 drug-retailers and, 32 traditional healers to create awareness and strengthen the referral mechanism.



## FREE and Subsidised SERVICES TO PATIENTS

Several screening and surgical camps at Koshi Province and Madhesh Province were conducted and identified 8,068 Cataract patients who underwent free surgery at the base hospitals. Patients from eye camps and poor economic backgrounds arriving directly at SCEH and BEH received support with the worth of NPR 45,183,319 (USD 338,337) in their examination, surgery, spectacles, medicine, transportation & food cost. Out of 88,268 cataract surgeries, 15% were done on a subsidized package of NPR 1200 (approx. USD 9).

**8068**

**NPR 45,183,319** (USD 338,337)

**Free Surgeries**

**Subsidy to poor patients**

**15%**

**Cataract Surgeries on  
subsidized package of NPR 1200**

### Improving and Strengthening Biomedical Waste Management (Zero Waste) System

Biratnagar Eye Hospital has started proper biomedical waste management system from 2018 and has been able to achieve zero waste concept and accredited by **ISO 14001:2015**. Similarly, to improve biomedical waste management system at **SCEH Lahan**, also started scientific system of segregation of waste at source, transportation, treatment and disposal, hospital to achieve zero waste concept.



## TRAINING & DEVELOPMENT

### **Postgraduate MD Ophthalmology with National Academy of Medical Science (NAMS):**

Post Graduate MD Ophthalmology was started at LEECS in affiliation with NAMS in 2015. Till 2023, 11 MD Ophthalmologists have completed their study and presently 8 are enrolled.



### **Bachelor in Optometry and Vision Science:**

Bachelor in optometry and vision science (BOVS) was started at BEH in affiliation with NAMS in 2018. 13 BOVS students have completed their study and presently 23 are enrolled.

### **Anterior Segment Fellowship:**

4 Ophthalmologists have completed their 2-year anterior segment fellowship from SCEH and BEH. Presently 12 ophthalmologists are undergoing two years Anterior Segment Fellowship at SCEH and BEH.

### **Glaucoma Fellowship:**

1 Ophthalmologist is undergoing 1-year Glaucoma Fellowship at BEH.



### **Vitreo-Retinal Fellowship:**

1 Ophthalmologist has completed and 3 Ophthalmologists are undergoing a two-year Vitreo-Retinal Fellowship at BEH.

### **Pediatric Ophthalmology and Strabismus Fellowship:**

1 Ophthalmologist has completed and 1 ophthalmologist is undergoing 1-year Pediatric Ophthalmology and Strabismus Fellowship at SCEH and BEH.

## **WORKSHOP AND CONFERENCES AT LEECS**

### **Myopia Symposium**

1<sup>st</sup> Myopia Symposium was organized at Biratnagar Eye Hospital on 26<sup>th</sup> May 2023. The aim of workshop was to develop the knowledge upgradation on myopia management and prevention by adopting different strategies like environmental modification, Atropine therapy, Advance Contact lens and spectacle. The key speakers for the symposium were Dr. Pavan Verkicular & Mr. Swapnil Thakur from LVPEI, Hyderabad, Dr. Pawan Shrestha and Mr. Pankaj Ray Adhikari from Biratnagar Eye Hospital. More than 150 Optometrists and Ophthalmic assistants from Koshi province and Madhesh Province participated in the workshop.



### **CME on Diabetic Retinopathy and ROP:**

CME on Diabetic Retinopathy was conducted by SCEH and BEH where VR Specialists, Ophthalmologist, Endocrinologists, Physicians, Internal Medicine Specialists, Pediatricians, Medical Officers, Health Assistants had participated. There were 100 participants participated in the CME.



## INCLUSIVE SERVICES

Considering diversity and inclusion is an important part of service delivery to overcome inequalities and mainstream equity and accessibility. LEECS working for prevention of possible blindness and deafness is committed to have gender and disability inclusive services. Safeguarding is another principle action of cross cutting theme where LEECS ensures protection of children and other people in vulnerable circumstances from both intentional and unintentional harm. LEECS capacitated by different orientation program to sensitize its staffs on these parameters. Total 104 (Male-51, Female- 53) staffs were oriented on disability inclusive eye and ear services and 114 (Male-54, Female-60) on gender mainstreaming and same number (114 staffs) were oriented on safeguarding.

Likewise, to consider inclusive response during any kind of disaster, LEECS oriented 93 (Male-50, Female-43) staffs in inclusive disaster risk reduction. The trained staff will ensure limited impact of any kind of disaster to patients visiting hospital premises in case of any emergency scenarios precisely for people with disability. Thus, capacitating staffs on cross cutting areas of gender, disability and inclusion in disaster have enhanced effective service delivery and ensured inclusive environment to all kind of people receiving services.



## HUMAN RESOURCE AT LEECS

The 999-member employees include 39 Ophthalmologists, 2 ENT Specialists, 3 Anaesthesiologists, 3 MD Physician, 1 Pathologists, 2 Microbiologists, 8 MD Residents, 44 administrative staff, 1 Research Officer, 1 Health Educators, 89 Ophthalmic Assistants (OA), 3 Anaesthetic Assistants, 3 HA, 33 Optometrists, 9 Staff Nurses, 14 Pharmacy Assistants, 137 Eye Health Workers and other Supporting Staffs.

## RESEARCH & PUBLICATIONS



LEECS has established research department since 2017. The department comprises both full-time research officer and part-time statistician, along with external advisors. An Institutional Review Committee (IRC) at BEH, approved by the Nepal Health Research Council (NHRC), has been operational since 2018. This year, 12 research papers have been successfully published in national and international journals, with an additional 30 research projects currently in progress, all approved by the IRC, BEH.

### **Research Dissemination Workshop:**

To share research findings and experiences from research projects in an effort to foster intellectual debate and interaction among the participants, research dissemination workshops were conducted at both hospitals where 23 research papers were presented to 91 participants including ophthalmologists, optometrists and ophthalmic assistants.





### **Publications of 2023:**

#### **1. REACH study Published in Journal of Chitwan Medical College: Prevalence of Refractive Error in school going children of Sunsari district and Biratnagar, Nepal. 2023;13(43):39-43**

The aim of this study was to find the prevalence of refractive error among school-going children of Sunsari district and Biratnagar metropolitan city, Nepal.

**Results:** During this period a total of 186215 students were enrolled. Primary screening was done for 124993 (67%) students and Secondary screening was done for 14355(11.5%) children. The overall prevalence of refractive error was 7439 (5.9%) found mostly in male 3897 (52.4%) of 11 to 15 years of age group 4554 (61.2%) ( $P=0.00$ ). The prevalence of refractive error at schools of Biratnagar was 3156 (7.9%), Dharan was 1680 (8.5%) and Itahari was 1538 (6.0%). It was mostly found in private school going children of urban areas (5.4%) ( $P=0.00$ ). Myopia (53%) was the most common type of refractive error ( $P=0.00$ ). <https://doi.org/10.54530/jcmc.1231>

**Authors:** Pankaj Ray Adhikari, Grishma Shree Chudal, Rajiv Ranjan Karn, Sudhir Kumar Thakur, Rakshya Panta Sitoula, Sanjay Kumar Singh

#### **2. Epidemiology and clinical outcomes of microbial keratitis in South East Nepal: a mixed-methods study-BMJ Open Ophthalmology. DOI: 10.1136/bmjophth-2022-001031**

The aim was to describe the epidemiology of microbial keratitis in patients presenting to a tertiary eye hospital in South East Nepal alongside qualitative interviews exploring patient perspectives on barriers to accessing eye care services.

**Results:** We recruited 174 participants; 88 (51%) were male (mean age of 47 years) and 126 (72%) were farmers. Ocular trauma with vegetative matter was reported by 79 (45%) and 84 (48%) had fungal infections. Visual acuity was <3/60 in 107 (61%) of affected eyes at presentation, reducing to 73 (42%) at last follow-up. Factors associated with poor visual outcome were trauma with vegetative matter, delayed presentation and poor visual acuity at presentation. Qualitative interviews with 40 patients identified lack of awareness of the disease and available services, poor knowledge and practice of community health workers and lack of affordability and accessibility of treatment as important barriers. Patient interviews highlighted need for public health awareness campaigns on microbial keratitis, training of community health staff on the urgency of this condition and improvements in accessibility and affordability of ocular treatments.

**Authors:** Lila Raj Puri, Helen Burn Abhishek Roshan, Ramanand Biswakarma, Matthew Burton

#### **3. Outcome of Therapeutic penetrating keratoplasty in a tertiary eye hospital in Nepal in Journal of Chitwan Medical College. 2023;13(45):33-7**

The objective of this study was to assess the outcome of therapeutic penetrating keratoplasty in infective keratitis.

**Results:** Sixty-seven patients of therapeutic penetrating keratoplasty who completed 2 months of follow-up after surgery were included in the study. Corneal scrapings and corneal buttons were positive for organisms in 19 cases (90.47%) and 20 cases (29.85%) respectively. In all, out of 67 eyes, 30 (44.77%) were positive for organisms in smear or culture or both, of which 27 cases showed pure fungus and 3 cases showed pure bacteria. Aspergillus (8, 29.62%) was the commonest fungus isolated. Eradication of infection after the primary procedure was seen in 48 cases (71.64%). Anatomical success was seen in 60 eyes (89.50%), clear grafts were seen in 23 eyes (34.32%). Visual acuity of  $\geq 6/60$  was seen in 14 eyes (20.89%). Therapeutic penetrating keratoplasty provided good success in terms of maintaining anatomical integrity and helps in eradication of infection while giving satisfactory functional outcome.

<http://jcmc.com.np/jcmc/index.php/jcmc/article/view/1367>

**Authors:** Manish Pandey, Pragya Luitel, Sanjay Kumar Singh, Rakshya Panta Sitoula, Rajiv Ranjan Karn



#### **4. Surgical Outcome of Repeat External Dacryocystorhinostomy with or Without Mitomycin for Previously Failed Dacryocystorhinostomy: A Comparative Study of Eastern Nepal- PMJN. 2023 Jun 6-12**

This study aimed to compare the surgical outcome of Dacryocystorhinostomy with and without intraoperative use of 0.02% Mitomycin-C in the treatment of failed external Dacryocystorhinostomy surgery.

**Results:** Total 96.7% had success in Dacryocystorhinostomy with the Mitomycin-C group and 93.3% had success in the Dacryocystorhinostomy without Mitomycin-C group. On the other hand, there was 3.3% failure in Dacryocystorhinostomy with Mitomycin-C group and 6.7% failure in Dacryocystorhinostomy without Mitomycin-C group. Although the success rates did not reach statistical significance, slightly higher success has been achieved in patients undergoing Dacryocystorhinostomy with Mitomycin C group. Thus it can be concluded that intraoperative use of Mitomycin-C improves the success rate of revision Dacryocystorhinostomy surgery without any detrimental effects and hence can be considered as a safe and effective modification of conventional Dacryocystorhinostomy.

<https://pmjn.org.np/pmjn/index.php/pmjn/article/view/153>

**Authors:** Diwa Hamal, Prerna Arjyal, Sabin Sahu, Rakshya Pant, Anjan Bikram Hamal, Sanjaya Kumar Singh

#### **5. Does Choice of Different Surgical Intervention Play a Role in the Recurrence of Pterygium? Kathmandu University Medical Journal.**

The aim was to compare the recurrence rate of different excision techniques and understand if a surgeon can alter the recurrence rate.

**Results:** Altogether 916 individuals with mean age 56.20 years had undergone pterygium excision. Bare Sclera 280 (30.56%), Pterygium Extended Conjunctival Transplantation (PERFECT) 305 (33.29%), Conjunctival auto graft (CAG) 262 (28.60%), Simple Pterygium excision 60 (6.55%) and Amniotic Membrane Graft (AMG) 9 (0.98%), jointly formed the total study sample and surgical techniques. Recurrence for Bare sclera was 172 (61.42%), simple pterygium excision 34 (56.66%), Pterygium extended conjunctival transplantation 0 (0%), and conjunctival auto graft 2 (0.76%). Compared conjunctival auto graft with pterygium extended conjunctival transplantation and simple pterygium with bare sclera revealed similar recurrence rate comparatively. The p-value obtained were  $p = 0.2148$  and  $p = 0.8152$  ( $p > 0.05$ , 95% CI) respectively. This study shows PERFECT surgery has the best result among the other available surgical options for pterygium, but it is a time taking procedure and requires expertise. Bare sclera and the simple pterygium excision method have higher recurrence rates. However, CAG can be an alternate surgical choice for patients choosing bare sclera or simple pterygium surgery, provided the adjustment in the difference in surgical cost will be a challenge to explore further.

**Authors:** Yadav R, Das SS, Gupta S, Agrawal N

#### **6. Comparison of sutured versus sutureless scleral fixated intraocular lens at a tertiary eye hospital, Nepal in Journal of Chitwan Medical College**

This study aimed to compare the visual outcome and complications between the suture and sutureless technique of scleral fixation intra ocular lens.

**Results:** Sixty-six eyes of 66 patients were included in the study. Out of which 51.5% underwent sutured and 48.5% underwent sutureless scleral fixated intraocular lens implantation. Most common indication for scleral fixated intraocular lens was the traumatic dislocation of lens. Mean postoperative vision of sutured and sutureless SFIOL when compared, sutured SFIOL was found to have statistically significant improvement. The most common complication was corneal edema in both groups. <https://doi.org/10.54530/jcmc.1425>

**Authors:** Ashma Manandhar, Rajiv Ranjan Karn

#### **7. Phacoemulsification learning curve in first 500 cases, Global Journal of Cataract Surgery and Research in Ophthalmology. Aug 2023:30-33. DOI: 10.25259/GJCSRO\_30\_2022**

This study aims to examine the complications in the first 500 cases of phacoemulsification and to compare the visual acuity in the first 100 and last 100 cases of phacoemulsification done by a single trainee.

**Results:** Overall posterior capsular rupture was the most common intraoperative complication (5.2%) and corneal oedema (10%) was the most common post-operative complication. The rate of posterior capsular rupture in the first 100 was 6%, while in the last 100 was 4% ( $P = 0.61$ ). Decreasing number of Posterior Capsular Defect and Vitreous Loss with increase in number of surgeries. As the experience of the surgeon increased after 400 cases intraoperative complications such as conversion to SICS, epinuclear fragment loss into the vitreous and zonular dialysis did not occur in the last 100 cases. There was decreasing trend of intraoperative complications while comparing first 100 and last 100 cases of phacoemulsification. First post-operative day vision in the first 100 and last 100, when compared, was not statistically significant ( $P = 0.592$ ). There was also a decreasing trend in post operative complications while comparing the first 100 and last 100 cases.

<https://gjcsro.com/phacoemulsification-learning-curve-in-first-500-cases/>

**Author:** Ashma Manandhar



**8. REACH study Published in Journal of BP Koirala Institute of Health Sciences (JBPKIHS)  
The Prevalence of Refractive Error among Children of Koshi Rural Municipality of Sunsari District: Door-to-Door Screening. JBPKIHS. 2022;5(2):42-46.**

The study aimed to find out the prevalence of refractive error among children in the Koshi Rural Municipality of Sunsari district.

**Results:** A total of 7830 children were screened in the door-to-door campaign. The majority (n = 5508, 72%) were Hindu and 2232 (28%) were Muslims. Only 6575 (84%) children were enrolled in school. Among them 3130 (40%) were going to government schools, 2105(26.9%) were going to private schools and 1340 (17.1%) children were going to a Madrassa (Muslim school) for education. The prevalence of refractive errors among children of Koshi Rural Municipality was 131 (1.7%) (95% CI: 1.4 - 2.0). Hypermetropia was seen in 69 (53%) children, followed by Myopia 60 (46%).

<https://doi.org/10.3126/jbpkihs.v5i2.49189>

**Authors:** Sanjay Yadav, Rajiv Ranjan Karn, Sudhir Kumar Thakur, Rakshya Panta Sitoula

**9. Prevalence and Awareness of Diabetic Retinopathy among Known Diabetic Patients Visiting the Sagarmatha Chaudhary Eye Hospital, Lahan-PMJN**

The study aimed to assess the awareness regarding diabetic retinopathy, the prevalence of diabetic retinopathy among diabetic patients, and its association with demographic characteristics.

**Results:** The prevalence of diabetic retinopathy was 72%. Among known diabetic patients, were 85(28%) had clinically significant macular edema, 51(16.8%) had Proliferative diabetic retinopathy, 38 (12.5%) had Mild non-proliferative diabetic retinopathy, 31(10.2%) had moderate non-proliferative diabetic retinopathy, 14(4.6%) had severe non-proliferative diabetic retinopathy and 84 (27.7%) had no DR. The odds of having diabetic retinopathy among knowing diabetic Mellitus was 1.59 times in comparison to no knowledge (95%CI: 0.93,2.7; p value=0.04). The reason for late coming to eye examination was less awareness 57%. There is a need to develop an awareness program on diabetic retinopathy among known diabetic patients. <https://pmjn.org.np/pmjn/index.php/pmjn/issue/view/15/8>

**Authors:** Rajiv Ranjan Karn, Ram Prakash Yadav, Sabin Sahu, Abhishek Rohan, Sanjay Kumar Singh

**10. Ocular and Neuro-ophthalmic Manifestations Post COVID-19 Infection- Journal of Nepal Health Research Council. 2023 Jan-March. 21(58): 184-6**

A 39-year-old male with a history of COVID-19 infection presented with ocular manifestations: dendritic ulcer in the left eye cornea followed by diplopia in the same eye. Extraocular motility was restricted in the levo-lateral gaze with maximum diplopia measuring 25 exotropia. Slit lamp biomicroscopy showed dendritic patterned lesion with diffused superficial punctate keratitis in the cornea. There are various reports associated with COVID-19 and the neuro-ophthalmic system. Although the clinicopathological aspect of COVID-19 and the neurological system is still to explicate. However, the patient showed gradual improvement with topical and systemic antiviral therapy and orthoptic exercise. This points to the need for detailed neurological and ophthalmic workup in symptomatic COVID-19 patients. Taking the risk of viral spread into serious consideration, a thorough evaluation is mandatory.

The patient gained binocular single vision and the ocular signs of viral infection subsided after 2 months of treatment. This report further points out the need for detailed neurological and ophthalmic workup in symptomatic COVID-19 patients. Taking the risk of highly contagious viral spread into serious consideration, a thorough evaluation is mandatory and challenges still exist ahead in this pandemic era. The neurological manifestation of COVID-19 needs to be studied in a detailed manner among a larger group of people for better outcomes in the future.

**Authors:** Bipin Bista, Reena Yadav, Sharad Gupta, Sandip Sanyam Das, Ashik Rajak, Rajesh Acharya, Rasik Neupane, Padam Raj Bista

**11. Knowledge and attitude regarding spectacles among patients visiting Biratnagar Eye Hospital. Nepal Journal of Optometry. 2023, 1(1), pp. 37-42**

The purpose of the study was to find the knowledge and attitude towards glasses among the patients visiting Biratnagar Eye Hospital, Nepal.

**Results:** A total of 100 patients participated in this study. 88% of the patients had knowledge of glasses and 86% of them were aware of the reasons for using glasses. Nearly one-quarter 23% of the patients had knowledge of progressive addition lenses. The main sources of information regarding glasses were friends and relatives. 92% of the participants reported that the reason for glass purchase from Biratnagar Eye Hospital were trust on the skills of professionals, doctors' advice, quality and cheap price.

[https://www.researchgate.net/publication/372890103\\_Knowledge\\_and\\_attitude REGARDING spectacles\\_among patients visiting Biratnagar Eye Hospital](https://www.researchgate.net/publication/372890103_Knowledge_and_attitude REGARDING spectacles_among patients visiting Biratnagar Eye Hospital)

**Authors:** Adhikari PR, Sah AK, Mukherjee T, Abedin Z, Karn RR



## History

Under leadership of Secretary General Dr. Ram Prasad Pokhrel and Chairmanship of General Ravi Shamsher Ja. Ba. Ra; Nepal Netra Jyoti Sangh (NNJS) was established in late 1978 for hassle-free and facilitative eye treatment of patients. Nepal Netra Jyoti Sangh appealed to different international unions and organizations to support them to eliminate blindness in Nepal. Christoffel Blindenmission, CBM started collaboration with Social Welfare Council and Nepal Netra Jyoti Sangh after an agreement in December 1982. Dr. Albrecht Hennig from CBM started 12 bedded Eye Care Center from Ram Kumar Sarda Uma Prasad Murarka's Public District Hospital at Lahan in 1983.

As the number of eye patients was increasing day by day, Dr. Hennig realized the need for a separate building for an eye hospital. For this, he began contacting and appealing through the Principal of Pashupati High School Mr. Kameshwor Chaudhary to various social workers of Lahan. As the appeal was for a humanitarian cause, the Chaudhary family at Lahan showed interest and assigned responsibility to Mr. Padma N. Choudhary for discussion and finalization of land donation. Finally, a bilateral agreement was signed by NNJS General Secretary, Dr. Ram Prasad Pokhrel and Mr. P. N. Choudhary on behalf of the donor Chaudhary family. As per the agreement, social workers of Lahan Shree Chhabi Lal Chaudhary, Shree Sarowar Lal Chaudhary and Shree Rabindra Lal Chaudhary have donated land in Lahan and Hardiya for the noble cause.

CBM extended its financial support by constructing 50 beds Eye Hospital on this donated land. The dedication and unselfishness as motivated with social service, Dr. Hennig and his team served the neediest populations through Sagarmatha Choudhary Eye Hospital. The growing trust in services and increased demand in eye care helped establish a 450-bed hospital with highly sound technologies in a short period. This newly constructed building was inaugurated by the then King Bir Bikram Shah in 1986.



To balance the workload of Sagarmatha Choudhary Eye Hospital and to increase the scope of long-term human resource sustainability, Biratnagar Eye Hospital was established on 13th September 2006 under the leadership of Dr. Sanjay Kumar Singh in a rented building as a branch of SCEH, Lahan. The hospital started from 80 beds expanded to become 300 beds by 2009 to meet the demand of an increasing number of patients. The management of the Hospital and supporting the organization's far-sighted vision, skilled doctors, enthusiastic manpower, and high-tech technology have contributed to its immense success in a short duration of time.

With the help of Sagarmatha Choudhary Eye Hospital and supporting organizations like CBM, European Union, Standard Chartered Bank and Internal source, 500 bed high-tech building was constructed in Biratnagar. This new building was inaugurated on 15<sup>th</sup> November 2011 by the first president of the democratic republic of Nepal, Hon. Dr. Ram Baran Yadav.



Nepal Netra Jyoti Sangh, Lahan Eye & Ear Care System (LEECS) is a non-profit organization providing high-quality eye care services along with comprehensive approach in the eye and ear care. The services are very much accessible and affordable for people of all socioeconomic backgrounds. LEECS is an umbrella of 2 tertiary level hospitals (Sagarmatha Choudhary Eye Hospital and Biratnagar Eye Hospital) and 35 Eye and Ear Care Centres. The program is providing services to a large number of populations of Koshi Pradesh, Madhesh Pradesh, and Bagmati Pradesh of Nepal and neighbouring countries.

## **Acknowledgments**

On behalf of LEECS, we would like to thank CBM Global and their donors for constant support and guidance, SEE international for their support with the Intra Ocular Lenses, Peek Vision, Vision for the World for their support for strengthening optical services, Nepal Eye Bank, and Noor Dubai Foundation for support in conducting cataract screening & surgical eye camp.

We are thankful to Ministry of Health & Population, Social Welfare Council, Ministry of Social Development, Ministry of Health, Local Governments for their continuous feedback and support.

We also express our sincere thanks to LV Prasad Eye Institute and Aravind Eye Care System, Tilganga Institute of Ophthalmology for providing training to ophthalmologists and paramedical staff and the London School of Hygiene and Tropical Medicine for its support in research activities.

All these accomplishments were possible due to strong commitment and support from LEECS Board, Hospital Management Committee of SCEH and BEH, all clinical, administrative and support staffs of hospitals and eye care centers.

We take this opportunity to thank many unnamed people and organization for their constant support to make Lahan Eye & Ear Care System a success.

### **Lahan Eye & Ear Care System**

**Lahan/Biratnagar, Nepal**

Email: [info@erec-p.org](mailto:info@erec-p.org)

Website: [www.erec-p.org](http://www.erec-p.org)

### **Team of Annual Report**



**Mr. Sudhir Thakur**  
*Chief Administrator, LEECS*



**Dr. Sanjay Kumar Singh**  
*Medical Superintendent, SCEH*



**Dr. Rakshya Panta Sitoula**  
*Medical Superintendent, BEH*



**Mr. Abhishek Roshan**  
*Hospital Manager, SCEH*



**Mr. Kumar Prithu**  
*Hospital Manager, BEH*



**Mr. Som Kumar Shah**  
*IT Officer, LEECS*





**CBM UK Team Visit**



**CBM Global Team Visit**



**Ex-Prime Minister of Nepal**



**Noor Dubai team visit**



**Seva Foundation Team Visit**



**NNJS Flag Installation**





**Awards 2023**



SCEH donor family felicitated by NNJS



SCEH Donor Family & Mr. Sudhir K. Thakur felicitated by CBM/NNJS



ACOIN Award to Dr. Sanjay Singh, Dr. Rakshya Panta, Dr. Pragya Luitel, Mr. Abhishek Roshan & Mr. Kumar Prithu



BEH felicitated LEECS and BEH Staffs on 17<sup>th</sup> Annual Day

(Mr. Sudhir K. Thakur, Mr. Som Kumar Shah, Mr. Rajendra Shah, Mr. Tanuk Lal Mahato, Mr. Dipendra Chaudhary, Mr. Bidyanand Chaudhary, Mr. Sunil Chaudhary, Mr. Shikendra Thakur, Mr. Raj Kumar Yadav, Mr. Shiv Charan Mehta, Mr. Roshan Thakur, Ms. Pramila Mahato, Ms. Padam Kumari Shrestha, Mr. Sabir Mustkim, Mr. Nabin Sardar)

## LEECS Centers

Sn	Eye Care Center	District	Head	Est.
A	SCEH, Lahan	Siraha	SCEH	1983
B	BEH, Biratnagar	Morang	BEH	2006
1	Rajbiraj	Saptari	SCEH	1988
2	Siraha	Siraha	SCEH	1988
3	Sarlahi	Malangwa	SCEH	2002
4	Diktel	Khotang	SCEH	2004
5	Gaighat	Udayapur	SCEH	2008
6	Bhojpur	Bhojpur	BEH	2009
7	Terelathum	Terelathum	BEH	2010
8	Rangeli	Morang	BEH	2012
9	Inarwua	Sunsari	BEH	2013
10	Mirchayya	Siraha	SCEH	2013
11	Katari	Udayapur	SCEH	2013
12	Haleshi	Khotang	SCEH	2014
13	Ilam	Ilam	BEH	2015
14	Urlabari	Morang	BEH	2016
15	Fikkal	Ilam	BEH	2016
16	Jaleshwar	Mahottari	SCEH	2016
17	Bardibas	Mahottari	SCEH	2017
18	Belkār	Udayapur	SCEH	2017
19	Letang	Morang	BEH	2018
20	Arjundhara	Jhapa	BEH	2018
21	Kanchanpur	Saptari	SCEH	2018
22	Duhabi	Sunsari	BEH	2019
23	Khalte	Sindhuli	SCEH	2019
24	Dhanushadham	Dhanusha	SCEH	2020
25	Lalbandi	Sarlahi	SCEH	2020
26	Mangalbare	Ilam	BEH	2020
27	Biratnchwok	Morang	BEH	2020
28	Ratnawal	Morang	BEH	2021
29	Ramchuni	Sunsari	BEH	2022
30	Mahendranagar	Dhanusha	SCEH	2022
31	Fetepur	Siraha	SCEH	2023
32	Sukhipur	Siraha	SCEH	2023
33	Pathari	Morang	BEH	2023
34	Sundarharaicha	Morang	BEH	2023
35	Itahari	Sunsari	BEH	2023

**A** Sagarmatha Choudhary Eye Hospital, Lahan (SCEH)  
**B** Biratnagar Eye Hospital, Biratnagar (BEH)  
**Red Dot** Eye Care Centers (ECC)



**Sagarmatha Choudhary Eye Hospital, Lahan-3, Siraha**  
**Email: [sceh@erec-p.org](mailto:sceh@erec-p.org) | Phone No.: 00977-33-563080**



**Biratnagar Eye Hospital, Rani, Biratnagar-13, Morang**  
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