Nepal Netra Jyoti Sangh Eastern Regional Eye Care Programme Sagarmatha Choudhary Eye Hospital, Lahan Biratnagar Eye Hospital, Biratnagar



Annual Report







www.erec-p.org | info@erec-p.org

Eastern Regional Eye Care Programme (EREC-P) is a non-profit, high volume treatment programme providing high quality comprehensive eye services at affordable cost to a huge population in eastern Nepal and northern India. EREC-P comprises of:

- Sagarmatha Choudhary Eye Hospital (SCEH) in Lahan,
- Biratnagar Eye Hospital (BEH) in Biratnagar,
- 12 Satellite Clinics / Eye Care Centres (ECCs) in the Terai and in the hills

HIGHLIGHTS:

Increasing number of patients 121,349 surgeries / 658,936 patients examined



Up-gradation of paediatric ophthalmology services









OUTPATIENTS:

SCEH, Lahan:	181,531
Biratnagar Eye Hospital:	247,217
11 ECCs:	103,588
634 Screening Camps' Patients:	91,667
10 Surg. Camps' Outpatients:	5,645
TOTAL	<mark>629,648</mark>
Ear Department, BEH:	15,752
Ear OPD in ECCs:	1,640
170 Ear Screening Camp Patients:	11,896
TOTAL	29,288
GRAND TOTAL:	658,936

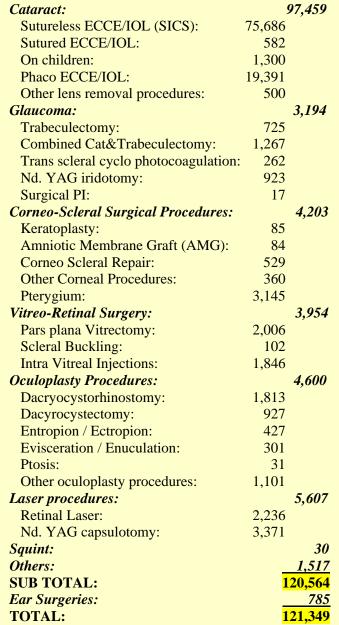


SURGERY:





SCEH, Lahan & its ECCs	: 59,775
Biratnagar Eye Hospital:	60,164
10 Cat.Surg.Camps :	625
SUB TOTAL :	<mark>120,564</mark>
Ear Department, BEH :	785
GRAND TOTAL :	<mark>121,349</mark>







SPECIAL SERVICES at EREC-P:

Paediatric ophthalmology department

Dr. Rajan Labh from BEH and Dr. Paras Panjiyar from SCEH completed 6 months paediatric ophthalmology fellowship at Dr. Shroff's Charity Eye Hospital, New Delhi, India. Similarly Optometrist, Ophthalmic Assistants and Counsellors underwent training at Dr. Shroff's Charity Eye Hospital and Eye Health Workers at Sankara Nethralaya, Chennai.

Paediatric OPD was renovated in both eye hospitals to make them children friendly. In Sagarmatha Choudhary Eye Hospital separate building was converted into paediatric ward. Equipment were upgraded and new anaesthesia machine was installed in both eye hospitals.



In the paediatric ophthalmology department of both eye hospitals 42,093 patients were examined and 2,964 patients underwent surgeries. Out of these 1,300 surgeries were for paediatric cataract.

Cornea department

In the cornea department of both eye hospitals, 2,481 corneal ulcer patients were treated. In this period 85 keratoplasty were performed and amniotic membrane transplantation procedure was performed on 84 patients. 18 eye donation awareness programmes were carried out, 250 people

filled up eye donation willingness forms and in last one year period 12 corneas were harvested.

Corneal Collagen Crosslinking was started and Specular Microscope was installed in cornea unit of Biratnagar Eye Hospital.



Vitreo-Retinal Department



In the vitreo-retinal department of both eye hospitals 3,954 patients underwent operations including intra vitreal injections. In last one

year period, 12 diabetic retinopathy camps were carried out; 1,022 patients were screened and 111 patients were referred to base hospital. Oertli Faros

vitrectomy machine and an additional retinal laser (Iridex) were installed at Sagarmatha Choudhary Eye Hospital, Lahan.







Glaucoma Department



In the glaucoma department of both eye hospitals 11,017 glaucoma patients were examined and 2,587 patients

underwent computerized visual field testing. Tube implant surgery was started in refractory glaucoma patients at Biratnagar Eye Hospital. Humphrey visual field

machine was installed at Sagarmatha Choudhary Eye Hospital and one additional Humphrey visual field machine was added at Biratnagar Eye Hospital.

Oculoplasty Department

In the oculoplasty department of both eye hospitals 4,600 surgeries were performed. In the **ocular prosthesis unit** 259 received artificial eyes, 81 of these eyes were custom made.





Low Vision Department

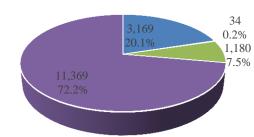
In the low vision department 602 patients with low vision were assessed, including 178 children. Special low vision devices were dispensed to 259 patients who required devices for improving vision.

Ear Department

In the ear department of Biratnagar Eye Hospital 28,668 patients with various ear problems were evaluated. 15,752 ear patients were examined at base hospital and 12,916 patients in the outreach activities (ECCs and Screening camps). 53 patients with hearing loss were provided hearing aids.



Ear OPD at BEH: 15,752



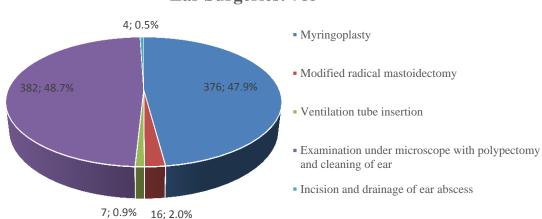
• Chronic Suppurative Otitis Media (mucosal type)

 Chronic Suppurative Otitis Media (Squamous type)

- Sensorineral hearing loss of various etiology
- Minor ENT ailments







Ear Surgeries: 785

Two paramedics underwent Basic Otology course at ear department of T. U. Teaching Hospital, Kathmandu. In 2 Eye Care Centres (Diktel and Inaruwa) ear services were started.



OUTREACH ACTIVITIES:



Besides continuing 11 Eye Care Centres (Malangwa, Rajbiraj, Siraha, Gaighat, Diktel, Bhojpur, Terhathum and Rangeli), 1 new Eye Care Centre was started at Haleshi in Khotang district.

Screening eye camps were conducted in collaboration with several local social organizations in Koshi and Sagarmatha zone.

Camp type	No of	Patient
	camps	examined
Screening Eye Camp	332	61,965
Diabetic Retinopathy Camp	12	1,022
Surgical Eye Camp	10	5,645
Pediatric Eye Camp	33	11,732
Workplace Camp	2	455
School Screening	104	11,690
Mobile bus eye clinic in 3 districts	137	3,518







Out of total 332 Screening Eye Camps 147 were combined Eye and Ear Screening Camps. In 147 combined camps 9133 ear patients were examined. A total of 367 ear patients were referred to Biratnagar Eye Hospital and out of this 54 patients underwent operations. In Screening Eye Camps, patients with refractive error were dispensed glasses



In 104 school screening, 23 were combined Eye and Ear camps in which 2,763 children were screened for ear problems and out of this 640 children had ear problems.

Surgical Eye Camps were conducted in hilly area of Koshi and Sagarmatha zone:

- Bhojpur-2 (Taksar and Annapurna),
- Dhankuta-1 (Maina Budhu),
- Ilam-1 (Ilam),
- Khotang-3 (Aiselukharka, Diktel and Halesi) and
- Sankhuwasabha-3 (Mudhe Sanichare, Tumlingtar and Maadi)

Tele-ophthalmology Service

Tele-Ophthalmology service is started at ECC, Gaighat and Inaruwa. Through this facility base hospitals are connected to ECCs and ophthalmic assistants at ECC can communicate with ophthalmologists at base hospital to confirm diagnosis so as to provide appropriate treatment to patients.



CBR PROGRAMME at BEH:

Biratnagar Eye Hospital started Community Based Rehabilitation (CBR) project for incurable blind in 14 Village Development Committees (VDCs) in Morang district with a population of 222,193 in May, 2013. By the end of 2014, CBR programme for blind was running successfully in 11 VDCs, and delivering rehabilitative services to 40 clients. The CBR team underwent 6 days refresher training at Biratnagar Eye Hospital, Biratnagar in December, 2014 to upgrade their services.





EYE HEALTH EDUCATION:

In the year 2014, Eye Health Education department provided training to 398 Female Community Health Volunteers (FCHV), 162 Maternal Child Health Worker, 22 participants from Mothers Group, 88 School Teachers, 33 Drug Retailers, 45 Camp Organizers and 20 Traditional Healers.

Eye health education in different schools was provided by exhibitions, wall paintings and eye health education messages. Pediatric eye health education messages were



published in newspapers and Eye/Ear health education was also provided in different Screening Camps. Every fortnightly eye health education program and jingles are aired on F.M. radio program. Different eye health education posters and brochures were designed, printed and distributed in co-ordination with government health posts /sub health posts.

FREE SERVICES TO PATIENTS:

A total of 10,493 cataract patients identified in several screening and surgical eye camps of Koshi and Sagarmatha zone received surgeries free of cost. Patients from eye camps and poor patients presenting to SCEH and BEH received a support worth of NPR 21,166,045.50 in their examination, surgeries, spectacle, medicine, transportation and food cost. Out of all cataract patients 53% surgeries were done on a subsidized package of NPR 1200 (approx. USD 12).

HUMAN RESOURCE DEVELOPMENT & TRAINING:

Besides continuous medical education for the hospitals' ophthalmologists the following teaching and training activities were performed:

Establishment of Surgical Training Center at SCEH, Lahan



Sagarmatha Choudhary Eye Hospital, Lahan started Surgical Training Center at SCEH, Lahan with support from Oertli Instruments AG Berneck, Switzerland for national and international ophthalmologists. The main objective of this training programme is to strengthen the skills of ophthalmologists in advanced ophthalmic surgical techniques. Equipment (Phaco machines, Vitrectomy machines and accessories) were donated by Oertli for the establishment of the Training Center. Dr. Moreno Menghini

from Switzerland received short term Phaco training from 8th to 18th Oct. Two anterior segment fellows also received phaco training in this training centre.

Diploma in Ophthalmic Science Course at SCEH, Lahan



Ophthalmic Assistants are regarded as the back bone of the eye care services in Nepal. To fulfill the required need of ophthalmic assistants for the expansion and development of eye care services, Diploma in Ophthalmic Science (DOS) course was started in collaboration with Lahan Technical School, Lahan and Sagarmatha Choudhary Eye Hospital, Lahan. In first batch 40 students were enrolled in this course.







Anterior Segment Fellowship and Vitreo-Retinal Fellowship completion

6 Ophthalmologists (Dr. Upendra Dev Bhari, Dr. Mannu Bhardwaj, Dr. Yengkhom Shailendra Singh, Dr. Prerna Arjyal, Dr. Amit Kumar Gupta and Dr. Indrajit Sarkar) completed their twoyear Anterior Segment Fellowship at SCEH and BEH, which also includes training in small incision cataract surgery with Fishhook technique and phacoemulsification. One Ophthalmologist (Dr. Haramaya Gurung) completed two-year Vitreo-Retinal Fellowship at BEH.



Co-operation with BP Koirala Lions Centre for Ophthalmic Studies (BPKLCOS), Kathmandu was continued with a comprehensive clinical and surgical training for

- 6 Post-graduate MD Residents for 2 months and
- 6 Optometry Students underwent one-month clinical training at SCEH/BEH.

Three sponsored candidates (Dr. Sharad Gupta, Dr. Kabina Shrestha and Dr. Pragya Luitel) joined SCEH after completion of their Post-Graduate MD Residency in Ophthalmology. EREC-P is currently sponsoring three candidates (2 for MD ophthalmology and 1 for MD anaesthesia).

MISCELLANEOUS:

Human Resource at EREC-P

The 476 member employee includes 31 ophthalmologists, 1 ENT Specialist, 1 Anaesthesiologist, 26 administrative staff, 29 ophthalmic assistants (OA), 2 anaesthetic assistants, 11 health assistants, 7 optometrists, 6 staff nurse, 78 eye health workers and other support staff.

People Equity HR consulting Pvt. Ltd., India studied Human Resource and Organization situation of EREC-P. They provided training on leadership inventory, performance management, core supervisory skill and professional training to EREC-P staff and suggested some modification in organization structure, performance management system, job description and retention plan with recommendations.

Celebrations of different international days







Visitors, Visiting Faculty & Guest Lecturers

Many visitors came to observe and support the work at EREC-P hospitals.

- 1. **Dr. Albrecht Hennig** & **Ms. Kristina Hennig** visited SCEH on 19th Jan and 9th Nov for 12 weeks in total to provide continuous medical education and surgical training to ophthalmologists.
- 2. **Mr. Tobias Pflanz** and **Mr. Ashok Shah**, CBM visited BEH on 14th Feb for possibility study of Representative Child Sponsorship (RCS) programme, collected photographs and materials for human interesting story for CBM.
- 3. **Ms. Isabella Kaiser,** Optician from Germany, provided four weeks training to refractionist and optical unit staff of SCEH and BEH from 25th Feb to 24th Mar.
- 4. **Mr. Pursheyyam Kumar Chaliya**, Embassy of India (Camp office) visited BEH on 26th Feb.
- 5. Mr. Oliver Neuschäfer, Designated Funding Manager, CBM visited SCEH on 11th Apr.
- 6. **Mr. Alessandro**, photographer from CBM, Italy came to SCEH and visited surgical eye camp at Diktel from 13th to 20th Apr.
- 7. **Ms. Lydia Oeftiger**, Optometrist from Germany came for Observational visit at SCEH on 21st April for two weeks.
- 8. **Ms. Rosy Marcel & Ms. Niva Marcel**, HR Consultant from People Equity, India visited SCEH and BEH from 18th to 26rd May.
- 9. **Prof. Arin Chatterjee** came for his regular visit at SCEH and BEH for clinical training of paramedics from 2nd Jun for 6 weeks.
- 10. Ms. Katharina Lanna Neuer from Technical University, Munich, came to SCEH for a medical internship from 18th Aug to 17th Sep.
- 11. **Ms. Kristina Paulsen** Medical student from Germany came to SCEH for medical Internship from 1st to 19th Sep.
- 12. **Ms. Brigitte Nachtmann-Leitl** optician from Germany provided training to optical unit staff at BEH regarding progressive glass fitting.

Various Trainings / Workshops and Conferences at EREC-P

Various orientations, short and long-term ophthalmic training programme were continued for Eye Health Workers, Auxiliary Health Workers (AHW) and Auxiliary Nurse Midwives (ANM), Staff Nurses & Health Assistant (HA) students. In 2014, 82 AHW & ANM had 6 months Primary Eye Health Worker training and 206 Staff Nurse & HA Students had 2 weeks training on primary eye care. Currently 15 AHW & ANM are undergoing 6 months Primary Eye Health Worker training,



Various types of training were provided to the hospital staff for capacity building like:

Photography, CBR Refresher, House Keeping, Leadership Inventory, Motivational Training, Core Supervisory Skill, Performance Management, Disaster Management and First Aid, Personal and Professional Excellence, Values in Health Care and Meditation Training at EREC-P hospitals.





Various Trainings / Meetings / Workshops & Conferences in Nepal

- 1. Mr. Abhishek Roshan and Mr. Kumar Prithu participated in 2 days Social Audit training conducted by ISI, Kathmandu from 8th to 9th Mar.
- Mr. Kishor Basnet and Mr. Dipendra Mahato attended "The D-Link Certified Cabling Expert & Techpro Certification" training at Mercantile Office Systems, Kathmandu from 9th to 10th Mar.
- 3. Dr. Pratap Karki attended 1 month Retina Training at Augenklinik Herzog Carl Theodore, Munich, Germany from 12th Apr to 15th May.
- 4. Mr. Bindeshwar Mahato and Mr. Sudhir Thakur participated in Partners Review Meeting organized by CBM-Nepal at HRDC Complex, Banepa from 23rd to 24th Jun.
- 5. Dr. Lila Raj Puri, Mr. Bindeshwar Mahato and Mr. Sudhir Thakur participated in Fund Raising Training conducted by CBM-Nepal at Kathmandu from 25th to 27th Jun.
- Md. Rafique participated in Community Social Mobilization Training at ISI, Nepal from 13th to 15th Jul.
- 7. Mr. Gauri Shankar Shrestha, Program Coordinator provided Pediatric Refraction training at SCEH, Lahan from 20th to 26th Jul.
- 8. Mr. Ramanand Bishwakarma and Md. Rafique participated in Training of Trainers for Eye Health Educator at Kathmandu from 10th Aug to 3rd Sep.
- Dr. Sanjay Kumar Singh participated and presented and Dr. Lila Raj Puri, Dr. Pratap Karki, Dr. Rakshya Panta, Dr. Lalit Agrawal participated in Nepal Ophthalmic Society's Annual General Meeting at Kathmandu on 16th Aug.
- Dr. Pratap Karki, Mr. Sudhir Thakur and Mr. Rajendra Shah participated in Inclusive Project Cycle Management (iPCM) Workshop organized by CBM at Kathmandu from 25th to 29th Aug.
- 11. Dr. Lila Raj Puri, Dr. Pratap Karki, Dr. Rakshya Panta, Dr. Rajan Labh, Dr. Lalit Agrawal, Dr. Diwa Lamichhane, Dr. Rajya Laxmi Gurung, Dr. Prerna Arjyal, Mr Kumar Prithu, Mr Abhishek Roshan participated and presented papers and Mr. Bindeshwar Mahato, Mr. Som Kumar Shah, Mr. Dipendra Chaudhary, Mr. Sunil Chaudhary, Mr. Bidyanand Chaudhary participated at "9th Eastern Regional Ophthalmic Conference" at Biratnagar on 20th Sep.
- 12. Mr. Rabindra Lal Chaudhary and Dr. Lila Raj Puri, participated on Apex body workshop on National Eye health Policy at Godabari village resort, Lalitpur, Kathmandu on 15th Nov.
- 13. Miss Dipika Gupta went for observational visit of Store Management at Manipal Hospital and Himalayan Eye Hospital at Pokhara from 22nd to 25th Nov.



- 14. Dr. Sanjay Kumar Singh and Dr. Lila Raj Puri participated in the workshop to operationalize Action Plan (2014-2019) for the prevention of avoidable blindness and visual impairment in Nepal, Kathmandu from 12th to 13th December 2014.
- 15. Mr. Afaque Anwar, Mr. Kishor Basnet and Mr. Dipendra Mahato attended Workshop on HINARI at Bhadrapur, Jhapa from 27th to 28th Dec.

Courses / Workshops / Conferences & Presentations outside Nepal

- 1. Dr. Sanjay Kumar Singh visited Disha Eye Hospital, Kolkota, India from 10th to 14th Mar.
- 2. Mr. Som Kumar Shah went for Tele-Ophthalmology Observership at Aravind Eye Care System, Madurai, India from 26th to 29th Mar.
- 3. Dr. Lila Raj Puri participated and presented papers on Visual Outcome of traumatic cataract surgery in 163 Children: the Lahan Experience and Approach to management of Glaucoma in high volume community eye hospital: the Lahan Experience at World Ophthalmology Congress 2014, Tokyo, Japan from 28th Mar to 9th Apr.
- 4. Mr. Sudhir Thakur participated in CBM-SARON workshop on Disability Inclusive Disaster Risk Reduction in Hospitals at Delhi, India from 24th to 26th Apr.
- 5. Mr. Raju Upadhaya attended Iridex Laser Service Training at Dubai, UAE from 8th to 14th Jun.
- 6. Mr. Badri Ram Mester went for observation visit on the perspective of Housekeeping at Sadguru Netra Chikitsalaya, Chitrkot, India from 22nd to 29th Jun.
- 7. Mr. Tirtha Kumar Singh participated in short term training in pediatric optometry, Orthoptic and vision therapy at Dr. Shroff's Charity Eye Hospital, New Delhi, India from 1st Jul to 30th Sep.
- 8. Mr. Pankaj Ray Adhikari attended Paediatric Optometry Training at Dr. Shroff's Charity Eye Hospital, New Delhi, India from 1st to 31th Aug.
- 9. Mr. Satya Narayan Singh participated in Contact Lens Training at Dr. Shoroff's Charity Eye Hospital, New Delhi, India from 1st to 31st Aug.
- 10. Mr. Abhishek Roshan participated in Management Training and System Development for Hospital Administrator at Aravind Eye Hospital, Madurai, India from 15th Aug to 14th Sep.
- 11. Dr. Prerna Arjyal attended Cornea Cataract Refractive & Dry eye preceptorship programme at Disha Eye Hospital, Kolkota, India from 1st to 3rd Sep.
- 12. Mr. Duliraj Timalsina participated in Children Eye Examination training at Dr. Shroff's Charity Eye Hospital, New Delhi, India from 1st to 30th Sep.
- 13. Mr. Pankaj Ray Adhikari participated in National Focal Person training in Low Vision at Hongkong from 5th to 18th Sep.
- 14. Dr. Rakshya Pant participated in Eye Fest 2014 conference at Bhubaneswar, Odisha, India from 12th to 14th Sep.
- 15. Dr. Sanjay Kumar Singh attended 5th EUCORNEA and 32nd Congress of the ESCRS at London, England from 12th to 17th Sep.
- 16. Mr. Sudhir Thakur Participated in Hospital Management Programme at IIM Ahmedabad, India from 15th to 19th Sep.
- 17. Mr. Padam Narayan Choudhary, Dr. Sanjay Kumar Singh and Mr. Raju Upadhaya attended 27th APACRS at Jaipur, India from 13th to 16th Nov.



- 18. Mr. Surat Lal Mahato participated in Community Outreach and Social marketing for Eye Care Services training at Aravind Eye Hospital, Pondicherry, India from 15th Nov to 5th Dec.
- 19. Mr. Sanjay Kumar Singh and Mr. Pintu Mandal participated in Instrument Maintenance Training at Aravind Eye Hospital, Madurai, India from 1st to 30th Dec.
- 20. Mr. Ram Prakash Singh participated in Exposure Training in Optical Shop Management at Aravind Eye Hospital, Madurai, India from 11th to 16th Dec.

Publications

- Foldable vs rigid lenses after phacoemulsification for cataract surgery: a randomised controlled trial, A Hennig, L R Puri, H Sharma, J R Evans and D Yorston, Eye (2014)28, 567-575
- Phaco Instruction Course DVD A. Hennig, Sanjay K. Singh, Lila Raj Puri; Jaypee Brothers, 2014
- 3. Video Atlas of Pediatric Cataract Surgery Instruction Course A. Hennig, B. Schroeder, Sanjay K. Singh, Lila Raj Puri
- 4. Fishhook Technique as Consultation Response: A Hennig J Cataract Refract Surg, Vol 40, November 2014: 1936-1939

Jaypee's Video Atlas of PHACO Instruction Course



Acknowledgments

Increasing number of patients continued to acquire services of EREC-P hospitals, Eye Care Centres and in out-reach activities. There was an increment of 25 percent in Out Patient and 13 percent in surgeries. There was tremendous increase in number of patients in ear department and ear services were expanded to two eye care centres after the training of paramedical staffs and addition of equipment. These achievements were possible due to continuous support from our partner CBM and their donors. We are thankful to Orbis International & Oertli Instrument AG Berneck, Switzerland for their support. There was constant support from local community and local social organizations. We would like to express our thanks to Ministry of Health & Population, Social Welfare Council for their continuous guidance and support. We also thank Nepal Eye Bank, Kathmandu for providing donor corneas for cornea transplantation on a regular basis and Impact Nepal for providing training on ear care.

We would like to specially thank Dr. Albrecht Hennig & Ms. Kristina Hennig for their service, continuous support and guidance. With their effort we could produce phaco instruction course DVD and video atlas of paediatric cataract surgery instruction course.

I would like to thank all my colleagues, administrative staff, clinical staff and other support staff for their hard work to make Eastern Regional Eye Care Programme a success.

EREC-P

Dr. Sanjay Kumar Singh Programme Director Eastern Regional Eye Care Programme Lahan/Biratnagar, Nepal Email: <u>sanjay.singh@erec-p.org</u>, <u>info@erec-p.org</u> Website: <u>www.erec-p.org</u> Photo: © EREC-P and CBM







A blind mother seeing her child for the first time after eye surgery.

A blind girl with bilateral cataract...



...now can see and read after eye operation.



Blind patient unable to see and walk brought to surgical eye camp in basket.



Patient after surgery ready to walk back home.



EREC-P Centers

Sagarmatha Choudhary Eye Hospital, Lahan-3, Siraha Email: <u>sceh@erec-p.org</u> | Phone No.: 00977-33-560402

Biratnagar Eye Hospital, Biratnagar-17, Morang Email: <u>beh@erec-p.org</u> | Phone No.: 00977-21-436358

