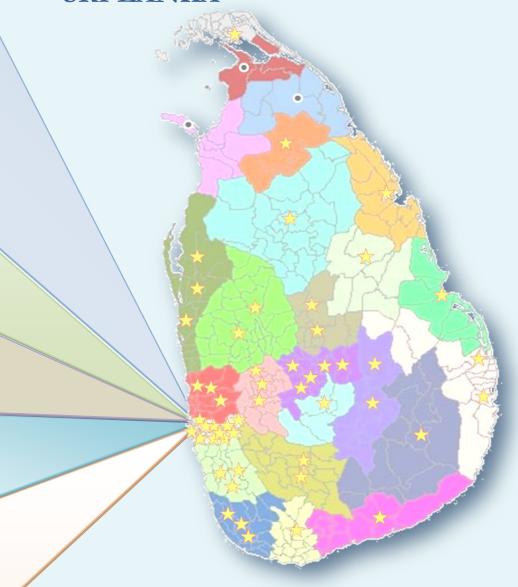


VISION 2020 SRI LANKA

THE RIGHT TO SIGHT

NATIONAL PROGRAMME FOR PREVENTION OF BLINDNESS SRI LANKA



COMPREHENSIVE EYE CARE PLAN 2013 – 2017 FIVE YEARS

Ministry of Health

In Collaboration with College of Ophthalmologists, Sri Lanka





NATIONAL PROGRAMME FOR PREVENTION OF BLINDNESS

SRILANKA

COMPREHENSIVE EYE CARE PLAN 2013 – 2017 FIVE YEARS



Ministry of Health

Sri Lanka

March 2013

Message from the Honourable Minister of Health

It gives me genuine pleasure to learn that the Second Phase of the National Plan for Prevention and Control of Blindness in Sri Lanka is on the launch. Since its inception in year 2007, I have noticed a marked change in the eye care services in the country. Positive facts to be noticed were improvement of treatment modes of common eye diseases and development of eye units across the country for better eye care services at the grass root level. It is evident to me that a large number of poor patients were benefitted by receiving free spectacles and free cataract operations in every corner of the island. Furthermore, the special services given to the internally displaced and war affected people in the Northern Province are appreciable. I thank dedicated team of the Vision Programme for making this programme viable, energetic and realistic.

I am confident that the successful implementation of the programme will achieve the objectives of Vision 2020 Global Campaign. Ministry of Health and the Government of Sri Lanka is firmly committed towards the success of this programme and will continue provide the required human resources, infrastructure and equipments through the national health budget. I am sure Vision 2020 Programme will reach its goal of elimination of avoidable blindness in Sri Lanka even before year 2020 with the support and contribution of the government and non-government organizations and the professionals in eye care. I wish the National Plan for Prevention and Control of Blindness a success.

Maithripala Sirisena Hon. Minister of Health

ii

Message from the Secretary -Ministry of Health

Eye health has been a focus area in the health care system for a long time in this country.

Over the time, the objectives have grown to cover a range of diseases and conditions, preventive

services and programs, and eye health infrastructure needs. I have learned about the value of

objectives that allow us to measure our progress from where we have been to where we need to

be. While as a nation we have made substantial progress in improving eye health over the past

five years with the first phase of the National Eye Care Plan, but many needy people still suffer

from unavoidable blindness.

The Vision 2020 Programme commenced in 2007 with a wide range of eye health

challenges aiming at improved eye health and quality of life of people. These objectives serve to

keep us focused and on track as we implement the National Vision 2020 Programme to promote

eye health. Achieving the eye health objectives is a great challenge. Multiple approaches are

needed, ranging from providing care in a clinical setting, to implementing community-based

programs, to conducting research. I observed Vision 2020 has followed all these approaches

during the past five years. I look forward to learn about more achievements in the Vision 2020

goals in the coming years.

Dr. Y. D. Nihal Jayathilake

Secretary - Ministry of Health

Message from the President College of Ophthalmologists, Sri Lanka

It's an honour for me to write down this message for the second phase of the National Vision 2020 Eye Care Plan for next five years. It has been witnessed by all of us the revolutionary changes occurred in the field of eye care services in Sri Lanka during the past five years with the implementation of the Vision 2020 porgramme. The College of Ophthalmologists being a principle partner of the national programme is always giving its fullest support and coordination through wide spread membership. As a college member actively involved with the activities of Vision 2020 in the past I remember the enormous efforts the Vision 2020 team has had to uplift the eye care services in the country.

Five focal persons in charge of the control of priority eye diseases who are the most senior members of the college are very dedicated in their tasks. Specifically the Low Vision and Primary Eye Care programmes were recognized internationally as best programmes in their category. Cataract surgical and refractive services given to the war affected people in the Northern Province during and after the civil war were also supported by members of the college. Eye surgeons working at the different districts in the country are performing to fulfil the objective of the Vision 2020 by reaching the unreached communities in the remote areas of the districts. It is clearly evident that the awareness programs conducted for Glaucoma and Diabetic retinopathy have opened the eyes of the general population.

The College of Ophthalmologists of Sri Lanka will have a stronger contribution in the second phase of the Vision 2020 Programme during the next five years to eliminate needless blindness from Sri Lanka by the year 2020. Let me wish Vision 2020 Sri Lanka all the success in its second phase.

Dr Ranjith Kodikara

President - College of Ophthalmologists of Sri Lanka

FOREWORD

Sri Lanka has been signatory to Vision 2020 global programme since year 2000. Following the enormous efforts of the Ministry of Health and the College of Ophthalmologists of Sri Lanka it was possible to formulate and launch the first five year plan of the Vision 2020 Sri Lanka programme in 2007. Since then we are experiencing a new era in the eye care services of Sri Lanka. Vision 2020 Secretariat has been established at the Health Ministry Head Office with a dedicated and competent team and coordination of the activities of the Vision 2020 Programme has begun. Infrastructure and human resource developments and control of major eye conditions were the principle elements of the Sri Lanka programme.

Five focal persons assigned for the control of major ophthalmic conditions were highly dedicated in their tasks and responsibilities. Therefore we were able to implement successful disease control programmes which were recognized as best of its kind in the region. These programmes were conducted covering most of the districts of the country benefiting a large number of needy individuals. Free cataract operations were conducted in large numbers especially in the war affected areas of the country. School screening and free spectacle programme was a unique venture with a great success. A free pair of glasses was made available to all school children with significant refractive errors across the country. Low vision and primary eye care programmes were other successful projects of Vision 2020 Sri Lanka.

Having completed its successful first phase, Vision 2020 Sri Lanka steps in to the second phase from 2013 to 2017. It is expected to further strengthen eye care services in the country through efficient and sustainable mechanisms. I strongly believe Vision 2020 National Programme has the strength and capacity to fulfil these requirements.

Dr Palitha Mahipala

National Focal Point – Vision 2020 Programme

Director General of Health Services

Ministry of Health

Sri Lanka

ACRONYMS

CBR	Community based rehabilitation
CME	Continued Medical Education
CPD	Continued Professional Development
CSR	Cataract Surgical Rate
DSL	Daily Living Skills
EMR	Eastern Mediterranean Region
IAPB	International Agency for the Prevention of Blindness
INGDO	International non government development organisation
LV	Low vision
MIS	Management Information System
MOE	Ministry of Education
MOH	Ministry of Healthcare
MOSW	Ministry of Social Welfare
M&R	Maintenance and Repair
NEEC	National Eye Care Coordinator
NGDO	Non government development organisation
NGO	Non government organisation
NPPB	National Programme for the Prevention of Blindness
O&M	Orientation and Mobility
ON	Ophthalmic Nurse
ОРТН	Ophthalmologist
OT	Ophthalmic Technician
PGIM	Post Graduate Institute of Medicine
PEC	Primary Eye Care
PHC	Primary Health Care
PHI	Public Health Inspector
PHM	Public Health Midwife
PHNS	Public Health Nurse
PWD	Persons with disabilities
R+R	Rehabilitation and Resource
UNDP	United Nation Development Programme
VA	Visual acuity
VI	Visually impaired
WHO	World Health Organisation

Contents

INTRODUCTION	7
GEOGRAPHY AND ADMINISTRATIVE STRUCTURE	8
Eye Care Services in Sri Lanka	8
Magnitude of Blindness and Visual Impairment	8
Manpower and Coverage	
Infrastructure, equipments and Pharmaceuticals	
ACHIEVEMENTS DURING THE FIRST 5 YEARS	
Achievements in general	
Primary Eye Care	
Diabetic Retinopathy	
LV and Refractive error	
Childhood Blindness	
Glaucoma	
Infrastructure, equipment and pharmaceuticals.	
MINISTRIES RESPONSIBLE FOR EYE CARE, REHABILITATION AND EDUCATION	13
MAJOR CONSTRAINTS FOR PREVENTION AND CONTROL OF BLINDNESS IN SRI LANKA	14
RATIONALE OF THE PROGRAMME - PHASE II	14
SPECIFIC WORK PLAN OF PHASE II	15
CATARACT	15
PRIMARY EYE CARE AND CHILDHOOD BLINDNDNESS	16
GLAUCOMA	19
5 YEAR SRI LANKA PROGRAMME PLAN: OUTPUTS/OUTCOMES AND TARGET SUMMARY	
(2013 – 2017)	
DISEASE CONTROL	
RESEARCH	
REHABILITATION	
HUMAN RESOURCES	
Infrastructure and equipment	
ANNEXES	24
Primary eye care kit	24
RECOMMENDED EQUIPMENT LIST FOR TERTIARY EYE CARE UNIT	24
Outpatient	
Operation Theatre:	
* Orthoptic Instrument Set	
REQUIRED EQUIPMENT AND INSTRUMENTS FOR SECONDARY EYE CARE UNITS	
Outpatient Operation Theatre:	
Essential ophthalmic drugs	
NATIONAL VISION 2020 STEERING COMMITTEE	
OFFICE BEARERS OF THE VISION 2020 , SRI LANKA	
VISION2020 REGIONAL OFFICE – KANDY	
VISION 2020 REGIONAL OFFICE – KANDY VISION 2020 URBAN EYE CARE OFFICE – COLOMBO	
ROLES AND RESPONSIBILITIES OF THE NATIONAL VISION 2020 SECRETARIAT, SRI LANKA	
CONTACT DETAILS	30

INTRODUCTION

Sri Lanka is a peace full country in the Indian Ocean. Twenty million people of mixed ethnicity live in harmony following an end of a long lasting civil war. The Democratic Socialist Republic of Sri Lanka is governed by an executive president accountable to the parliament of the country. Ministry of Health is one of the important ministries and manned by a veteran minister. Preventive and curative cares are the key elements of the service component of the ministry. Primary Health Care System in Sri Lanka is recognized as one of the best of its kind in the world.

Vision 2020 Sri Lanka Programme was launched in year 2007 as a collaborative effort of the Ministry of Health and the College of Ophthalmologists of Sri Lanka. A five year comprehensive eye care plan was the key implementing strategy of the programme. Many important milestones in the eye care development in Sri Lanka were reached by the initiative since its inception, in the prioritized elements of Vision 2020 including infrastructure, human resource development and diseases control. Vision 2020 Programme is lead by a National Focal Point who is a higher official in the health ministry and five focal points who are senior ophthalmologists and technical advisors to the programme. As a commencement, The Vision 2020 Secretariat had been established within the premises of the Ministry of Health Headquarters with the necessary technical and administrative staff. The running costs of the secretariat were bourn by the supporting organization of the Vision 2020 Sri Lanka Programme. This office liaises with all government non government organizations, professionals and general public in all of its activities.

All the finances of the Vision 2020 are voluntarily handled by the College of Ophthalmologists of Sri Lanka. Separate accounts are maintained by Vision 2020 accounting staffs and annual audits are conducted by external auditors. Audit reports are made available to all the partners of the programme to maintain transparency of the fund disbursements. Over the last five years vision 2020 programme has spent over 300 million rupees on different useful projects aiming to develop eye care services in the country. All these projects are financially supported by international and local donor organizations. Infrastructure development, human resource development and control of the blinding eye diseases were target areas of action consuming most of the finances. Many eye units in the country were upgraded with new buildings, renovations, supply of equipment and instruments and training of staffs. Cataract, glaucoma, low vision, diabetic retinopathy, childhood blindness and primary eye care programmes were principle disease areas concerned in Vision 2020 programme. Developing screening mechanisms to detect individuals with eye diseases including screener education, organizing programmes, referral and organizing eye surgical and medical camps along with public education were major activities related to above diseases.

Upon the successful completion of the first phase of the Vision 2020 programme, next phase is to reach the goal of the programme in year 2020 by achieving elimination of avoidable blindness in Sri Lanka. This booklet is an effort to plan out activities of Vision 2020 Sri Lanka in the next five years with inspirations of the lesions learnt during the past. We earnestly look forward to accomplish more comprehensive eye care programme reaching every unreached corner of the country.

GEOGRAPHY AND ADMINISTRATIVE STRUCTURE

Sri Lanka is a greenly Island with 65,610sq Km area, 980sq km area of rivers and streams running from the central hill country to the sea. Ancient ruling kings of the country built several large scale reservoirs and tanks to feed the main income generative paddy cultivation. The ruled foreign nations introduced other crops like rubber and tea.

For the administrative purposes, country is divided into 9 provinces Central, North Eastern, Central, Northern. North Western. Sabaragamuwa, Southern, Uva, Western and further divided into 25 districts. Multi ethnic groups of people (Sinhalese, Sri Lankan Moors, Indian Tamil, Sri Lankan Tamil, other) are living in all parts of the country but densely populated in the main cities of the provinces and districts. Governance system includes central government and provincial councils for all the provinces. Religions are Buddhism, Islam, Hinduism and Christianity. Sinhala, Tamil and English are official languages.



Health care Services

Free health service in Sri Lanka is unique in the region. This is implemented through the preventive and curative health care services conducted by the government of Sri Lanka. Annual health expenditure is 4% of GDP (2009). Physician density is 0.492 physicians/1,000 populations (2006). Hospital bed density is 3.1 beds/1,000 populations (2004). Around 13000 qualified medical officers are working in the state health services both in preventive and curative elements.

EYE CARE SERVICES IN SRI LANKA

Magnitude of Blindness and Visual Impairment-

Prevalence of blindness is 1.1% for age group 40 and above. It is estimated that there are 100000 blind and 300000 with low vision.

Manpower and Coverage-

57 eye surgeons and 250 medical officers including registrars in the government hospitals and 31 surgeons in the private sector. Coverage in the island are, 229,885 people per eye surgeon

District	Eye Surgeon in Government Sector	No of surgeons in Private Sector	Area Sq/Km	Estimated Population
Ampara	02	-	4,415	615,000
Anuradhapura	01	_	7,179	801,000
Badulla	02	-	2,861	850,000
Batticaloa	01	-	2,854	523,000
Colombo	13	20	699	2,456,000
Galle	05	-	1,652	1,052,000
Gampaha	05	-	1,387	2,140,000
Hambantota	01	-	2,609	552,000
Jaffna	01	-	1,025	599,000
Kalutara	03	-	1,598	1,111,000
Kandy	05	03	1,940	1,380,000
Kegalla	01	-	1,693	802,000
Kilinochchi	-	-	1,279	146,000
Kurunegala	02	-	4,816	1,524,000
Mannar	-	-	1,996	101,000
Matale	02	-	1,993	477,000
Matara	01	-	1,283	813,000
Moneragala	01	-	5,639	425,000
Mullaitivu	-	-	2,617	147,000
Nuwara Eliya	02	-	1,741	742,000
Polonnaruwa	01	-	3,293	395,000
Puttalam	03	-	3,072	752,000
Ratnapura	02	-	3,275	1,086,000
Trincomalee	02	-	2,727	355,000
Vavuniya	01	-	1,967	166,000
Sri Lanka	57	23	65,610	20,010,000

Infrastructure, equipments and Pharmaceuticals

All government eye units have equipped screening and examination units. Few units have dedicated full equipped operation theaters and others share with main operation theaters. Ophthalmic drugs are available in all units free of charge. Advanced and costly drugs are available in limited stocks.

ACHIEVEMENTS DURING THE FIRST 5 YEARS

First Phase of the National Plan for the Prevention of Blindness was drawn up for the period 2007-2012. Since then much has been achieved in terms of expansion of eye care services, with an improvement in the quantity and quality. Priorities of the first five years and achievements in the each area are outlined below. These priorities are continued for the second phase of the Vision 2020.

- 1. Cataract
- 2. Primary Eye Care and Childhood Blindness
- 3. Glaucoma
- 4. Diabetic retinopathy
- 5. Refractive errors &Low vision
- 6. Human resource development
- 7. Infrastructure development

Secret for success in the first 5 years is the dedication of the eye care staffs, donors' support and political blessings.

Achievements in general

Vision 2020 Secretariat has been established within the premises of the Ministry of Health in year 2008 with only one medical officer and now expanded to 9 including 2 coordinating medical officers, financial and project officers and supporting staffs and is equipped with communication, internet, and modern office equipments. International days related to eye care are celebrated every year including of World Sight Day, World diabetic day and glaucoma days. An office has been opened at National Eye Hospital for urban eye care project in Colombo district in September 2009 and appointed a project officer and an assistant to the office.

Primary Eye Care

Strong PHC system in the country helped to manage most of the problems faced during initial phase. PEC has been incorporated into PHC in 13 districts inclusive of training of primary health care workers with provision of a eye examination toolkit. A referral system has been established from the primary level to tertiary level of eyecare. Reaching unreached is a main strategy. Outreach eye camps, provision of custom made spectacles, supply of necessary instruments and equipments for investigative, screening and treatments to eye units were main activities. Two population based surveys (primary eye care survey in 2 districts namely Kalutara and Ampara and Vision screener survey in 2 districts Kandy and Colombo) took place and publications are waiting. A school transport drivers' vision screening has been launched initially in Colombo district and planned to be extended to other districts.

Cataract

Age is a well-known (and unpreventable) risk for cataract. Prevalence of cataract among elderly in developing nations is very high. The only option to prevent cataract blindness is surgery, which is a highly cost effective intervention resulting restoration of sight and improvement of quality of life. The Cataract Surgical Rate (CSR- number of cataract surgeries done per million populations per year) has significantly increased over the last 5 years but CSR was reported to be quite low in some districts with lack of necessary human resources, infrastructure and equipments. Available data shows that the cataract surgical rate is increased from 3000 to 4500 by the end of 2012 during the last five years.

Supply of instruments including surgical microscopes, autoclaves, and micro surgical instruments supplied to selected eye units. Renovation and building of dedicated eye units is the main target and completed in few areas. Majority of consumer supply are through the ministry but few donor agencies support to carry out cataract surgical camps in different areas of the country.

Diabetic Retinopathy

Prevalence of Diabetes in Sri Lanka is 14.2% in Males and 13.5% in females. Approximately 5% of all blind people are due to Diabetic Retinopathy. Diabetic Retinopathy prevention programme has addressed this issue of by raising awareness among people about the diabetes and complications, developing infrastructure and human resource to screen and to treat diabetic retinopathy patients and by

LV and Refractive error

While refractive error has been recognised as a major cause for blindness and low vision, still there is a need of strengthening the existing screening systems and follow up processes in case of low vision clients through primary health care workers and school screening. At present, there are 15 low vision clinics in the country. However, these low vision clinics need strengthening and linkages with secondary eye units. Existing midlevel eye care services has to be strengthen to overcome in service provision.

Childhood Blindness

The global prevalence of childhood blindness is thought to be around 0.07%, or approximately one tenth of the prevalence of blindness in adults (Rahi et al. measuring the burden of childhood blindness. Br J Ophthalmol. 1999 Apr: 83(4): 387-8). Childhood refractive errors are the main problem where most of the schools in the island have covered by school screening programme. Blind children in the world are approximately 1.4 million.

Eye diseases in children cannot be viewed as a mere extension of adult eye conditions. Given the special features of the eye in childhood, treatment of the visually threatened eye requires

specialized training and skills, as well as a child-friendly attitude in the professionals dealing with children.

It has been already established 2 Paediatric and another 2 proposed to establish Ophthalmic Units in 4 teaching hospitals. School screening with the help of Ministry of Education and supply of custom made free spectacles to all needy children. Grade 1, 4, 7 and 10 routine screening carried out by public health staff also provided custom made spectacles. Producing and practicing an approved, modified log MAR chart for effective screening.

Glaucoma

Glaucoma is an eye disease causing gradual peripheral vision degradation. An estimated population of 120,000 persons consider to be suffering from Glaucoma in the country. Newly developed protocol for glaucoma screening and management guidelines in addition to provision of necessary public awareness, equipments at secondary and tertiary hospitals is a great achievement in managing glaucoma in the country.

Awareness programmes for PHC and general public are carried out in every year and training of medical staff (Government and private) to screen glaucoma patients are completed in Western and Sabaragamuwa Provinces. Mass media and public awareness has been mainly conducted each year.

Human Resource Development

According to the available data there are 85 ophthalmologists and 112 ophthalmic technologists are serving in state and private sector in the country. However it is still needs a cadre of additional 60 ophthalmologists and 150 ophthalmic technologists to meet the needs of Vision 2020 to provide reasonable services. As in all states, Sri Lanka also facing inequitable services where all facilities are centred in cities.

Projected Cadre for Eye Surgeons

,	•		
1.	Base Hospital Type (A)	-	20
2.	District General Hospital	-	36
3.	Provincial General Hospitals	-	10
4.	Teaching Hospitals	-	10
5.	Eye Hospital	-	07
6.	Sub Specialties	-	06
7.	Lady Ridgeway Hospital	-	01
8.	Sirimavo Bandaranayake Children's Hospital	_	01

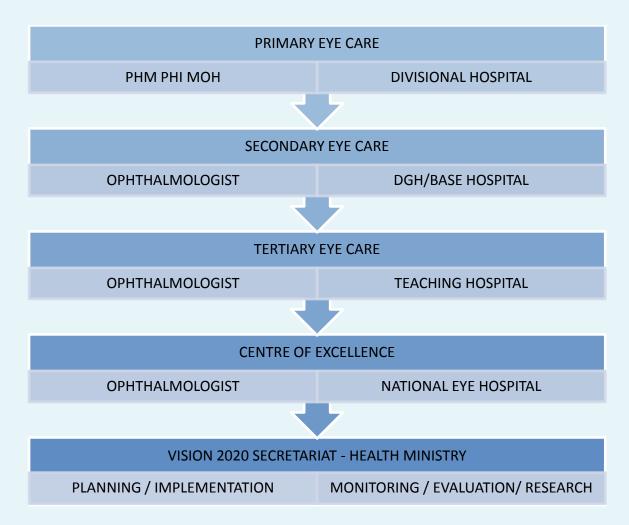
Training of 40 surgeons, 250 midlevel personals including maintenance technician through government and donor funding has been completed.

Infrastructure, equipment and pharmaceuticals

Vision 2020 programme has involved in upgrading care units to set up sub specialties and two centers for excellence (in Kandy and Colombo), five other tertiary care units were up graded to post graduate training, 18 secondary care units were renovated and equipped and establishment of 08 new secondary care units were completed. Most of the required equipments were supplied by MoH and the new equipments required for these upgraded eye units are also supplied with the recommendation of the college of Ophthalmologists of Sri Lanka. Though the supply of free IOLs is routinely carried out by the v2020 secretariat the demands remains high. Colombo and

Peradeniya dedicated pediatric eye units were opened in 2010 and 2012 respectively. Optical workshops were established in Colombo and Kandy to provide free eye glasses to poor patients.

Eye Care Structure and Coordination



MINISTRIES RESPONSIBLE FOR EYE CARE, REHABILITATION AND EDUCATION

The Ministry of Education, Social Services and Social Welfare is responsible for children and elderly persons with disabilities including visual impairment, blindness and severe visual impairment. The Health Ministry is working towards to strengthening the rights of the persons with disabilities including accessibility and rehabilitation services.

With regard to education, it is the Ministry of Education (MOE) that is accountable for any curriculum for the children, including those with special needs such as visually impaired or hearing impaired children. A dedicated Director for Special Education is working for the promotion of inclusive education and non formal education. Additionally, the organizations for Blind and for the deaf is involved in lobbying, advocacy and mercy-work for persons with related

impairments, however the coverage is far from adequate. Representatives of these ministries are in the vision 2020 steering committee.

MAJOR CONSTRAINTS FOR PREVENTION AND CONTROL OF BLINDNESS IN SRI LANKA

- 1. Inadequate and lack of human resources in all categories
- 2. Unequal distribution of human resources, infrastructure, equipment and therefore respective service delivery
- 3. Inadequate proper information system
- 4. Lack of proper monitoring and evaluation
- 5. Lack of preschool screening for the early detection of eye disease and inadequate school screening
- 6. Inadequate supply of spectacles for children
- 7. Insufficient supply of low-vision devices
- 8. Inadequate collaboration between other Ministries, (I)NGOs and organizations involved in eye care
- 9. Inadequate knowledge and awareness about services in the communities.
- 10. Inadequate financial resources available for eye care services

RATIONALE OF THE PROGRAMME - PHASE II

Aim

Elimination of Avoidable blindness in Sri Lanka by Year 2020

Objectives

- 1. Strengthening of incorporation of PEC into PHC in all 9 provinces by 2017
- 2. Doubling the cataract surgical rate by 2017 and other surgeries
- 3. Public awareness on DR and Glaucoma, target screening and treat all vulnerable groups
- 4. HRD Training existing and introduction of new disciplines in demand
- **5.** Introduction and Increasing the capacity of the 2ry and 3ry care unit in all provinces
- 6. Island-wide public awareness on blindness and its consequences through mass media
- 7. Strengthening school screening and provision of free spectacles to all needy children
- **8.** Production and dispensing free spectacles for the needy in all provinces by 2017
- 9. Identification of Low vision people and provision of basic visual aids/ Rehabilitation
- 10. Addressing NCD and geriatric visual disabilities in collaboration with NCD unit

SPECIFIC WORK PLAN OF PHASE CATARACT

1.1	2013	2014	2015	2016	2017
Infrastructure /Dedicated eye theatre	Upgrading 3 units with dedicated OT	Upgrading 3 units with dedicated OT	Upgrading 3 units with dedicated OT	Upgrading 3 units with dedicated OT	Upgrading 3 units with dedicated OT
Instruments	Cataract Sets for all DGHs/MSD supply should be monitored	Cataract Sets for all IIry Eye Units	Cataract Sets for all DGHs	Cataract Sets for all IIry Eye Units	
Equipments	Instruments and equipments for 5 units	Instruments and equipments for 5 units	Instruments and equipments for 5 units	Instruments and equipments for 5 units	Instruments and equipments for 5 units
	Maintenance and repair by trained biomedical engineer- on request	Maintenance and repair by trained biomedical engineer- all Island	Maintenance and repair by trained biomedical engineer- all Island	Production, Maintenance and repair by trained biomedical engineer	Production, Maintenance and repair by trained biomedical engineer
Logistics	10,000 Foldable IOLs and 20,000 PMMA IOLs	Additional 10,000 foldable IOLs and 30,000 PMMA IOLs for all IIry Eye Units	Additional 10,000 foldable IOLs and 40,000 PMMA lenses to all Eye Units	50,000 Foldable IOLs to and 20000 PMMA IOLs all eye Units	Do
Human Resources	Surgeons Mid level personal/MO Nurses OT				
Web based Data Collection system	Eye Hospital	All Teaching Hospitals	All DGHs	All Eye Units	All Island including Private Sector
Surgery target	40/week/surgeon (To start eye camps in peripheries, patients will be operating with Free PMMA IOL, Every Surgeon in Government Sector will volunteer for 200 cases annually) 200 x 50 = 10,000 Minimum requirement will be announced for cataract Surgeries	45/week/surgeon	50/week/surgeon	55/week/surgeon	60/week/surgeon
Training	2 weeks training on Cataract Surgical Skills for 3 surgeons(College and Focal Point will be schedule the Activity-Utilize a space in OT in NEHC for training- need a good accommodation and duty leave)	2 weeks training on for 3 surgeons Cataract Surgical Skills	2 weeks training on for 3 surgeons Cataract Surgical Skills	2 weeks training on Cataract Surgical Skills for 3 surgeons	
Out come	Introduction and Implementation / all surgeons	Self Assessment and skill development			

PRIMARY EYE CARE AND CHILDHOOD BLINDNDNESS

Child hood blindness	2013	2014	2015	2016	2017
Public Awareness and PEC component	Total 14 districts-Integration into Primary Health Care and basic training	Total 19 Districts – Integration and refresher training	Total 25 districts- Integration and basic training	All island – PEC	
School Screening	1,4,7,10 and all children in 6 districts	additional 6 district	Total 20 Districts - All children,	All Island School Children Screening	
Pre School Screening	2 provinces	4 provinces	6 provinces	8 provinces	All Island
Infrastructure	2 Paediatric units Colombo and Kandy	2 New units to be established	Full functioning 4 units		
Human resource	Surgeons- 2 more specialists OT cadre revision Nurses- (4)special paediatric training Orthoptists to all teaching hospitals	Orthoptist to all 9 Provinces Paediatric OT cadre creation Nurses- (4)special paediatric training	4 Paediatric Ophthalmologist, Nurses and Paediatric trained OTs Nurses- (4)special paediatric training	Nurses- (4)special paediatric training	Paediatric trained OTs to all 9 Provinces
ROP Screening Laser facilities and treatment	Follow ROP screening Guidelines Screening and treatment by General Eye surgeons/Retinal Surgeons New treatment unit in Batticloa	Screening and treatment by Retinal/ Paediatric Surgeon -4 Provinces New treatment unit in Anuradhapura	Screening and treatment by Retinal /Paediatric Surgeon – All Island New treatment unit in Trincomale	New treatment unit in Badulla	Introduction of Paediatric VR in Colombo/Kandy? New treatment unit in Kurunegala
Spectacles New and Maintenance	Provision in 14 Districts and maintenance in Colombo and Kandy districts Production and maintenance in 2 Units	Provision in 20 District and Maintenance/Production in 4 Units	Provision and Maintenance/Production 50% of the requirement	Production, Provision and maintenance – All Island	
IOLs/Sx	Free IOLs and consumables for poor income families	Free IOLs and surgeries for all in Paediatric Surgeons/on request	Free IOLs for all on request		
Other surgeries (Squint/amblyopia management/Handling Emergencies)	Awareness and find more theatre time Proper referrals	Dedicated theatres/ Paediatric units	Dedicated theatres in 2 provincial hospitals	Dedicated theatres in 2 provincial hospitals	

LOW VISION

Activity	2013	2014	2015	2016	2017
General public awareness on Low Vision	To increase the low vision clients from 5% to 30% clients of low vision. Constant mass media publicity regarding availability of services	40%	60%	80%	90%
Human Resource Ophthalmologist Mid Level (OT/Nursing/) Supportive teams	Training / awareness of health and welfare providers Ophthalmologists/ ophthalmic surgeons, optometrist and OTs Training Low Vision Clinic nurses in maintaining records and inventories. LV modules to be incorporated into, undergraduate, Post graduate, OT's, nursing and PHW courses. Establishment of cadre positions for Councillors for LV clients under the MoH	Placement of One trained OT in refraction and low vision assessment in all II & III eye units Training and continuous education s programs for LV trained OT's. Raising of awareness on disability, especially vision impairments among directors of provincial and district education institutions, teachers and special education teachers.	Inclusion of primary school teachers in LV support. low vision technologists to be continuously exposed to LV seminars and meetings. opticians training	placement of one trained occupational therapist for each province LV recognised as a special entity in eye care with specific cadre positions for doctors and OT's.	Evaluation of HR and LV acceptance as a subdivision within the professionals in Ophthalmology. all Ophthalmologists in SL support and encourage the functioning of the LV clinics.
Devices	all LV clinics have adequate stocks of LV devices	Maintainace and supply of devices. Internalized into the MOH.	production of devices	full range of products- manufacture/maintena nce	
New units	separate compound/ provision of sufficient space/room for lv at secondary units	Monitoring and evaluation of units	All telephones in LV clinics to be absorbed by the MOH and maintenance and running of web site.	all provincial hospitals	all eye units
CHILDHOOD LV	Creation of appropriate environment in schools for LV students. Provision of LV devices and other basic requirements Strengthen linkages between LV care givers, MOE and MO,SS. Continuous provision of Low vision equipment and devices Provision of all accessibility options at Low vision clinics and resource centres Good evaluation system with follow up at both education ministry and IIIry care unit. inclusion of all children including international schools	Resource centres have all accessibility options 80% enrolment in LV clinics of LV children.	students with LV have appropriate assistance to continue their education	Fulfil all requirements for higher studies. Vocational training	
.Adult LV and rights of the visually disabled	Telephones and internet facilities Access to all buildings. Disability access to all eye clinics in the country	LV clients Registered at LV clinics. Clinics having disabled friendly access. number of LV adults in employment. to help and support the MOE in fulfilling the rights of the low vision child in schools	vocational training	International links to be established regarding LV. private sector	every ware

DIABETIC RETINOPATHY

Specific Objectives	2013	2014	2015	2016	2017
Screening	Screening all diabetics visiting Eye units	To examine the eyes of at least 90% of known diabetics attending medical in the government sector	All diabetics and high risks will be screened	All people above 40 will be screened	Provision of a screening chart
Infrastructure Development	Vitreo retina services Provision of equipment to selected places Necessary equipment i.e. laser, Vitrectomy Fundus camera, fluorescine angiography	. Web based data system in place with referrals and sharing of knowledge between units freely functioning. Short waiting lists for V/R surgeries. Making sure Bio medical engineering unit have the necessary spares in hand.		Develop networking between the district hospitals and the provincial district hospitals for referring patients with diabetic eye disease. Development of training manual for detection of diabetic retinopathy Negotiating with suppliers to provide equipment at lower cost considering the requirements of the country.	All Ophthalmologist manned peripheral units are providing diabetic screening services by 2020 Provision of necessary human resources at the units Development of a standard equipment list acceptable to College of Ophthalmologists and MOH.
Human Resource	Sub speciality course conducted with Post Graduate Institute of Medicine	Making sure Bio medical engineering unit has trained personnel to repair the equipment	Mid level cadre positions to be developed for D/R screening		
Primary eye care workers- public awareness programmes	Developing linkages with local NGOs, media, campaigns and other groups for raising of awareness	2000 PHC workers in the country have knowledge on D/R and educate the public regarding D/R screening		Refresher workshop for Ophthalmologists in fundus examination with 90D lens and staging	training in Medical Retina as part of training
Awareness	Public aware of Diabetes can cause retinopathy and understands importance of D/R screening. Raising of awareness amongst ophthalmic staff, medical officers and general practitioners about blindness due to diabetic retinopathy Training of OTs about diabetic retinopathy	Awareness raising among consultants, policy makers and media through workshops and seminars. Conducting regular awareness programs specially in collaboration with Physicians to the Diabetic clinic attendees regarding D/R.	Refresh Awareness and in disease management	Refresh Awareness and disease management	

GLAUCOMA

No	Category	2013	2014	2015	2016	2017
1	Increase awareness and training for Identified groups of medical Para - medical staff in the respective areas	Uva and East	Central and Wayamba	North		
2	Raise public awareness among the community (Continuation)	Glaucoma Week TV and Radio adds	Glaucoma Week TV and Radio adds	Glaucoma Week TV and Radio adds	Glaucoma Week TV and Radio adds	Glaucoma Week TV and Radio adds
3	Provision of tool kits to all trained staff for basic screening.(Direct Ophthalmoscope)	Direct Ophthalmoscope 100	100	100	100	100
4	Developing an effective referral system to the II ^{ry} eye care levels and record keeping	National Eye Hospital	All teaching	All DGHs	All Eye Units	
5	Upgrading the existing glaucoma clinics in the National Eye Hospital and Centre for Sight	GDX,Ecc/OCT/HVF Colombo	GDX,Ecc/OCT/HVF Kandy	GDX,Ecc/OCT/HVF Galle	GDX,Ecc/OCT/HVF Jaffna	GDX,Ecc/OCT/H VF Anuradhapura
6	Setting up special Glaucoma unit in collaboration with PGIM and the College of Ophthalmologists		Inclusion of Special interest in Glaucoma to PGIM	Glaucoma unit in EHC and Kandy	Glaucoma Units in two Teaching Hospitals	Glaucoma Units in South and North Provinces
7	Setting up special glaucoma investigating compounds within each peripheral eye unit	Up grading District General Hospitals/ Infrastructure				
8	Provision and maintenance of diagnostic instruments to all identified II ^{ry} and III ^{ry} Eye care Units		Provision of Diagnostic Instruments-All DGHs		All Eye units	
9	Refresher / upgrading programmes for ophthalmologists to perform filtration Surgeries/Laser Other Treatment protocols	6 weeks training or Fellowship for 1	6 weeks training or fellowship for 2			
10	To make available affordable new generation Glaucoma medication in the Teaching and District General Hospitals	Prostaglandins in EHC and Kandy	To all teaching hospitals	To all District general Hospitals	To all 2ry eye units	
11	Celebration of World Glaucoma Week/month	Southern Province	Central Province	North Central Province	North Western Province	Eastern Province
12	Inclusion of Glaucoma Screening in Medical Clinics and Diabetic Clinics	Western Sabaragamuwa	Uva North	Central Wayamba	East	

5 YEAR SRI LANKA PROGRAMME PLAN: OUTPUTS/OUTCOMES AND TARGET SUMMARY (2013 – 2017) DISEASE CONTROL

Objectives/outcomes	Targets					
		2013	2014	2015	2016	2017
Diabetic Retinopathy	-	-			1	1
Known Diabetics to be screened and treated appropriately to prevent vision loss from DR	At least 90% of known Diabetics in seven units	At least 25%	At least 30%	At least 50%	At least 75%	At least 90%
Glaucoma						
Glaucoma screening attending government hospitals age above 40	100%	10	25	50	75	100
Refractive Error and low vision	1					
Coverage of adult population	At least 90%	At least 50%	At least 60%	At least 70%	At least 80%	At least 90%
Adults with Low Vision to be provided with low vision care	At least 75%	At least 15%	At least 25%	At least 35%	At least 50%	At least 75%
Cataract	1					
Awareness and braking barrios in community	50%	55%	60%	65%	75%	At least 90%
Reaching unreached - camps	30%	40%	50%	75%	90%	Regular camps all Island
Childhood Blindness						
Parental Awareness and School Education	35%	45%	55%	65%	75%	At least 90%
Genetic counselling and availability of services	50%	60%	70%	75%	85%	90%
Providing Children with Low Vision with low vision care	100% of children with Low Vision	At least 25%	At least 35%	At least 45%	At least 75%	100%

RESEARCH

Disease Area	Subject	Year of Commencement
Blindness	National Blindness Survey	2013
Glaucoma	Annual Glaucoma Prevelance Survey	Annually
PEC		2015
Intervention		
Medicines		

REHABILITATION

Objectives/outcomes	Targets	2013	2014	2015	2016	2017
Orientation and Mobility	At least 75% of the LV to receive training in O&M	10%	At least 20%	At least 35%	At least 60%	At least 75%
Increasing the number of low vision /blind children enrolled in the main stream schools (Inclusive Education)	Increase by at least 100% each year	60%	Increase at least by 90%	Increase by 100%		

HUMAN RESOURCES

Objectives/outcomes	Targets	Physical Plan by Year				
		2013	2014	2015	2016	2017
National level						
Training of Maintenance & Repair Technicians	25 Bio Medical Technicians	5	5	5	5	5

Optical Work Shop? NO and Recruited	15	3	3	3	3	3
Train in local production of eye drop	4		1	1	1	1
Training and awareness of OTs/Private sector	500	100	100	100	100	100
Training and awareness of paediatric tram on Childhood blindness	1000	200	200	200	200	200
Tertiary / Secondary level			1	l		·
Training of OPHTH in sub-specialities - Paediatric Ophthalmology	4	1	1	1	1	
Training of Community Ophthalmologists	5	1	1	1	1	1
Training of Ophthalmic Nurses	500	100	100	100	100	100
Training of additional 150 Ophthalmic Technologists	150	30	30	30	30	30
Training of 24 orthoptists	16	8	8	-	-	-
Appointing councillors	4	4				
Training of occupational therapists in low vision at four tertiary care centres	4	4				
Cataract surgeons skills development in phaco- emulsification (PECS) or small incision cataract surgery (SICS)	50 ophthalmologists	10	10	10	10	10
Primary level			1		1	•
Training of Primary Health Care Workers	3500	700	700	700	700	700
Training of school teachers in Vision Assessment	5000	1000	1000	1000	1000	1000
Rehabilitation			1			
Train master trainers for LV support	4		1	1	1	1
Train special education teachers	1000	200	200	200	200	200
Train a local special education teacher as a master trainer	9	0	3	3	3	0
Train master trainers in Orientation & Mobility and Activities of Daily Living	4	0	1	1	1	1

INFRASTRUCTURE AND EQUIPMENT

Objectives/outcomes	Targets	Physical Plan by Year				
		2013	2014	2015	2016	2017
Vitreo Retinal Unit	6 new units	1	1	1	1	2
Cornea and Anterior Segment	03	1	1	1	-	-
Orbit	03	1	1		1	-
Secondary eye care units	20 upgraded units	2 new	2 new	4 new	4upgraded	6 upgraded
Optical workshops	4	1	1	1	1	
School of Ophthalmic technology	1		1			
Low Cost Eye Drops production units	4	1	0	1	1	1
Mobile Unit	1	1	-	-	-	-
Official vehicle		Preparatory work	1	-	-	-
Research and Resource Centre	2		Colombo		Kandy	

ANNEXES PRIMARY EYE CARE KIT

Primary Eye Care Kit

Equipment – Vision Testing Charts for distance and near vision, Tourch Other supplies – Eye pads Eye dressing and Bandages

RECOMMENDED EQUIPMENT LIST FOR TERTIARY EYE CARE UNIT

Outpatient

	patient	
1	Vision testing Drums	5
2	Trial Frames	5
3	Trial lense case with Jackson cross cylinder and near vision chart	5
4	Prism bars	1
5	Color vision chart	1
6	Ophthalmoscopes	4
7	Retinoscopes	5
8	Focimeters	1
9	Indirect Ophthalmoscope with lenses (20D, 25D)	1
10	78D, 90D lenses	1
10	Slit lamp & applanation tonometer	4
11	Visual Field Analyser	1
12	Gonio lenses	1
13	3 Mirrors	1
14	Keratometer	1
15	Children vision testing charts	1
16	Torches	3
17	A Scan	1
18	B Scan	1
19	Comprehensive Low vision center with the standard equipment	1
20	Yag Laser	1
21	Argon Laser	1
22	Endo Laser	1
23	Fundus angiography unit	1
24	Photo Slit lamp	1
25	Slit lamp with teaching attachment	1
26	Indirect ophthalmoscope with teaching attachment	1
27	Corneal topography unit	1
28	Portable slit lamp	1
29	Perkins tonometer	1
30	Dioade laser	1
31	Orthoptic Instrument Set*	1
32	OCT machine (only for teaching hospitals)	1
33	GDX machine (only for teaching hospitals)	1
		•

Operation Theatre:

1	Mini Auto Claves	3
2	Instrument trolleys	4
3	Cataract set	4
4	Operating lights, mobile one	2
5	Operating Microscope (with teaching attachment)	2
6	Operating tables	2
7	Operating Chairs	4
8	Stools	4
9	Surgical instruments as per the requirements of the sub specialties.	
10	Phaco Machine	1
11	Vitrectomy Machine	1
12	Cryo Machine	1
13	Bipolar diathermy	1
14	Drill with saw and wire	1
15	Endoscope	1
16	Trabeculectomy set	2
17	Keratoplasty set	1
18	R D Surgery Set	1
19	Chalazion set	1
20	DCR set	1
21	Squint set	1
22	Orbital/Oculoplasty	1
23	Equipment required for general Anesthesia	

* Orthoptic Instrument Set

1	Pair or horizontal and vertical prism bars	1
2	TNO Stereotest	1
3	Frisby Stereotest	1
4	Lang No. 2 Stereotest	1
5	Bagolini striated glasses	1
6	Worth's lights wall mounted	1
7	Worth's light macular 4 dot	1
8	Diplopia goggles	1
9	RAF binocular gauge	1
10	Franceschetti Maddox Rod	1
11	Set of 16 loose prisms	1
12	Romanes occluder	1
13	Eustace pinhole occluder	1
14	Lang fixation bar	1
15	Lang fixation cube	1

16	Fixation bar	1
17	Pen torch	1
18	Oculus Children's half-eye trial frame	1
19	Occlusion glasses	1
20	Kay 3m book set	1
21	Set of 3 fixation targets	1
22	LogMAR crowded test	1
23	Cardiff Cards	1
24	Toys	
25	Fresnel Prisms 1-30 dioptres (17strenghs) X 2	1

REQUIRED EQUIPMENT AND INSTRUMENTS FOR SECONDARY EYE CARE UNITS

Outpatient

1	Vision testing Drums	4
2	Trial Frames	4
3	Trial lenses case with Jackson cross cylinder and near vision chart	4
4	Prism bars	1
5	Colour vision chart	1
6	Ophthalmoscopes	2
7	Retinoscopes	4
8	Focimeters	1
9	Indirect Ophthalmoscopes with lenses (20D, 25D)	2
10	78D and 90D lenses	
11	Slit lamp & applanation tonometers	2 to 3
12	Visual Field Analyser	1
13	Gonio lenses	1
14	3 Mirrors	1
15	Keratometer	1
16	Children vision testing charts	1
17	Torches	4
18	A-Scan	1
19	Low vision assessment kit and devices	1

Operation Theatre:

1	Mini Auto Claves	2
3	Instrument trolleys	4
4	Phaco Machine	1
5	Cryo Machine	1
6	Bipolar diathermy	1
7	Cataract sets	4
8	Trabeculectomy set	1
9	Keratoplasty set	1
10	Lid surgery sets	1
11	Chalazion set	1
12	DCR set	1
13	Squint set	1
14	Operating Microscope	1
15	Operating tables	1
16	Operating Chairs	2

ESSENTIAL OPHTHALMIC DRUGS

Drops/Oinment	Drops/oinment
Tetracycline 1%	Atropine 1%
Chloramphenicol	Cyclopentalate1%
Gentamycin	Tropicamide 1%
Ciprofloxacin	Adrenalin
Gentamycin Inj	Lidocane
Netilmycin	Xylocane
Povidone Iodine	Propacane
Pilocapine(Reverse)	Fluorescein dye
Predisolone1%	Acetozolamide
Hydrocortisone	Predisolone
Depomedrol Inj	Vit A
Dexamethasone	Beta blockers
Prostoglandin analogs	NSAIDs
Viscoelastics	

GUIDELINES DEVELOPED AND AVAILABLE FOR EYE CARE PROFESSIONALS

Cataract Surgery

ROP Screening

Glaucoma

Diabetic Retinopathy

School Vision Screening

Driving Licence

NATIONAL VISION 2020 STEERING COMMITTEE

National Focal Point 1 seat Focal points 6 seats Community Ophthalmologist 3 seat **PDHS** 9 seats Provincial Eye Surgeons 9 seats MoH 5 seats MOL (Social Welfare) 1 seat MOE (Education) 1 seat WHO (National office, WR) 1 seat

INGDO/National NGDO/Charity societies 1 seat for each

College of Ophthalmologists4 seatsSchool of ophthalmic Tech1 seatMinistry of Education1 seatAny other invitee/s1 seat

OFFICE BEARERS OF THE VISION 2020, SRI LANKA

National Focal Point

Dr. P. G. Mahipala – Director General of Health Services,

Ministry of Health

Focal Points

Dr. Champa Banagala – Cataract

Dr. Mangala Gamage – Primary Eye Care and Childhood Blindness

Dr. Muditha Kulathunge – Glaucoma Dr. Saman Senanayake – Low Vision

Dr. Binara Amarasinghe – Diabetic Retinopathy

National Coordinators

Dr. Kapila Edusooriya Dr. Asela Abeydeera Dr. Ahamed Jeza

Secretaries to the National Steering Committee

Dr. K.A. Salvin

Dr. Maduwanthi Dissanayake

VISION 2020 NATIONAL SECRETARIAT - MINISTRY OF HEALTH

•	National Focal Point /Head of the Secretariat	-	01
•	Community Ophthalmologists	-	03
•	Accountants Officer	-	01
•	Secretary / Admin	-	02
•	Office Assistant	-	01
•	Driver	_	01

VISION2020 REGIONAL OFFICE – KANDY

•	Community Ophthalmologist	-	01
•	Project Officer	-	01
•	Finance Assistant	-	01
•	Driver	_	01

VISION 2020 URBAN EYE CARE OFFICE - COLOMBO

Project Officer - 01
 Project Assistant - 01

ROLES AND RESPONSIBILITIES OF THE NATIONAL VISION 2020 SECRETARIAT, SRI LANKA

- To facilitate Interaction with and between relevant Ministries, officials, focal points, College of Ophthalmologists and NGOs (both local and international)
- To facilitate the work of V2020 steering committee and Implementation of decisions made by the committee for implementation of Vision 2020 National Plan
- To Facilitate disbursement of Funds to individual projects and submission of narrative and financial reports
- To Undertake Project and Financial monitoring and evaluation

CONTACT DETAILS

1. Office of the Director General of Health Services

2nd Floor

Ministry of Health

Colombo

Email dr.mahipala@gmail.com

2. The National Secretariat – Vision 2020

Room No 37 A

Ministry of Health

Colombo

Sri Lanka

TP/ Fax +94 11 2693744

E mail vision2020srilanka@gmail.com

3. Vision 2020 Urban Eye Care Office – Colombo

1st Floor

National Eye Hospital

Colombo

TP/Fax - +94 11 2693977

Email <u>urbaneyecare.v2020@gmail.com</u>

4. Vision 2020 Regional Office – Kandy

Center for Sight

General Hospital (Teaching)

Kandy

TP/Fax +94 81 2204725

Email kandyuecp@gmail.com

5. College of Ophthalmologists of Sri Lanka

Ground Floor

National Eye Hospital

Colombo

TP/Fax +94 11 2693924

Email ophsli@gmail.com