SRI SANKARADEVA
NETHRALAYA

SSDN COMMUNITY VISION FOR SIGHT

MISSION: INTEGRATED PEOPLE CENTERED EYE CARE FOR ACHIEVING AVOIDABLE BLINDNESS FREE VILLAGES THROUGH SRI SANKARADEVA NETHRALAYA EYE CARE CENTER APPROACH

Last man connectivity.
Integration of primary health care and primary eye care.
Intervention for avoidable blindness free villages in target areas of Assam

VISION DOCUMENT 2026.
PROJECT AND ACTION PLAN

Healthy lives and promotion of wellness for every life

Community project undertaken by Sri Sankaradeva Nethralaya.
Commemoration of 75 years of Independence of India

Dr. Harsha Bhattacharjee
President, Sri Sankaradeva Nethralaya

GOVERNOR
ASSAM

RAJ BHAVAN
GUWAHATI

Prof. Jagdish Mukhi

MESSAGE

It really gives me immense pleasure to learn that Sri Sankaradeva Nethralaya expanding its community reach across our society has developed SSDN Community Mission for Sight and Preventable blindness free villages. The hospital in view of this is releasing a vision document.

Avoidable and preventable blindness have been a major health concern in our society. Our people because of inadequate awareness or sometimes penury fail to take appropriate steps to keep this health hazard a bay. It is really heartening that Sri Nethralaya declared 178 villages free from avoidable blindness in Sonapur area.

As a continuum of its community outreach, the hospital on the occasion of 75 years of India's independence has developed SSDN Community Mission for Sight and Preventable blindness free society across 1565 villages. A vision document incorporating innovative ways for protecting and providing 'vision' to our people is being published.

I convey my best wishes to Sri Sankaradeva Nethralaya in its mission and vision. May it attain its desired objectives in the service of human kind.

Dated: August 16, 2022

(Prof. Jagdish Mukhi)

ড° হিমন্ত বিশ্ব শর্মা
Dr. Himanta Biswa Sarma

সত্যমেব জয়তে

মুখ্যমন্ত্রী, অসম
Chief Minister, Assam

Dispur
31 Shravana, 1429 Bhaskarabda
17th August, 2022

MESSAGE

I am happy to learn that Sri Sankardev Nethralaya has adopted 1600 villages, aimed at making residents of these areas free from "avoidable blindness" within the next four years.

Every year, a large number of Indian citizens lose their eyesight, some partially while others fully. Loss of vision doesn't lead to mental agony alone. It also puts financial strain on the one who loses vision and his/her family members. Some of the most common causes of blindness, as per various studies, can be attributed to medical conditions such as cataract, glaucoma, age-related macular degeneration, among others. However, the saving grace here is a significant percentage of cases of blindness are, in medical sciences terminology, "curable" and "avoidable", if timely intervention is ensured. Sadly, owing to ignorance, lack of affordable treatment options, among others, many unfortunate souls forever lose their eyesight, devoid of one of the most beautiful senses.

Sri Sankardev Nethralaya, ever since its inception in 1994, has been providing yeoman services in the field of human visual health. Nearly three decades of selfless services have made Sri Sankardev Nethralaya a household name in the field of eye-care in the region.

The adoption of villages with the noble aim of preventing "avoidable blindness" is a commendable humanitarian measure, and in conjunction with the ethos and philosophy of the institution. This would definitely raise the reputation of this institution to a pedestal higher than ever before.

I extend my best wishes to everyone associated with Sri Sankardev Nethralaya on this noble endeavor.

(Dr. Himanta Biswa Sarma)

Keshab Mahanta

MINISTER
Health & Family Welfare,
Science & Technology,
Information Technology

MESSAGE

I am happy to know that commemorating 75 years of India's independence, Sri Sankaradeva Nethralaya has adopted a project in a mission mode to implement integrated people centered eye care in more than 1700 villages in 12 districts of Assam where eye care is needed. In fact, primary prevention of disease is the most important way of maintaining health and wellness. Not only that it is the most cost effective investment in public health care. I wish a success in their endeavor.

Keshab Mahanta
(Keshab Mahanta)

Office Address: Block A, Ground Floor, Janata Bhawan, Guwahati, Assam 781006
Tel: +91 361-2237007 (Fax)/ 2237063 (O), +91 9435060006, +91 9954060006 (Mobile)
Email: mhfwofficeassam@gmail.com

(From left to right Mr. R.P. Kakoti, Dr. G.C. Kuri, Dr. M.J. Barman, Dr. H. Bhattacharjee, Prof. Jagdish Mukhi, the Hon'ble Governor of Assam, Dr. K. Bhattacharjee, Dr. B. Saikia and Dr. B.M. Agarwal)

Release of Vision Document
SSDN Community Vision for Sight 2026
by His Excellency The Hon'ble Governor of Assam Prof. Jagdish Mukhi
on 12th Day of August 2022 at Raj Bhavan. Guwahati

Table of contents

Foreword…… 11
Acknowledgement …… 13
List of Acronyms and abbreviations……. 15
Executive summary…… 17

1. Blindness: Impact on life……... 19

2. Need and scope of community base eye care…… 20
   - Geopolitical situation, uncertainty in Assam
   - Assam population, livelihood challenges, affordability, resource allocation, limitation of government eye care and developmental issue
   - Blindness scenario in Assam

3. Control of blindness. Integration of PEC and PHC……..…. 22
   - Essential elements of PHC
   - Broad concept of PEC
     - Prevention of potentially blinding eye disease using PHC elements…
     - Identification and treatment/referral of individual with treatable cause of blindness
     - Capacity of Accredited Social Eye Care Activist (ASECA)
     - Activities of the Accredited Social Eye Care Activist (ASECA)

4. PEC delivery in India and Assam…….. 24
   - Fixed facility PEC
   - Mobile eye care and tele-ophthalmology

5. Self sustainable eye care…… 24
   - Principles and approach of resilient and sustainable eye care with equity and open access.
   - Cost containment measures
   - Cost subsidy mode for economic equilibrium
   - Time driven activity based costing methodology

6. Community eye care activities: SSDN since 1995…… 26
   - Capacity of SSDNICO
   - Pilot community eye project: Sonapur, Assam. OEU collaboration
     - Sonapur overview
     - Livelihood
     - Model of the community pilot project (HBCEHP)
     - HBCEHP aim
     - Project outcome
     - Project summary
     - Project cost

7. SSDN Community Vision for Sight-2026.…… 34
Eye care human resource and infrastructure, Assam
Strength, weakness and policy
Vision objectives
Project implementation
Project review methodology
Methods of training
Site selection, service area and SSDN Eye Care Center (Integrated People Centered Eye Care)
Action plan
Cluster based annual action plan
Field activities
Community engagement activities
SSDN Eye Care Center (Integrated People Centered Eye Care) care
SSDN Eye Care Center (Integrated People Centered Eye Care) activities
Hospital care
Surveillance and audit methodology
Method of declaration of blindness free villages
Sustainability measures
Assessment of effective cataract surgical coverage
Assessment of cataract surgery outcome
Assessment of refraction error coverage

8. Budget SSDN Community Mission for Sight……... 48

9. Special step for maintaining project area sustainably free from avoidable blindness... 50

10. Conclusion……... 50

11. Reference ……. 51

12. Annexure ……. 53

Foreword

Blindness is preventable at least in 80% situations if not more. Therefore, this issue of mankind wellness needs serious attention and action. In near future due to population growth and aging, behavioural and lifestyle changes and rapid urbanization, issue of blindness will graduate to further complexity and will be exposed to further challenges. Presently in the field of eye care important challenges are inequality in access and lack of integration of eye care with health care system. Every human needs quality eye care without experiencing financial hardship. Considering these facts SSDN has made a blue print of SSDN Community Mission for Sight on the basis of 25 years of experience in the field of community eye care. It is an integrated people centered eye care service including preventable vision impairment and blindness (*This message was endorsed by the 73rd World Health Assembly resolution. WHA 73.4 in 2020*). To prepare the document knowledge and recommendation from World Health Organization and National Programme for Control of Blindness &Visual Impairment, Govt. of India has been considered. The mission is a step by step approach for achieving preventable and avoidable blindness free villages in the community service area of SSDN in Assam.

Acknowledgement

The author of this document would like to thank the Operation Eyesight Universal and its members for orienting SSDN Institute of Community Ophthalmology on Hospital Based Community Eye Health Programme and for their active guidance in implementing the Sonapur project.

The author acknowledges and expresses profuse thanks to WHO, NPCBVI and others as many resources and input from their publications have been incorporated in this document.

The author is also thankful to other valuable collaborators namely ORBIS, HelpMeSee, Light for the World, Mission for Vision, Jiv Daya Foundation and others for their assistance in the community activity of SSDNICO and generating experience in community service.

The author wishes to express sincere thanks to Dr. Kasturi Bhattacharjee, Dr. Kalyan Das, Dr. Pankaj Bhattacharyya, Dr. Amjad Ali, Dr. Shyam Sundar Das Mahapatra, Dr.Suklenmung Buragohain and Dr. Dipak Soni for academic and technical support. Mr. Randip Prasad Kakoti, Mr. Tarit Das and Mr. Anupam Goswami for administrative support. Mr. Dipjyoti Medhi and Mr. Upam Handique for the field programme. Mrs. Geeta Baruah (Member, Ethics Committee, SSDN & Retired Principal, Handique Girls College) for preparing the document. Dr. Pragya Bhattacharjee for final proof reading. The author also acknowledges Mr. Kishore Kumar Choudhury, Mr. Syed Sagir Rahman, Mr. Prasanta Kumar Sarma, Mr. Jyotirmoy Sarma, Mr. Rajiv Daloi and Kristi Borah for secretarial assistance.

Finally the author appreciates the team of SSDN Eye Care Center (Integrated People Centered Eye Care) optometrists and the team of ASECAs for their valuable input from the field.

The author is specially thankful to Mr. Santanu Barman for taking the pain of typing and editing the manuscript.

Acronyms

ANM	-	Auxiliary Nurse Midwife
ASHA	-	Accredited Social Health Activist
ASECA	-	Accredited Social Eye Care Activist
AWW	-	Anganwadi Worker
BPL	-	Below Poverty Line
BDO	-	Block Development Office
CBAAP	-	Cluster Based Annual Action Plan
CHC	-	Community Health Center
CME	-	Continuing Medical Education
EMR	-	Electronic Medical Record
GNI	-	Gross National Income
HBCEHP	-	Hospital Base Community Eye Health Programme
ICDS	-	Integrated Child Developmental Service
IMF	-	International Monitory Fund
IOL	-	Intra Ocular Lens
IPEC	-	Integrated People centered Eye Care
KAP	-	Knowledge Attitude Practice
NER	-	North Eastern Region
NGO	-	Non Governmental Organization
NPCBVI	-	National Programme for Control of Blindness & Visual Impairment
OEU	-	Operation Eye sight Universal
PEC	-	Primary Eye Care
PHC	-	Primary Health Center
RAAB	-	Rapid Assessment of Avoidable Blindness
RBSK	-	Rashtriya Bal Swasthya Karyakram
SDG	-	Sustainable Development Goal (of United Nation)
SMART	-	Specific, Measurable, Achievable, Realistic and Time bound
SSDN	-	Sri Sankaradeva Nethralaya
SSDNECC	-	SSDN Eye Care Center (Integrated People Centered Eye Care)
SSDNICO	-	Sri Sankaradeva Nethralaya Institute of Community Ophthalmology
SWOT	-	Strength, Weakness, Opportunity and Threat
TWG	-	Technical Working Group
UN	-	United Nations
WHO	-	World Health Organization

Executive summary

India has disproportionately a higher burden of blindness[1]. Blindness is equated with poverty. According to IMF World Economic Outlook (2021) per capita income in India is 2,191$, approximately only eight times greater than world's poorest country[2]. Per capita annual earnings of the people of Assam is approximately INR 43,438 (against national average INR 86,659). The incidence of blindness in lower income countries is three times more than higher income countries. It makes people of Assam more vulnerable to develop blindness. Average 2/3 of eye patients cannot afford treatment and it is a barrier to address the issue of inequality in eye care.

Middle income/low income societies and underserved population like women, rural community, indigenous people, migrants and people with various disabilities are vulnerable groups to suffer from avoidable blindness. For preventing avoidable blindness and vision impairment public health strategies and clinical intervention (prevention, treatment, rehabilitation) are to be effectively implemented with proper monitoring. Success of eye care service is less in proportion to the ever growing demand of service. There is a gap between the recommended scientific eye care and current practice. The eye care centers, different equipments and trained manpower are not available universally. "Integrated people centered eye care and preventable vision impairment"… to establish this vision plan, resources, effective implementation of the plan and people's participation are vital points.

SSDN Community Mission for Sight has been developed based on our Sonapur project of avoidable blindness free 178 villages and other inputs. Estimated establishment cost for the current project is INR 1.6 cr. The recurrent expenditure towards mobilization and surgery will be INR 3.1 cr. and INR 4.9 cr. respectively every year considering 12000 cataract surgeries annually. We hope to incorporate the expenditure in the annual budget of SSDN by raising donation, collaboration and community engagement.

This health programme has been created identifying the need and aspiration of the people. The community programme for medical and social welfare has been particularly aimed for those who have no access to even affordable eye care. Cataract surgery, glass prescription, school eye health, improvement of knowledge, attitude and practice of the society will be the main thrust areas of action.

It is expected that at the end of four years the service area will be free from avoidable blindness with an attitudinal change in eye health care seeking behavior of the community. System guide of action, intervention, competency framework and performance indicator have been designed accordingly.

1. Bourne RR, Flaxman SR, Braitheraite T, Cieinelli MV, Das A, Jonas JB et al. Magnitude, temporal trends and projection of the global prevalence of blindness and distance and near vision impairment. A systematic review and meta-analysis. Lancet Glob Health 2017;5:e888-97.

2. https://statisticstimes.com/economy/country/india-gdp.php

'India lives in the villages'
Mahatma Gandhi

"Overwhelmingly majority of Indian workforce is in agriculture who contributes close to 60% of India's gross domestic product"

Aim of the document is to build and deliver an excellent, inclusive and self sustainable eye care service in the North Eastern region (NER) of the country in a community based care delivery system and social business economics model, appeasing charity in consciences because prevalence of treatable and preventable blindness is highest in the NER in our country. 2/3 of such patients need free or subsidized treatment mainly because of economic reasons.

1. Blindness: Impact on life

Vision is the dominant and strongest sense created by the brain along with a pair of eyes and important for leading every step of life of an individual. Existence of the world depends on the visual ability of a person. Blindness and visual impairment both are public health problems.

WHO Expert Committee on Health Statistics, depending upon measurement and disability have endorsed two definitions of blindness. One of which is economic blindness. Both the definitions are included in the International Classification of Diseases, Injury and Causes of death[1]. The World Assembly of the World Council for the Welfare of the Blind adopted a functional definition of blindness[2]. At present more than 65 definitions of blindness[3] are there across the world (total blindness, economic blindness, social blindness, etc).

The National Programme for Control of Blindness and Visual Impairment (NPCB&VI), Govt. of India and WHO defined blindness as 'presenting distance visual acuity less than 3/60 (20/400) in the better eye or limitation of field of vision less than 10 degree from centre of fixation'[4]. Largely blindness is preventable.

Distant vision impairment may be mild (vision 6/12 to 6/18), moderate (6/18 to 6/60) or severe (6/60 to 6/36) and blindness (less than 6/36) or inability to count finger at 3mt distance. While near visual acuity worser than N6 (or M.08), at 40cm is termed as near vision impairment. However technically, inability to count fingers from a distance of 6 mtr. or 20 ft. is blindness.

Universal symptom of visual impairment and blindness is difficulty in seeing. Depending upon the time of onset, impact of blindness has different but significant and devastating effects. Congenital blindness or severe vision impairment in children cause delay in motor, language, emotional, social and cognitive development and may have lifelong consequences. School going children with severe vision impairment are exposed to denial, low level of educational achievements and loss of opportunity. As a result quality of life may be compromised. Adult blind person have lower rate of workforce participation resulting to reduction of productivity and suffer from higher rate of depression and anxiety. Blindness in old people may lead to social isolation, difficulty in mobility and walking with increased risk of fall, fractures and early geriatric care. Broadly vision problem is associated with aging and hampers ability of a person in performing natural activities required for daily living or performing any work for which eye sight is essential[3],[5],[6]. Experience of a person of vision impairment varies and depends upon several factors like availability of preventive and curative treatment, access to vision rehabilitation and inaccessibility to information, transport and building.

Blindness is preventable

Eye conditions are universal. Every individual if they survive long enough will experience at least one condition which will essentially warrant eye care. Scientific intervention and appropriate preventive policy together have reduced prevalence of blindness due to aging, nutritional deficiency, infection and childhood causes but inspite of declining prevalence, the total number of blind and eye patients are increasing in the country due to population explosion, several other barriers and economic reason.

Economic impact and burden of vision loss

The estimated global productivity loss due to non correction of vision by spectacles in myopia and presbyopia is US$ 244 billion and US$ 24.5 billion respectively. Vision loss has devastating effects on individual, family and in community level mainly through enhancement of poverty, reduction of employment and overall compromised quality of life. Globally there is estimated relative loss of 30.2% employment and annual productivity loss due to that is US$ 408.5 billion PPP (dollar purchasing power, parity)[7]. In India every year net loss of gross national income (GNI) due to blindness is estimated to be INR 845 billion (Int$ 38.4 billion). Per capita loss of GNI per blind person per year is INR 170,624 (Int$ 7,756). Cumulative annual loss of GNI due to avoidable blindness in India is estimated to be INR 11,778.6 billon (Int$ 535 billion). Annual loss of productivity due to vision impairment is estimated to be INR 646 billion (Int$ 29.4 billion). In past two decades cumulative gross national income loss has increased about three times[8].

2. Need and scope of community based eye care

Geopolitical situation and uncertainty

NER constitutes 7.9% of India's total geographical area where about 3.8% of total population of the country resides. Factually 90% of the border of NER is the international border.

Assam is situated at latitude $24N^0 – 28N^0$ and longitude $90E^0 – 96E^0$ in the global map. Assam is the gateway of India. Total geographical area of Assam is 78,438 km sq, it constitutes 2.4% of countries total geographical area and shelters 2.6% population of the country. 98.4% area is rural. Most of the population leaves in lush valleys of Brahmaputra and Barak. Population density is 398 per km. 3 hill districts (Karbi Anglong, West Karbi Anglong and Dima Hasao) are less densely populated. There are 219 development blocks and 2202 gram panchayats. Forest cover is 26,832 sq km. Total rural population is 2.9 cr. (census 2011). There are thick forests, 800 odds tea gardens, valleys surrounded by mountains and hills, bathed by rivers. Scenic beauty has made this land incredible and a "land of blue hill, mountain and red river". Historically this land was ruled by Ahom dynasty for 600 years. The Mughals could not conquer Assam in spite of several attempts. Assam is a land of unparallel diversity where several ethnic groups with asymmetric history reside in perfect harmony maintaining their own distinct identity, rich heritage, culture, custom, religious belief, language. Both Brahmaputra and Barak valley witness devastating floods every year causing enormous damage to crops, live stock, land and property resulting to miseries large number of people[9].

Before independence, Assam (along with NER) ranked as well connected and integrated economic geographic region of the country in spite of ethnic and biodiversities, challenging connectivity and natural calamity. In the post independent era due to multiple reasons there was dislocation of economic structure and as a result Assam and the entire NER got alienated from the main land of India. The current GDP is 4.02%. In fact till today the NER is confined to a developmentally laggard area in all performance and development indices[10].

Assam: Population, livelihood challenges, affordability, resource allocation, limitation of government eye care and development issue

Major population of Assam is rural (85.56%) and livelihood depends on agriculture which is in fact the backbone of its economy. Most of the farmers are either marginal (67.31%) or small (18.25%). Their life is challenged due to small land holdings, annual severe flood and distress sale. They are poorer in parameters to food, nutrition, affordability of health care, etc in comparison to several other states of the country. As a result after meeting the living expenses with difficulty, minimum or nothing is left for health care, eye care, education and depends on the government welfare[11].

It is estimated that only 20% of the wealth is shared by the general population and maximum about 2.1% of the GDP is allocated for health. Due to poverty and lack of health care infrastructure and services people in the villages and tea gardens are bettering for even primary eye care and health care. Ground reality is ever increasing inequality.

Government PEC and PHC facilities are integrated with several schemes and programmes (mother and child health programme, non communicable disease programme, RBSK, NPCBVI etc.). Social sector welfare programmes run by the government do not cover majority of the poor people. The scope of these programmes are also restricted.

NITI Aayog ranking on the basis of SDG performance Assam ranked 3rd from the bottom (score 57 out of 100)[12]. Notably SDG3 (UN of 2015) depicts ensuring healthy life. Primary eye care goal is to reach the unreached areas of villages and hills. For achieving the goal facility, human resource, equipment, infrastructure and health insurance (health card) are important.

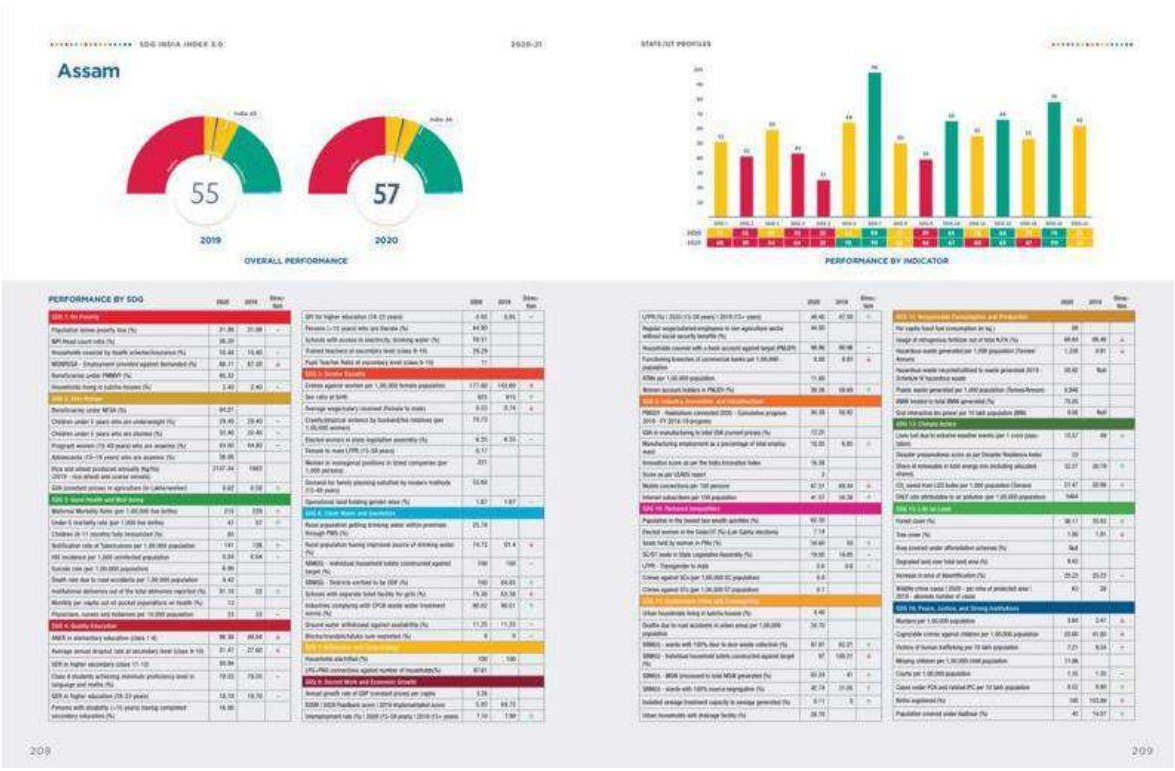


Fig.1: NITI Aayog ranking of Assam

SDG Vision Assam agenda 2030 for transforming economics and social progress of the state distinctly express concern on the burgeoning aspiration of people, leapfrogging of all developmental activities and gap in fulfillment of basic need including health care and eye care[13].

Blindness scenario in Assam

Eye care issues of Assam and Northeast India as a whole are not simple. Various published reports by the government documented high prevalence of blindness (3.03% against national average of 1.99% and vision impairment 15.02%) in Assam. Estimated 92% of such blindness and 50% of childhood blindness are preventable. Remaining 8% blindness is only unavoidable[14],[15],[16],[17].

Poor eye care uptake in the Northeastern region and relatively higher incidence of blindness have been related to poverty and different barriers (like poor health status, doubt about surgical result and recovery, apathy towards good vision, lack of information, poor transport and connectivity, no escort, affordability, accessibility, non availability of service)[18],[19]. Pediatric blindness scenario is also grave[16],[17].

Cataract and uncorrected refractive errors are the major causes of blindness and visual impairment. Blindness can be detected and prevented by early screening and intervention through SSDNECC or IPCEC approach[23].

Prevalence of blindness is fundamentally proportionate to economic development and health spending of the state[20]. Development indices and (SDG3) good health and well being score of Assam is lesser[21],[22]. It explains the reason behind higher prevalence of blindness in the state.

During the last four decades the gap between the service needed and service available is widening. The private eye care providers are trying to bridge this gap. But private eye care is not affordable to the masses. So there is a requirement of affordable/subsidized or charity care.

18.8% of the Indians who are suffering from cataract blindness are the residents of Assam. Overall 40% people of the state have some ophthalmic issues. A pair of glasses and successful cataract surgery together can tackle more than 90% of blindness. Remaining portion blindness is due to glaucoma, various retinopathy, corneal disease, trauma, etc. Some of which are chronic in nature and requires recurrent treatment[9].

Most of the eye care services in our state are located in the urban areas where only 14% population are resides. Due to under performance of PHC and CHC and lack of private facilities even for availing of minor eye care services (glass prescription/minor treatment), a villager has to travel several kilometers to nearby town or city. As a result cost of spectacle/minor treatments for a villager is very high (considering treatment cost and other cost like travel, logistics, loss of wages, etc.)[9],[24].

3. Control of blindness: integration of PEC and PHC

Primary eye care is in the bed rock of prevention strategy of blindness. Without primary eye care in place, only the individuals who present themselves on their own to secondary/tertiary facilities will get treatment. The community at large will not be benefited from modern eye care services and will be left alone. PEC uses the essential elements of PHC. Integration of PEC and PHC will give best possible outcome.

Essential elements of PHC

a. Education concerning main health problems

b. Promotion of food supply and good nutrition
c. Adequate supply of safe water and basic sanitation
d. Maternal and child health and family planning
e. Immunization against major infection disease
f. Prevention and control of local epidemic disease
g. Appropriate treatment of common disease and injuries
h. Provision of essential drugs

Broad concept of PEC

Prevention of potentially blinding eye disease using PHC elements

Improvement of water supply and sanitation by intersectional collaboration between health care workers, public health engineers and environmental sanitary officers.

Similarly utilizing the PHC elements like safe water supply to prevent diarrhea, immunization to prevent infection and measles, promotion of food supply and good nutrition, availability of essential drug to mitigate the dependency on harmful traditional medicine and promotion of maternal and child health can prevent corneal blindness. Corneal blindness results from corneal scarring mainly due to vitamin A deficiency and eye infection. Corneal blindness is an important cause of childhood blindness in the NER[16],[17]. It has been estimated 500 thousand children become blind every year due to corneal scarring.

Identification and treatment or referral of individual suffering from treatable cause of blindness.

Case detection, treatment, referral and monitoring: There are certain eye diseases which when detected early blindness can be prevented by proper treatment and surgery. These diseases can be detected by routine and regular screening by the ASECAs and referring the cases to SSDNECC or the base hospital for proper treatment. ASECAs can also treat minor eye conditions. After the treatment in base hospital or in SSDNECC ASECA should regularly follow up and monitor the case by home visit and ensure use of proper medication as advised and cure the disease. Common causes of redness of eye are conjunctivitis and mild trauma whereas common eye complains are watering and itching.

Cataract blindness: It is estimated that out of 38 million blind people across the world, 20 million of them are blind due to cataract. Almost all these cases can be treated by cataract surgery and intraocular lens implantation. These populations in the community have no means to reach to secondary and tertiary care because of economic reason, ignorance and other barriers.

Capacity of a ASECA

- *ASECA should know the limitations*
- *How to diagnose/suspects the diseases listed above and treat common conjunctivitis*
- *When to begin treatment and refer*
- *Which condition leads to red eye. Which red eye cases should be referred to secondary and tertiary level*
- *Use of tele-ophthalmology*
- *Referral protocol to SSDNECCs*

Activities of a ASECA

- *Door to door screening*
- *Documentation*

- *Case findings*
- *Treatment*
- *Referral to SSDNECC*
- *Escorting to base hospital*
- *Community empowerment*

4. Primary eye care delivery in India and Assam

Broadly two models of primary eye care exist in India namely fixed facility and mobile services.

Fixed facility primary eye care

In this model primary eye care services is integrated within primary health centers and run by the Govt. of India. The primary eye care facilities are located at the community health care level (CHC for one lakh population) or PHC level (for a population of 30,000) without any provision of surgical facility service. 'Vision 2020 the Right to Sight – India' has recommended SSDNECC for every 50,000 population[12]. Paramedical ophthalmic assistant / vision technician is the only key person for providing primary eye care services, refraction and screening of common ocular conditions. For sustainability reason primary eye care has integrated with the existing resource of the PHC or CHC. The National Rural Health Mission Govt. of India is working at architectural correction of health system of India.

Stand alone primary eye care services

Outside the public health infrastructure of the government, stand alone primary eye care through fixed facility and mobile center are widely popularized and accepted for effective primary eye care. Nongovernmental and nonprofit organizations deliver eye care through stand alone model.

Mobile primary eye care and tele-ophthalmology

In this approach equipped mobile van is used with or without tele-ophthalmology facilities. Tele-ophthalmology facility can be incorporated in the SSDNECC with a provision of tele-prescription. SSDNECC can also be connected with the EMR.

5. Self sustainable eye care

Self sustainability is essential for viability and growth. The growth plan is to be tailored according to the need available external funding and internal revenue. Revenue of eye care institution is earned mainly from
Registration and counseling
Surgery charge
Spectacle service
Medicine dispensing
Investigation service
Laboratory service (pathology, microbiology) and
Contact lens service

To increase the revenue proper planning, smart financial management and costing are critical. When the cost of service is reduced and foot fall of patient increases, the viability and growth of the institute become more certain. Eye care service is always under pressure due to inflation and ever increasing aspiration of human resource and patients. An efficient financial management can only establish the equilibrium.

Principle and approach of resilient and self sustainable eye care with equity and excellence

- Collaboration, empowerment and ownership
- High quality, large volume and low cost
- Cost recovery by understanding people's capacity to pay
- Multi tiered pricing
- Wise location of the facility
- Compassionate
- Changing the mindset of ophthalmologist
- Use of high quality cataract surgery to build reputation
- Programme planning for a standardized replicable approaches
- Appropriate technology and appropriate pricing
- Accountability
- Response to consumer's expectations
- Per unit cost as a tool for evaluating efficiency, productivity and quality

Cost containment measures

Continuous organizational process is the strategy to sustain and enhance eye care delivery considering reality of (a) increasing cost due to inflation, (b) advancement of medical technology, (c) changing expectation of professionals, staff and patients. In this process the focal points are

- Protocol based efficient management practice
- Periodic monitoring and fine tuning of the system
- Optimal utilization of human resources, infrastructure and time.
- Adoption of low cost technique without compromising the quality
- Inventory management, good material control, better pricing to control variable cost.
- Elimination of anything that do not contribute to quality, productivity, outcome, patient comfort.
- Building good attitude of staff.
- Systematic and system based approach.

Cost subsidy model for economic equilibrium *(2/3 of our patient requires free or subsidized treatments)*

Income generation and cost optimization are aimed to support the community[17]

Source of income is mainly from

- Income generated from paying patients
- Accessory services (pharmacy, optical)
- Government scheme

Expenditure of the hospital is planned considering

- Replication of facilities
- Variable cost (clinical consumables, stationary)
- Fixed cost (70% of the recurring cost of our institution is fixed)
- (Regardless of level of activity, SSDN has high investment in infrastructure, staffing, salaries, depreciation, AMC, etc.

Fund raised through (i) grants and aid, (ii) CSR funding, (iii) social projects, (iv) accrual interest, (iv) reimbursement and NGO collaboration is used to meet the cost for

- Free and subsidized treatment

- Infrastructure development
- Training needs
- Growth
- Expansion

Time driven activity based costing measures

Each activity can be broken down into time spent and the resource used. This valuable exercise is critical to identify the key modifiable variables that determines and influences directly or indirectly productivity and the net profit. In time driven activity based costing direct (variable) and indirect (fixed) cost estimate and revenue source, from the services (main hospital as well as outreach SSDNECCs etc) are gathered. The cost per activity is calculated by estimating the portion of ophthalmologist's time dedicated for the 7 principal activities like counseling, surgeries (mostly cataract), spectacle sales, medicine dispensing, investigations, laboratory services, contact lens dispensing. The cost by activity can be reduced by modifying the staff role, infrastructure investment and expansion of service and footfall of patients. Monitoring these activities and appropriate action in time together improves the revenue and ensures self sustenance.

Regular actions using various methodology in the way for growth, development and overall sustainability is the main responsibility of the hospital manager.

6. Community eye care by SSDN since 1995

Capacity of SSDNICO

SSDN is committed to community service and offering assistance to economically underprivileged patients. The community eye care services were inaugurated in 1996 by the then Governor of Assam L.N. Mishra at Bonda. Bonda centre is located at Chandrapur 11.5 Km away from Guwahati in a semi urban setting. Since then up to 2021 SSDN has offered 59,669 number of surgeries at free of cost, & in fact has also arranged free mobilization, logistics, stay, food, medicine and post operative care costing us Rs.49,41,12,338.

SSDN has also extended outreach activities in all the Northeastern states and also is working in collaboration with NPCBVI Govt. of India and other eye care NGOs. SSDN regularly conducts different survey works entrusted by the Govt. of India.

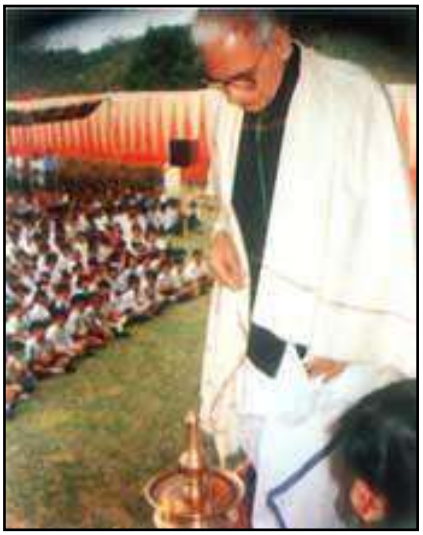


Fig.2: Inauguration of the Bonda center by the Governor of Assam Loknath Misra

The basic approach of community service was case detection through screening camps with NGO and NPCBVI, Govt. of India collaboration and arrangement of medical and surgical treatment. This approach was not effective.

Community service during the period 1996-2008 was mostly through reach-out and reach-in approach. This mode of service was executed through organizing screening camps, case detection, logistics support, two way transport, surgery and medication at free of cost to the beneficiaries. Over the period of time it was realized that in spite of sincere effort to generate awareness and demand for services, and intervention practically we could serve only about 10% of the patients who need eye care in the rural mass.

During this period of time a few fixed facility centers were established by us to serve different identified geographical locations. Different hospitals were also empowered in the region by us through skill transfer, technological assistance and eye surgery by our team in different hilly areas. By realizing the limitations of the present community service a new approach was considered.

Fig.3: Bonda charitable service center

Fig.4: PC Chatterjee memorial hospital

Pilot community eye project at Sonapur, Assam. Hospital Based Eye Health Programme in collaboration with OEU

Sonapur overview

Sonapur Circle of Kamrup Metropolitan district of Assam is situated besides National Highway 37, near the river Digaru. A railway track runs across the land and the Meghalaya plateau is located southeast to the circle. The Digaru river in turn flows to the river Brahmaputra through Kolong river. The circle is constituted by a small town and a number of villages. Predominantly the area falls under rural category. Sonapur town is located 26.12^0 and 91.90^0 east in global map. Sonapur is located 50 mtr above the sea level. The Sonapur town is located 20 km away from the state capital Dispur. In a time zone UTC + 5.30 (IST). Administration wise Sonapur is under Demoria development block having 12 gaon panchayat.

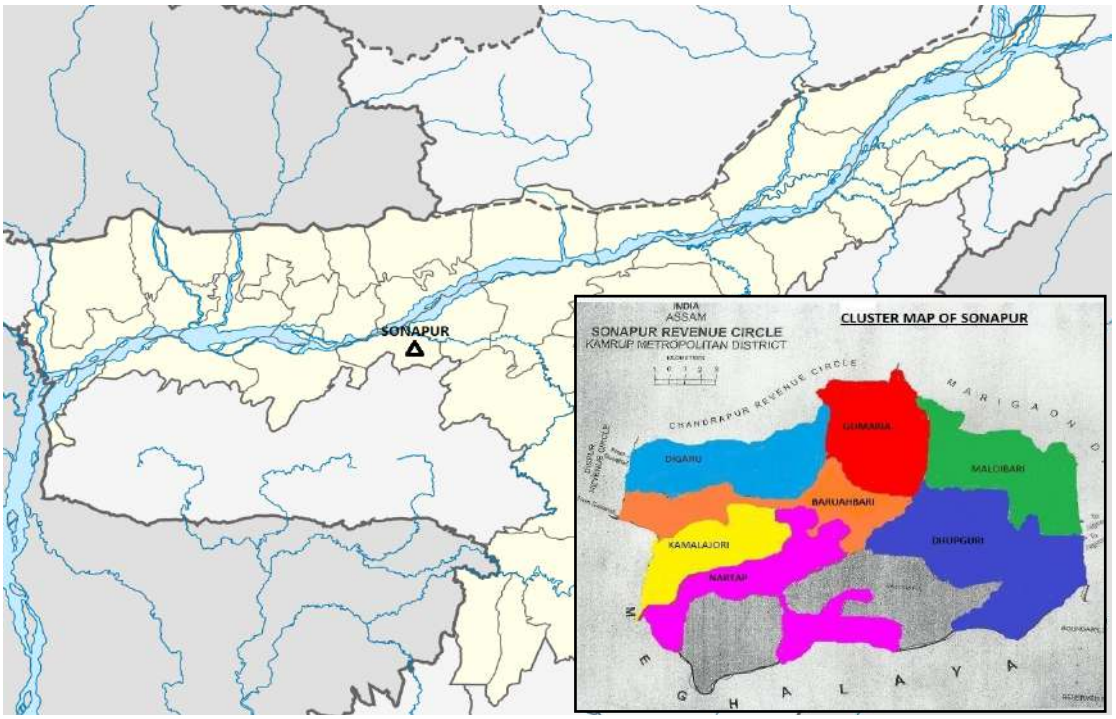


Fig.5: Cluster map of Sonapur project under SSDN Community Mission for Sight

As per census 2011 the total population is 143,371. 10.1% people lives in urban areas and 89.9% lives in rural areas. Total literacy rate is 76.1%. Literacy rate in urban area is marginally higher (82.51% against 76.01%). Schedule cast is 15.4% and Schedule tribe constituted 14.4% of total population. Male and female ratio is 50.8 and 43 respectively. Sex ratio is 971 female for 1000 male while child sex ratio is 982 female out of 1000 male child. 12.6 % of the total population is in 0-6 years age group.

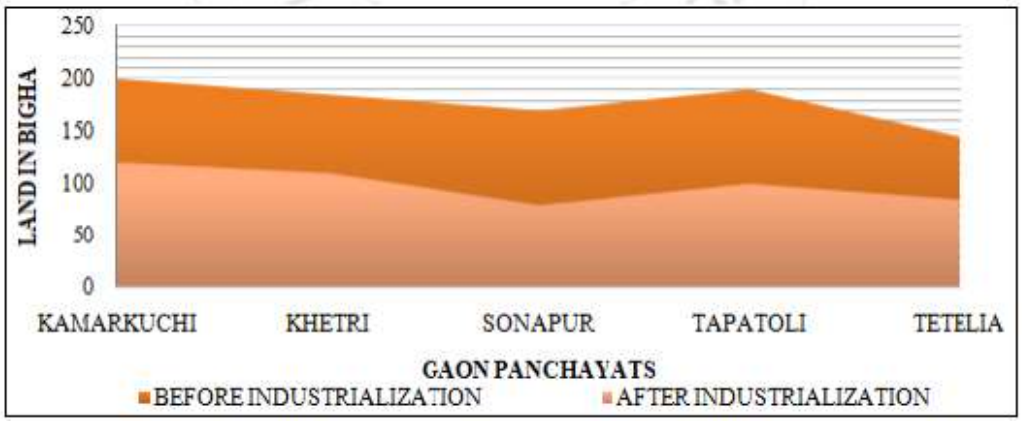


Fig. 6: Status of Tribal Land before and after Industrialization Source: Field Survey

Total area included in the SSDN project is 122.64 sq km and constituted by hill as well as plain area with average population density 1223 people per sq. km. in Sonapur town. The clusters covering the plain areas are Baruabari, Maloibari, Dhupguri. Similarly Nartap (extreme terrain), Digaru, Kamalajari, Gumaria cluster are the hill areas under the project. The other areas are not included in the project. Assamese, Tiwa, Boro, Rabha, Deori, Garo and Karbi communities are the major people.

Livelihood in Sonapur

Occupational Distribution of Working Population in Dimoria and Assam (1991) in Per Cent			
Sl. No.	**Classification of workers**	**Dimoria**	**Assam**
i.	Cultivators	56.34	50.90
ii.	Agricultural labourer	14.83	12.09
iii.	Livestock, forestry, fishing, hunting and plantation	4.31	10.51
iv.	Mining and quarrying	0.06	0.49
v.	Manufacturing, processing, servicing and repairing in house	0.74	3.11
vi.	Other services	9.63	11.11
vii.	Household and other industries	4.16	0.88
viii.	Construction	1.45	1.57
ix.	Trade and commerce	6.11	6.84
x.	Transport and storage communication	2.37	2.50
	Total	100.00	100.00
Source: Statistical Handbook of Assam 1993, Directorate of Economics and statistics, Government of Assam, Guwahti-6, p. 28.			

Table 1: Showing livelihood of the residents, major occupation – agriculture, general and industrial labour. However the livelihood and occupation is changing along with the time

In Sonapur circle 41.5% people (main working group) are engaged in some work activities while 58.5% people have no work to do. 70.5% of the total working group earns 6 months or more in a

year while remaining 29.5% are involved in marginal activities and only earn less than 6 months per year out of various works. The work activities of the working groups include cultivation as owner or co-owner, agricultural labour. Many people are engaged in household and industry as labour and also in various unspecified jobs. Cultivators occasionally do distress selling.

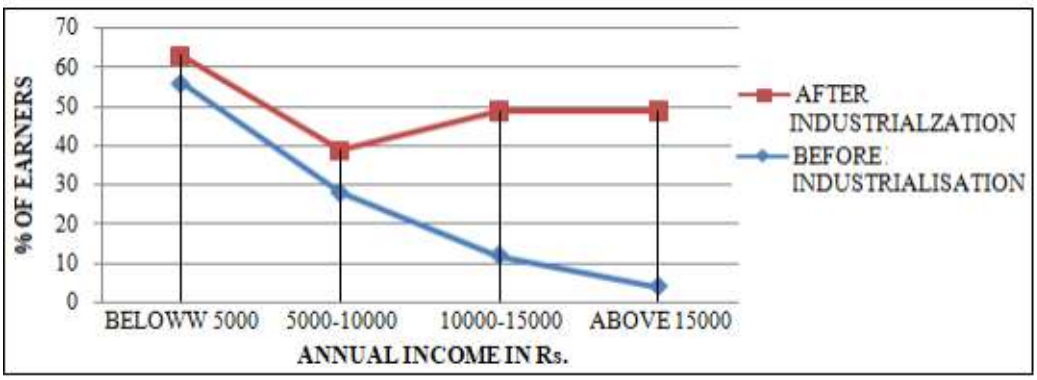


Fig.7: Per capita annual income before and after skeleton industrial activities

In the recent periods some industrial activities started in the region and there is a raising tendency of engagement of the youth as an industrial labour. Before setting up of industries and factories 70% of the people dependent on agriculture and allied activities for livelihood. But after the settlement of industries the tribal found a new source of additional income during the off-season period of agriculture. Now some of them have been engaged directly as industrial workers. After setting up of industries nearing 43% are engaged as industrial workers and rest 57% are still stuck to their parent works. Overall Economic condition is Poor as shown in Fig.7.

Model of the community pilot project (HBCEHP)

This project was implemented adopting the model of "Hospital - Base Community Eye Health Programme: A model for elimination of avoidable blindness on a sustainable basis". Designed by the OEU.

This model targets both medical and socio economic causes of avoidable blindness in order to make eye care services available to all including vulnerable groups of people in the community. This comprehensive approach also includes school health programme, children who dropped out from schools and those who never enrolled in schools.

Lack of proper knowledge, unscientific health practices and beliefs, cultural and traditional harmful practice, low prioritization of eye health care, gender discrimination, poor affordability and lack of awareness are the major factors which influence the eye health care seeking behavior negatively. As a result burden of eye disease and blindness are complex and progressively increasing.

HBCEHP aim

i. Continuous delivery of quality eye care services in order to clear the backlog of avoidable blindness in the service area in a mission mode and sustainable basis.
ii. Empower the community health care workers and the target communities so that they can take the ownership and become responsible for their own eye care need and arrange to take care of all new cases of avoidable blindness after elimination of the backlog.

iii. Capacity building and strengthening of the base hospital in comprehensive manner to ensure delivery of quality services for strengthening of primary health care and primary eye care and integration of both in the service area.

Key components of Hospital - Base Community Eye Health Programme

i. Assessment: Quantity and quality of the base hospital
ii. Action plan: To prepare a document to enlist the steps to be taken to achieve the goal of the project.

Sonapur project outcome

i. Total population covered and total households : **117680 & 25997**
ii. Initial Heath data. Infrastructure - 2014

Govt. Hospital	1 (50 beds)
Primary Health Center	4
Sub Centers	39
Community Health Center	1
Family Welfare Center	3

Table 2: Initial health data of Sonapur project

iii. Result of screening after validation - 2014

Total covered (Door to Door Survey)	117,680
Cataract (Bilateral + Unilateral)	4107 (6%)
Visually impaired persons	2229 (3.12%)
Blind*	1168 (1.6%)
Refractive Error	8279 (12%)

Table 3: Result of screening after validation - 2014

iv. Summary of Survey

	Adult		Children		Total	%
	M	F	M	F		
Total covered	41630	4116	17766	1712	117680	
Total screened	18359	2951	11585	1178	71237	
Unilateral cataract	357	570	3	1	925	
Bilateral cataract	1167	2014	1	0	3182	
Visual impairment	840	1368	13	8	2229	
Blind	420	728	13	7	1168	1.6
Refractive error	2825	5352	38	64	8279	12
Other eye disease	821	1773	187	202	2983	
>50 yrs population	8656	7429				

Table 4: Population and prevalence of cataract and blind

	Yes	No	Govt.	SSDN	Others	Total	%
Can cataract be treated	8256	15189				23445	
Knowledge about eye checkup above groups of	6159	16938				23097	
Nearby hospital	12047	11408	7261	1083	3695	23455	

Table 5: Showing awareness on certain health facts

Services	Yes	No
No of pregnant women not getting ante natal care service	851	75
Number of new born not getting post natal care service	490	71
No of children 0.5 yrs getting immunization service	11320	9922
No of children getting supplementation food	8929	7580

Table 6: Showing awareness level on primary health care

Summary: Sonapur project impact

Project is a permanent primary eye care facility centric comprehensive plan and approach. The nodal center of this approach is the SSDNECC. Services are delivered through hub and spoke approach where all surgical intervention is done in the base hospital. This particular comprehensive approach is considered to be more effective and people centered in comparison to other modes of service delivery. The recent world report on vision by the World Health Organization (WHO) on achieving universal eye health has recommended integrated people centered eye care services[1]. Subsequently, WHO proposed thresholds and outcome for refractive error and cataract surgery intervention. In India health care services are essentially urban centric, seldom percolating below the district headquarter. SSDNECC approach coverage is universal, services are freely accessible and equitable, is a need, appropriate, effective and flamboyant.

Initially the project duration was for 4 years (2014-2018). Realizing the success of the project in achieving the goals of sustainably avoidable blindness free area project has been extended and is now ongoing.

Fig 8:- *Blindness free village declaration ceremony by His Excellency the Governor of Assam Prof. Jagdish Mukhi ji at Sonapur*

In this collaborative project SSDN Community Department worked in collaboration with OEU through a strategic program, comprised of enumeration, survey, screening, validation, blindness registry, surgery, treatment, monitoring, surveillance and follow up services. Under this project SSDN has made 178 villages sustainably free from avoidable blindness (13946 beneficiaries). His Excellency the Governor of Assam publically declared the villages of Sonapur to be blindness free. This achievement was possible only because of implementation of SSDNECC approach in the community. Prevalence of blindness reduced to <0.3% from initial 1.6% at the end of 4 year. This initial success led us to open 15 SSDNECCs in different districts of Assam.

Case study

i. Story of Mr. Uken Rahang.

Fig.9: Mr. Uken Rahang regained self confidence and economic independence following cataract surgery

60 years Male of village Diksak, Police Station Khetri, Kamrup Metro, Assam. He was blind due to total Cataract and could not move independently. He used to live alone with his sister in a hut in the hill side. He is artisan and used to maintain his livelihood by preparation of different bamboo and cane products and selling these products in nearby market. Due to his blindness he became completely dependent on his sister and was living in a miserable condition. Our community task workers identified him in his doorstep and escorted him and brought him to SSDN Main hospital in Guwahati where his Cataract Surgery was performed successfully and regained his vision and after one month following surgery he started preparing cane and bamboo products. He started selling the products. His economic status improved and he could now maintain his livelihood and is now living happily with his sister and in the society. He regained his dignity and self esteem with the help of SSDN community project.

ii. Story of dignity and independence

Fig.10: Mr. Paresh Das regained self confidence, mobility and economic independence following cataract surgery

Mr. Paresh Das.

70 years male from Malibagan, Sonapur, Kamrup Metro, Assam. He was blind due to mature Cataract in both eyes and used to live with his son, daughter-in-law and grand children in a hut. His family used to live on fishing with poor economic condition. He did not know what to do and where to go to get relief from his blindness and progressively been hopeless. He felt neglected in the family as his son is too poor to take care of his father's medical problem. SSDN health workers during the house visit detected him and brought to SSDN for surgery. After the successful surgery and IOL implantation he regained his vision and became independent and started his profession. He regained his vision – he regained dignity – and he could support his family with his little earnings.

Category	Year	Nos.	Remark
Initial Project Period.	2014 -2018		Subsequently the project was extended beyond 2018 and currently ongoing
First Survey Coverage Total population surveyed	2014	1,17,680	
Second Survey Coverage Total population surveyed	2018	1,40,000	4 years of project activities
Total cataract detected		4307	During first survey cataract detected 4107. 200 more cases of cataract were detected during 4 years. Every year in the project area average 50 new cases developed cataract.

Cataract surgery performed	4250	57 cases could not be operated because – 7 case died before surgery 10 case physically unfit for surgery 5 case migrated
Other cause of avoidable blindness **Refractive error**	35	Corrected with spectacle

*** Prevalence of blindness**	**2014**	**1.6%**	
*** Prevalence of blindness**	2018	< 0.3%	178 villages were declared free from avoidable blindness

Table 7: Summary of Impact Analysis of the Project (2014 – 2018)

Fig.11: People centered approach to Community Eye Health (PACEH) Programmes

Project cost

Sl. No.	Budget head	No	Salary/month (INR)	Total
1.	**Human resource**			
	Project coordinator	1	10,000	480,000
	Community based eye health worker	7	5,000	1,680,000
	Documentation in-charge	1	6,000	288,000
				Total: 2,448,000
2.	**Travel and transportation**			
	Field visit by the project coordinator			144,000
	Field visit by the ASECA outside respective cluster			224,000
				Total: 368,000
3.	**Equipment / Furniture**			
	Motorcycle for the project coordinator			60,000
	Bicycle for the ASECA			21,000
	Computer, printer and camera for the project office			45,000
	Project office furniture (Almirah, shelves, chairs, table, etc)			20,000
				Total: 146,000
4.	**Programme activities**			
	Training of ASECA	14 session @ Rs. 3,000		42,000
	Outreach screening activities	200 session @ Rs.4000		800,000
				Total: 842,000
5.	**Other direct project cost**			
	Registers, survey material, BCC material and other documents	@ Rs.24,000 / year		96,000
				Total: 96,000

6.	**OEU support cost. Tral. Excluding accommodation and hospitality**		
	Orientation visit	2 visit @ Rs.10,000	20,000
	Recruitment of project staff	1 visit @ Rs.10,000	10,000
	1st module training	1 visit @ Rs.10,000	10,000
	2nd module training	1 visit @ Rs,10,000	10,000
	Monitoring visit	7 visit @ Rs.10,000	70,000
			Total: 120,000
			Grand total: 4,020,000

Table 8: Sonapur Project cost for 4 years (2014-2018)

Recurrent expenditure on ongoing Sonapur Project after the initial activities

Head of Expenditure	FY (2018-19)	FY (2019-20)	FY (2020-21)	FY (2021-22)
Manpower Cost	181475	335400	372030	363240
Vehicle Cost	114000	216000	138000	156000
Rent	43494	86688	105360	144000
Other Recurring Cost	12967	59534	35900	33250
Total	**351936**	**697622**	**651290**	**696490**

Table 9: Recurrent expenditure on Sonapur Project

Total expenditure incurred so far Rs.64,17,388.00 (excluding cost of surgery)

7. SSDN Community Vision for Sight-2026: Integrated People Centered Eye care (IPCE) for achieving avoidable blindness free villages of Assam in selected service areas

"Scholars are never made from reading countless books but learn from the schools of world and man"

…Kabir's Doha

Philosophy and Vision statement of SSDN

- Accessibility to care regardless of patient economic status and affordability.
- Delivery of highest quality eye care services.
- Self sustainability at all level of operations.
- Free of cost service to economically deserving subset of population.
- Inclusive social entrepreneurial approach.

Service with quality – care – trust – compassion

Commemorating 75 years of Indian independence "Azadi Ka Amrit Mohatsav", this project have been undertaken by SSDN. The concept was developed on the basis of eye care situation analysis (using ECSMT).

Action plan has been developed based on established facts on blindness. Prevalence of blindness in our Sonapur project area is 1.6%. Where in a Rapid Assessment of Avoidable Blindness (RAAB) the prevalence of blindness was reported 3.03%[28] indicating possibility of inter district variation in prevalence of blindness in Assam.

Main causes of blindness (cut-off < 6/60) in older population of India is estimated to be cataract (62.2%), refractive error (19.70%), glaucoma (5.80%), posterior segment disorder (4.07%), surgical complication (1.20%), corneal blindness (0.90%), posterior capsular opacification (0.90%) and others (4.19%). National prevalence of childhood blindness/low vision is 0.80 per thousand children. Due to demography and epidemiological transition diabetic retinopathy as a cause of blindness in adult is emerging. Rapid increase in the population above 50 years of age due to significant increase of life span is apprehended to influence both on prevalence and incidence of blindness as well as the number of people needing eye surgery. Poor access to service, lack of awareness and other barriers like inadequate service availability and gender equality is a reality in Indian society which is more grave in rural areas[29],[30][31],[32].

Eye care, human resource and infrastructure. Assam: Is Assam near the Vision 2020 norms of 1 ophthalmologist per 50,000 population.

In India there is no regular mechanism for the data collection regarding provision of eye care facilities and human resource availability[25]. In a survey it was reported that overall there was nearly 1 ophthalmologist per 100,000 population (95% CI:0.77-0.94) in the country with wide regional variation. In Assam there is only 0.6 ophthalmologist per 100,000 population[26]. In Assam there are 151 CHCs, 1014 PHCs, 4621 sub centers, 188 SSDNECCs and 211 PMOAs. Prevalence of blindness is 0.58% and there are 36 public hospitals with dedicated eye operation theatre. More than 62% of cataract surgeries are performed by non-governmental sectors[27].

According to a recent NBCBVI, Assam data Regional Institute of Ophthalmology in Guwahati and 6 medical colleges located in Dibrugarh, Silchar, Barpeta, Jorhat, Tezpur and Lakhimpur have provision of eye surgery. In addition to that in the district hospital / sub-division hospital at Barpeta, Baksa, Bongaigaon, Chiran, Darrang, Dhubri, Dhemaji, Dima Hasao, Golaghat, Goalpara, Hailakandi, Jorhat, Karimganj, Karbi Anglong, Kokrajhar, Morigaon, Nalbari and Sibsagar have dedicated eye operation theatre where eye surgeries are performed regularly.

In Assam there are about 650 registered ophthalmologists but all of them are not involved in active surgical service delivery. In the medical college about 54 nos. and in district level about 115 nos. eye surgeons are there. The remaining ophthalmologists are working in the private capacity. Factually most of the ophthalmologist, paramedicos and nurses offer services in the cities and towns only. Varied nature of the medical education and its training, this particular service has an empirical field and demands ‘Specific and significant infrastructure, equipment and post graduate qualification, and skill’. Chronic imbalance and multifaceted influence on work force in the form of quantitative mismatch, qualitative disparity, uneven distribution and shortfall in overall management are adversely affecting the eye care of the region. However human resource related issues are related to overall health policy of the state and the nation. Eye care facility in Assam is inadequate[27]. With proper initiative hopefully the situation will improve in near future. But without a committed public health policy, health care in rural Assam will be always insufficient. Broadly lack of infrastructure, manpower and resources, limited literacy, diverse geographical location, weather, people with different culture and belief, literacy level, insufficient health spending by the government and overall poor economic status are the obstacles in eye care of Assam.

Cataract backlog data in Assam year 2022

Sl. No.	District	Cataract backlog (number)	Sl. No.	District	Cataract backlog (number)
1	Sivasagar	4500	13	Darrang	800
2	Biswanath	700	14	Goalpara	700
3	Jorhat	4000	15	Nalbari	4500
4	Charaideo	200	16	Hailakandi	300
5	Sonitpur	2000	17	Dhemaji	200
6	Udalguri	1500	18	Bongaigaon	900
7	Baksa	1800	19	Karimganj	800
8	Kamrup (R)	2300	20	Dhubri	1500
9	Nagaon	1927	21	Cachar	5000
10	Karbi Anglong	500	22	Tinsukia	5000
11	Kamrup (M)	3600	23	Dima Hasao	100
12	Kokrajhar	2000	24	Dibrugarh	6000

Table 10: Cataract backlog data in Assam year 2022

Regional Strength, weakness and policy

Several regional factors prevail in opportunity and weakness front of the eye care. In the opportunity front there are forward looking, skilled, knowledgeable, expert, competent and adoptable ophthalmologists who are now working outside the region, some of them will return and will hopefully be the flag bearer to change the game to fulfill the huge need of eye care services in the community. Young generation in the Northeast India are energetic, vibrant and forward looking having potentials. These human resources can be easily trained to competent medical and paramedical workers. The issues in the weakness front are related to infrastructure, institution, connectivity, technological laggardness, high transition cost, conflict ridden geopolitics, image of remoteness of the place, resource constraint, deficient culture of accountability, knowledge gap and over dependency on government.

Fig.12: Consultation with the TWG

Per 100,000 people, 1000 patients need cataract surgery (and intraocular lens implantation) and another 1000 people need some form of eye care[35]. The goal, objectives, feasible targets and overall ambition of our project has been developed on the basis of our cumulative experience in community service in the Northeastern states since last 25 years, Sonapur project (where 178 villages are made sustainably free from avoidable blindness current prevalence < 0.3%), evidence based literature and recommendations from various authority were the corner stone of the current project. Goals of the project are regional in nature and tailored considering the ground state of affairs of the land where homes are dilapidated without access to proper health care, eye care and education. Serious vulnerabilities of the region to disaster, other nontraditional security threats, overall laggard prosperity, burgeoning human aspiration, various regional opportunities and weakness were also taken into account. In addition to the above

key points institutional Strength, Weakness, Opportunity and Threat (SWOT) were incorporated to developed our Specific, Measurable, Achievable, Realistic and Time bound (SMART) objectives. Inputs from Technical Working Group (TWG) were also incorporated and the vision has been aligned with the NPCBVI, Assam.

The core of SSDN Community Mission for Sight is to create and implement a service delivery model which will be people centered and self sustainable with a target to serve the people in general and to make the service area free from avoidable blindness in a sustainable manner and empower its people to bring an attitudinal change towards health care and eye care within a time frame.

Elimination of avoidable blindness (NPCBVI target. prevalence < 0.3) depends on

a. Available and accessible ophthalmologist (both geographically and culturally)
b. Efficient & quality eye care and infrastructure
c. Efficient human resources (key point)
d. Quality of eye care service (efficiency, efficacy, accessibility and viability) and performance by care giver[33][34].

Realizing the facts that in absence of appropriate eye health services and inclusive environments visual impairment can impact individuals households, and communities at large in many ways including through increasing poverty, reduced quality of life and reduced employment[36]. The community eye care programme of SSDN has been designed considering 10 essential public health services. Accordingly policy has been formulated within the legal and regulatory framework of the state.

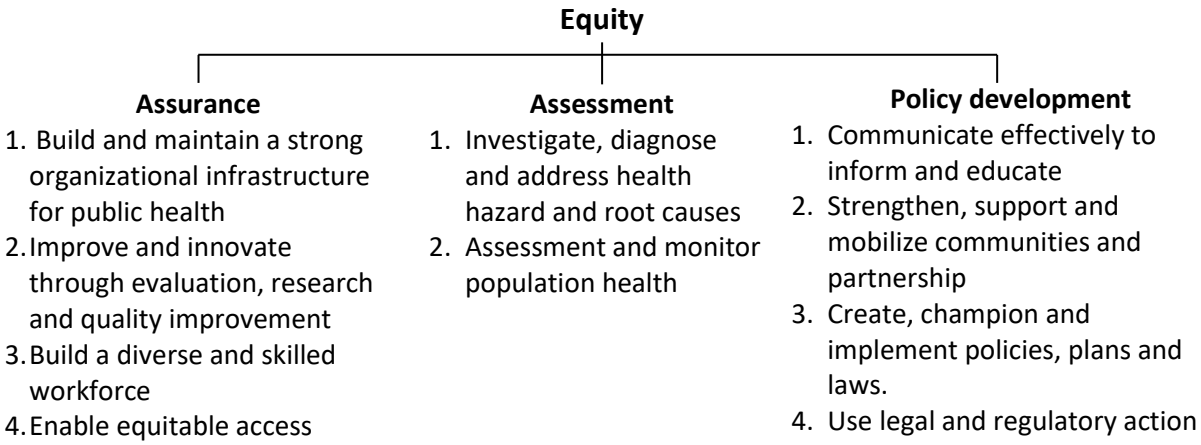


Fig.13: 10 essential public health services

It is estimated that 2/3 of the people of India requires subsidized or free eye care[15]. If they do not have access to eye care they will be at risk of marginalization and exclusion. In this scenario for eliminating avoidable blindness from the society following strategic actions are required.

- Affordable and accessible high quality eye care.
- Care delivery by trained eye health professionals.
- Ably assisted programme by cross trained support staff.
- Community based self sustainable settings.
- Time and resource oriented research facilities.
- Optimal infrastructure.
- Built in financial sustainability

Quality – Volume – Efficient – Community based – Low cost – Self sustainability

Vision, objectives

i. To reduce the prevalence of preventable blindness to >0.3% in the service area in five years time.
ii. Health promotion and to bring a positive change in the attitude of general population towards primary health and primary eye care in five years time.

Objectives

i. Active screening to detect cataract and cataract surgery with intraocular lens implantation of the detected cases.
ii. Provision of spectacles for presbyopia for refractive error cases.
iii. Empowerment and health education to general people, school teacher, village leaders to bring the change and attitude on eye health care.
iv. Integration of eye health to general health and alignment with the government and other private eye care existing in the service areas.

Active screening – referral pathway – SSDNECC – base hospital – surgery/treatment – post operative follow-up – monitoring – evaluation – corrective programme.

Project Implementation

i. Phase – I
   A. Target area selection and delineation of clusters
   B. Recruitment of project coordinator and cluster based field worker
   C. 1st module training for project staff
   D. Door to door survey in all clusters
   E. 2nd module training
   F. Selection of staff for Phase - II

ii. Phase – II
   A. Annual action plan for each cluster
   B. Implementation of project activities
   C. Monitoring and reporting
   D. Evaluation / Impact assessment

Project review methodology

Day-1:

- Detail presentation by the team on project activities like output against target different challenges encountered etc and their suggestion before the reviewer.
- Presentation by the team in-charge on events and achievements.
- Verification of the documents, blind register, disease register, primary health data etc are maintained by the team.
- The interaction of the reviewers with team members.
- Assessment of knowledge and skill of the team members.
- Activities – self rating of achievement by the team members.
- Assessment of any knowledge gap of the team members.

Day – 2:

- Field visit by the reviewer.

- Random selection of cluster, villages and beneficiary and interview by the assessor to determine and verify outcome of surgery, spectacle and any form of intervention.
- Meeting with community members of the same village and focused group discussion.
- Random participatory approach to community eye health (PACEH/PRA) in order to understand and assess the level of awareness of primary eye health and primary health in the community.
- Interaction of the reviewer with community members regarding their opinion and their involvement in the project.

The Day – 2 activities is repeated until the entire project area is covered.

Methods of training

i. Time required for selection and training of health worker : 1 Month
ii. Method of training :

(a) Classroom training

- Communication skill in Local Language
- Anatomy of Eyes
- Integration of Primary Eye care Services with Primary Health Care Services
- Use of disease screening card
- Essential basic information on primary health care and primary eye care

(b) Field training

- Door to Door Survey
- Demographic Data Collection
- Interview
- Vision screening
- Case detection
- Disease registration
- Blind registry
- Blind Patients Tracking
- Hands on training for home screening, data collection and documentation was mainly conducted by the professionals of Operation Eye Sight International and by doctors & executives of SSDN Institute of Community Ophthalmology. The other faculties involved in the training where PHC staffs like AASHA, ICDS and ANM supervisor.

(c) Virtual capacity Building training – a special effort

It is an endeavor to provide the best Community service to the underprivileged and economically challenged patients through empowerment of the health workers of different capacity. SSDN has designed a Comprehensive Training Module for our SSDNECC team and field workers which involves regular weekly online training sessions on clinical aspects (for Vision Technicians and Optometrists), administrative aspects (for SSDNECC supervisors) and field-work related training (for all ASECAs).These sessions are very interactive and require active participation from all members; and include a well structured training module involving interactive Q&A sessions, Case Studies, Assessment and Evaluation, sharing of Training materials, monthly/weekly targets data validation etc.

Fig.14: Virtual capacity Building training

Site selection: Service area and SSDNECC

The nerve center of integrated people centered eye care is the SSDNECC. The service areas are selected within 250 kms radius of the base hospital. SSDNECC is the nodal point for conducting the grass root activities. Under each SSDNECC 100 villages are selected within a radius of 5 kms of the SSDNECC. The villages are divided into two clusters where each cluster includes 50 villages.

Sl. No.	Place SSDNECC	District	Date of establishment	No of clusters	No of villages	Total Population	Remark
1.	Sonapur	Kamrup Metro	August, 2014	2	178	1,17,680	Pilot project
2.	Bijay Nagar	Kamrup Rural	November, 2016	2	124	75,815	
3.	Hajo	Kamrup Rural	February, 2018	2	102	42,340	
4.	Sualkuchi	Kamrup Rural	February, 2018	2	95	27,590	
5.	Morigaon	Morigaon	April, 2018	2	157	1,23,550	
6.	Mangaldoi	Darrang	August, 2019	2	100	74,076	
7.	Nagaon	Nagaon	September, 2019	2	109	1,23,555	
8.	Bongaigaon	Bongaigaon	August, 2021	2	100	54,998	
9.	Goalpara	Goalpara	August, 2021	2	100	75,000	
10.	Udalguri	Udalguri	October, 2021	2	100	74,699	
11.	Pathsala	Bajali	February, 2022	2	100	1,02,320	
12.	Barpeta	Barpeta	February, 2022	2	100	1,38,614	
13.	Nalbari	Nalbari	March, 2022	2	100	1,27,252	
14.	Dhekiajuli	Sonitpur	April, 2022	2	100	1,05,000	
15.	Boko	Kamrup Rural		2	139	1,11,880	
		Grand Total				**13,74,369**	

Table.11: List of the SSDNECC for IPEC

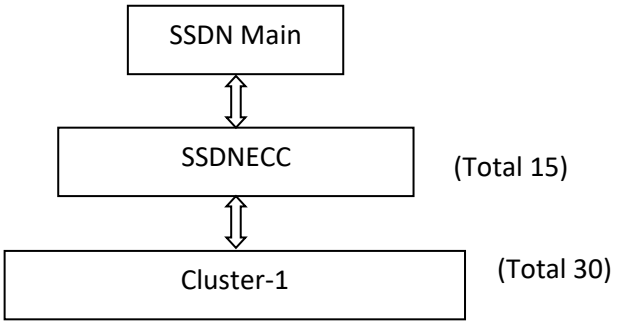


Fig.15: Schematic diagram of the administrative framework

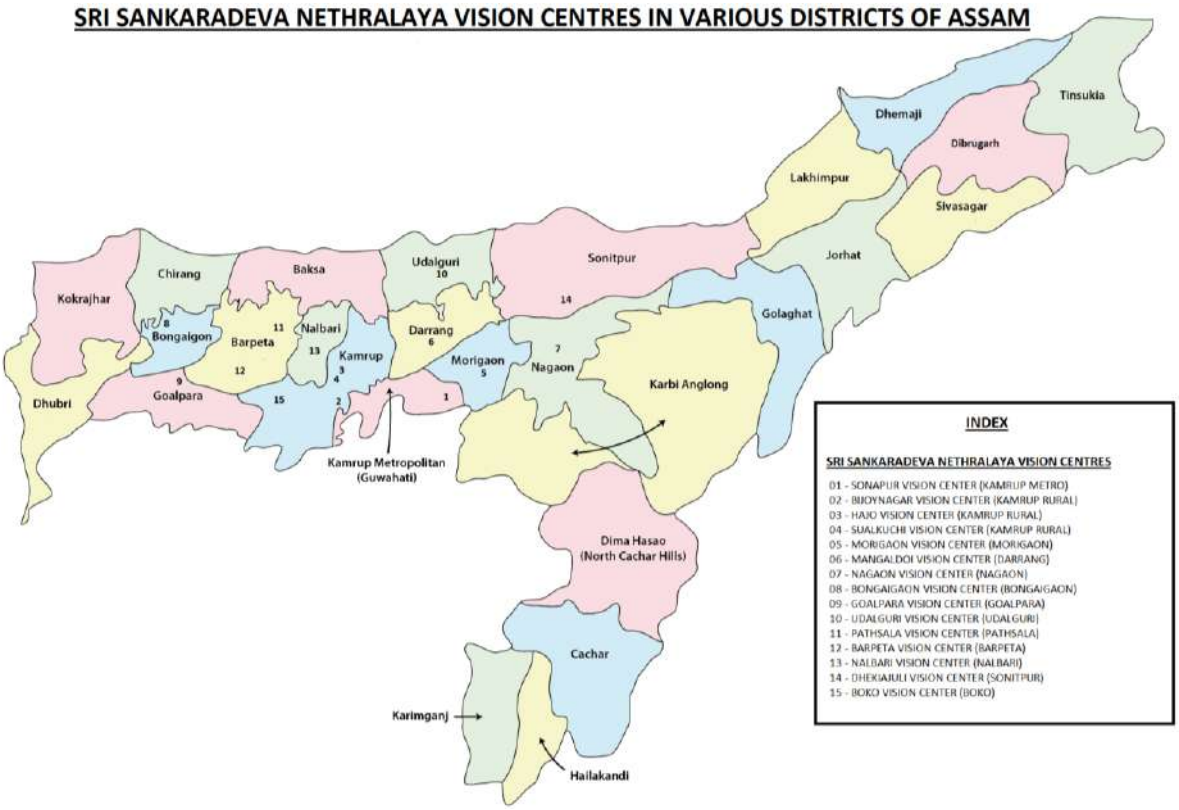


Fig.16: Location of the SSDNECCs

Action plan

Action step	Person responsible	Date of completion	Resource requirement	Potential barriers/resistance	Collaborator	Remark
Target area selection and cluster formation	Project Manager					
Recruitment of ASECA, volunteers and other staff	Project Manager, SSDN HR Department					
Door to door survey and screening. Blind VI and disease register KAP survey	ASECA					

Immunization status Anti/post natal care						
Validation of survey	Qualified ophthalmologist /optometrist					
Data entry	Data entry operator					
Door to door eye checkup and community eye care Screening, Minor treatment Referral to base hospital	ASECA					
Social marketing	Supervisor					
Health promotion education	ASECA					
Training of self help group	Project Manager					
Formation of village vision committee	Project Manager					
Community based rehabilitation	SSDN Management					
Integration of primary eye care and health care	ASECA/Supervisor					
Alignment with the government programme and promotion of immunization, maternal and child health (PHC and PEC integration)	ASECA					
Monitoring and reporting to keep the project on track Daily reports, Weekly reports, Monthly review, Corrective action.	Project coordinator, Project manager, Hospital administration , Third party evaluator					

Recruited employees are oriented and trained on the project activities, duties and responsibilities.

Table.12: Showing action plan for each project area under different SSDNECC

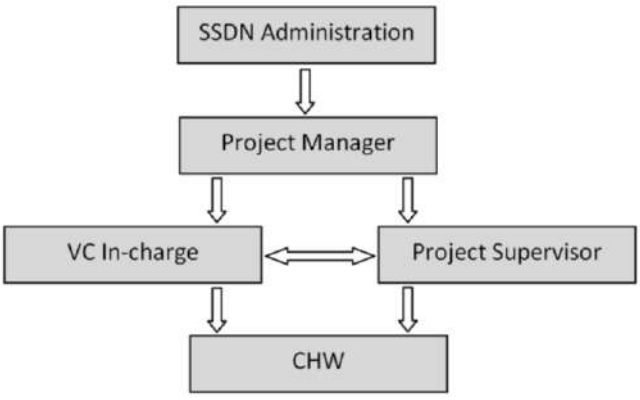


Fig.17: Schematic diagram showing operational framework

Cluster Based Annual Action Plan (CBAAP)

CBAAP will determine and contribute significantly to the achievement of goal. ASECA of each cluster will developed the annual action plan and will be assisted by the Project Manager, coordinator and SSDNECC In-charge. Main focus is completion of screening, disease register and blindness register in time. The other components of the plan are arrangement of treatment, cataract surgery, refractive error, glass prescription for distance and near, primary health care, primary eye care, community engagement, school screening for the children and blind rehabilitation. Cluster based micro plan is focused to determine the number of screening camps and awareness session annually aiming to bring behavioural change of the target population.

Field activities

The ASECAs under guidance, supervision and monitoring of the SSDNECC project coordinator and the project manager performs target oriented field activities like

- Door to door survey, screening, examination for eye condition.
- Preparation of household list, disease register and blindness register and regular updating.
- KAP analysis and record maintenance (*Reason for non availing eye care. Awareness about the eye care service available in nearby areas. Any fear for treatment, financial constraints and fear of charge. Lack of decision and fear of earning loss)*
- Arrange treatment for blind and visually impair patient and ensure the reporting in the SSDNECC of the cluster.
- Ensure supply of spectacle and transportation of the patient who need cataract surgery to base hospital.
- Ensure referral pathway of the other patients and any patient who can afford treatment at subsidized rate at the base hospital.
- Conducting awareness programme on health, hygiene, sanitation, vaccination, pure drinking water, primary eye care and primary health care.
- Creating awareness about cluster SSDNECC, SSDN Guwahati and the eye care services and facilities available along with encouraging patient to avail the services.
- Ensure pre and post operative care

Community engagement activities

i. Hygiene. Personal and environmental
ii. Sanitation
iii. Pure water and food
iv. Vaccination
v. Maternal and childhood
vi. De-addiction of toxic habit
vii. Physical activity
viii. Green villages

Health promotion - awareness and education to break the barrier to eye health – diagnosis and treatment.

SSDNECC care

SSDNECC will be responsible for managing and supervising the SSDNECC and its activities and achievement of targets.

The standard facilities available in SSDNECC are:-

i. Eye screening
ii. Spectacles
iii. Telemedicine
iv. Follow up facilities
v. Medication for simple eye condition
vi. Coordination with base hospital
vii. IEC activities
viii. Assistance to programme implementation and monitoring
ix. School screening and referral to SSDNECC/ base hospital
x. Programme monitoring in service area

SSDNECC activities

- Walk-in patient
    - Examination of cases and data recording in EMR
    - Tele-consultation if indicated
    - Glass prescription and minor medicine prescription
    - Referral of patient to base hospital if further consultation and surgical/medical treatment indicated
    - Counseling (Primary eye care, Primary health care, personal hygiene, hand hygiene, cleanliness, vaccination, etc.)
- Activities for the patient mobilized from cluster.
    - Examination and recoding of findings in the EMR
    - Examination of blood pressure, blood sugar in glucometer. Arrangement of physician consultation if anyone has systemic disease in PHC/CHC.
    - Record verification if available.
    - Listing and batch format for free and subsidized cataract surgery and scheduling the date for surgery in batches.
    - Counseling and motivation for surgery
    - Glass prescription if needed
- Transportation of patient
    - On the day of sending the patients re-verification of blood pressure and blood sugar before boarding the bus. Rescheduling of all the uncontrolled cases (BP and blood sugar) and arrangement for physical treatment in PHC/CHC.
    - Verification of cleanliness, personal hygiene, clean dress, use of medicine and carrying along with two days stock of all personal medicine if any for use during the day and first post-op of the surgery.
- Receiving back and counseling regarding post-op instruction and use of medicine as per discharge summary.
- Second and third post-op checkup as per routine and data recording in EMR and reporting to the project manager.

All SSDNECCs are equipped with electronic record facility. The EMR data of SSDNECC is linked with SSDN. Each patient will have unique ID number. Tele-consultation is done through EMR/store and carry forward through electronic communication/online method depending upon the situation. In-charge of the SSDNECC is responsible for all SSDNECC activities, supervision and monitoring of the field activities and target achievement.

(*A. Optical and B. Examination & Counseling*)

Fig.18: Schematic diagram of typical SSDNECC

Hospital care: Base hospital activities following arrival patient from the field

Day-1

- Serving of food and diet at the SSDN ICO dining hall.
- Transportation to the base hospital for
    - Verification of EMR data
    - Clinical examination (Applanation tonometry and Indirect Ophthalmoscope)
    - Biometry
    - B-Scan ultrasonography in case of opaque media
    - Any other investigation
    - Physical fitness
    - Specialty consultation if needed
    - Surgery scheduling and posting in OR list
- Transportation back to SSDN ICO for dinner and night stay in dormitory arrangement

Day-2

- Transportation to base hospital for surgery
    - Receiving and admission in the day care unit
    - Pre-op preparation and observation
    - Surgery
    - Post-op observation
    - Discharge instruction, supply of medicine, sterile cotton, goggles and counseling
- Transportation back to SSDN ICO for dinner and night stay in dormitory arrangement

Day-3

- Breakfast at SSDN ICO dining hall
    - Post-op dressing
    - First post-op examination
    - Data entry in EMR
    - Counseling and discharge (if needed additional medicine)
- Transportation back in batches to the respective SSDNECCs and clusters.

The entire process is executed under guidance and supervision. Two way transports are arranged by the duty manager.

Second and third post-op follow-up as per discharge instruction (mostly in SSDNECC). Door to door visit by the ASECA and recording of the data and post-op visual recovery in the EMR systematically. These data to be submitted to SSDN Quality Improvement Committee every month for analysis and for assessment of effective cataract surgical coverage and assessment of cataract surgical outcome.

Surveillance and audit methodology

i. Regular communication between the SSDNECC and ASECA.
ii. Networking with ASHA workers, Community level leaders and Village Heads to identify new blind patients and arrangement for their immediate treatment at base hospital through the SSDNECC.
iii. Regular integration with primary health care schemes and with other ASECA of the locality.
iv. Regular IEC and community meetings for sensitization, increase of awareness and motivation to adopt appropriate health seeking behavior.
v. Community Awareness on various Government welfare schemes

Method of declaration of blindness free villages

i. Verification of backlog of blindness. The activity will be done by the ASECA.
ii. Verification will be done by ophthalmologist/optometrist.
iii. Treatment of remaining cases, certification for non treatable cases and arrangement for issuing by the appropriate authority.
iv. KAP (Knowledge, Attitude and Practice) survey on eye health care seeking behavior.

Sustainability measures

After the project period is over, the services will be sustainably delivered through SSDNECC and ASECA in collaboration with village vision committee, women group, volunteers and networking with the government health care workers (ASHA etc.). All effort will be given to sustain the services with minimum or no staff of SSDN after a period of 5 years of the project. The referral pathway to SSDNECC and base hospital will be maintained by the community volunteers. The other fixed recurrent costs will be in the hospital annual budget mainly through raising donations/grant funding.

Assessment of effective cataract surgical coverage

The portion of people who have received cataract surgery and have a good result to number of people in need of cataract surgery. The WHO recommended method of calculation will be adopted.

$$\left[\frac{a+b}{c+d+e}\right] \times 100$$

a. Individuals with unilateral operated cataract attaining PVA equal to or better than 6/12 in the operated eye, who have BCVA worse than 6/12, with cataract as the main cause of vision impairment or blindness in the other eye.

b. Individuals with bilateral operated cataract attaining PVA equal to or better than 6/12 in at least one eye
c. Individuals with unilateral operated cataract (regardless of visual acuity in the operated eye), who have BCVA worse than 6/12 with cataract as the main cause of vision impairment or blindness in the other eye.
d. Individuals with bilateral operated cataract, regardless of visual acuity.
e. Individuals with BCVA worse than 6/12 with cataract as the main cause of vision impairment or blindness in both eyes.

Assessment of cataract surgical outcome (visual acuity)

- Good outcome $\frac{a}{d} \times 100$
- Suboptimal outcome $\frac{b}{d} \times 100$
- Poor outcome $\frac{c}{d} \times 100$

a. Number of cataract operated eyes with a "good" outcome (PVA 6/12 or better).
b. Number of cataract operated eyes with a "suboptimal" outcome (PVA worse than 6/12, and equal to or better than 6/60).
c. Number of cataract operated eyes with a "poor" outcome (PVA worse than 6/60)
d. Total number of cataract operated eyes.

Assessment of effective refractive error coverage

$$\left[\frac{a+b}{a+b+c+d}\right] \times 100$$

a. Individuals with UCVA worse than 6/12 in the better eye who present with spectacles or contact lenses for distance vision and whose PVA is equal to or better than 6/12 in the better eye ("met need")
b. Individuals with a history of refractive surgery whose UCVA is equal to or better than 6/12 in the better eye ("met need")
c. Individuals with UCVA worse than 6/12 in the better eye who present with spectacles or contact lenses for distance vision and a PVA of worse than 6/12 in the better eye, but who improve to equal to or better than 6/12 on pinhole or BCVA ("undermet need")
d. Individuals with UCVA worse than 6/12 in the better eye who do not have distance vision correction and who improve to equal to or better than 6/12 on pinhole or BCVA ("unmet need").

8. Budget for 15 SSDNECC for 4 years

Project Cost for 15 SSDNECC

Equipment /Establishment cost.	15600000
Mobilization Cost (For 1 Year)	30075000
Surgery Cost (12000 surgery)	40800000
Total Project Cost	**86475000**

Details of the Project Cost										
Sl. No.	**Budget head**	**No**	**Salary/ Month (INR)**	**No. of activity / visit**	**Total (Per month)**	**Total (Year-1)**	**For 4 Year**	**Total (Year-2)**	**Total (Year-3)**	**Total (Year-4)**
1	**Human resource**									
	Project Manager cum supervisor	1	@ 50000		50000	600000		600000	600000	600000
	Project coordinator (7 SSDNECC per coordinator)	2	@ 30000		60000	720000		720000	720000	720000
	Optometrist/OA	15	@ 20000		300000	3600000		3600000	3600000	3600000
	Data entry operator	7	@ 10000		70000	840000		840000	840000	840000
	ASECA (multipurpose) per cluster 2 nos.	60	@ 5000		300000	3600000		3600000	3600000	3600000
2	**Travel and transport**									
	Optometrist (for mini screening camp)		@ 100	2880	288000	3456000		3456000	3456000	3456000
	ASECA (60 Nos)		@ 500		30000	360000		360000	360000	360000
3	**Programme activity**									
	Field Training cost (AASHA/Govt. network) per SSDNECC 1 nos.	Per SSDNECC 1	@ 4000	15	5000	60000		60000	60000	60000
	Training cost (1st module per SSDNECC 1)									
	Training cost (2nd module per SSDNECC 1)	15 session	@ 5000		6250	75000		75000	75000	75000
	Residential training for capacity building (base hospital)	15 session	@ 5000		6250	75000		75000	75000	75000
		1 session		TA+DA	2500	30000		30000	30000	30000
				Food	750	9000		9000	9000	9000
				Rent	1000	12000		12000	12000	12000
4	**Recruitment cost**									
	Phase-1 In the field	15	@ 5000		75000	75000		-	-	-
	Phase -2 base hospital									

5	**Incentive cost**									
	Volunteers /ASHA worker		@ 250		118750	1425000		1425000	1425000	1425000
	ASECA		@ 75							
6	**SSDNECC establishment cost**									
	Equipment	15	@ 755000		11325000	11325000		-	-	-
	Renovation	15	@ 250000		3750000	3750000		-	-	-
	Location cost	15	@ 25000		375000	375000		-	-	-
	Monthly rent	15	@ 10000		150000	150000		-	-	-
7	**Monitoring cost**									
	Third party from the collaborator					150000		150000	150000	150000
8	**Health care promotion cost**				**-**	**-**				
	IEC material		@ 500		20000	240000		240000	240000	240000
	Community awareness session	6 meeting / year for each cluster	@ 500							
9	**Patients Travel, Accommodation and Fooding.**	**12000 Nos.**	**@1000**		**1000000**	**12000000**		**12000000**	**12000000**	**12000000**
10	**Overhead and other expenses**				**229000**	**2748000**		**2748000**	**2748000**	**2748000**
	Total Project Cost					**45675000**		**30000000**	**30000000**	**30000000**

Surgery Cost										
	Name of the Surgery	**No. of Surgery**	**Cost of Surgery**		**Per Month**	**Year-1**		**Year-2**	**Year-3**	**Year-4**
	Cataract surgery	12000 Nos.	3400		3400000	40800000		40800000	40800000	40800000
	Grand total				**3400000**	**40800000**		**40800000**	**40800000**	**40800000**

The project cost has been estimated on the basis of list of tasks, resource required and schedule of activities to complete the project in time. Fixed, variable, direct and indirect costs have been calculated with a chosen price index. NGO collaboration, fund raising, donation, reimbursement and retained earnings will be the expected source of funding.

9. Special steps for maintaining project area sustainably free from blindness

i. The Continuation of the SSDNECC and regular field activities through ASECA.
ii. Networking with ASHA/ICDS/ANM/Village Heads/ Community.
iii. Tracking of new blind patients through ASECA, other government health care workers, local leaders, village heads and local health care establishments.
iv. Time to time home revisits and screening by the ASECA in the declared avoidable blindness free villages.
v. Rehabilitation measures and to assist irreversibly blind people to connect with the social welfare department of the government and also extend support to obtain various certificates from the different authorities and avail government benefit.

This programme will connect eye care with the last man residing in the last mile of the project area. The structured activities in the field, SSDNECC and in the base hospital along with the engagement of designated qualified manpower, periodic monitoring, corrective action and people's participation together form the bedrock of this programme. For successful implementation of the project WHO recommendations and guidelines on eye care in health system, guide for action (*Analyze – Plan – Do – Review cycle*), package of eye care intervention and monitoring and eye care indication tool will be the guiding principles with an aspiration to achieve our goal of avoidable blindness free villages and their empowered people.

10. Conclusion

Service to the community is within inclusive social empowerment goal of SSDN. SSDN Community Vision for Sight-2026 is ambitious and developed based on 26 years of institutional experience and recommendation by various authorities (NPCBVI, WHO and other authorities). Public health service principles and sustainable financial systems have been adopted in the policy of this integrated, people centered, inclusive, participatory, curative and rehabilitative eye care model. The project is intended to deliver service under definite guide of action, intervention, competency framework and monitoring strategies. The package of PEC intervention is aimed to equip ASECAs, individuals and community living in the service areas to manage efficiently common eye diseases and take preventive and curative measures against common conditions that may cause visual impairment and blindness. This package has two broad components namely (i) eye health promotion, (ii) preventive and curative eye care. Eye health promotion components have two elements – (a) development of communication and essential technical skilled of ASECAs enabling them to discharge their duties and responsibilities efficiently and (b) development of positive attitude towards health care in the community. In the preventive and curative eye care component elements are (a) screening, (b) case detection, (c) treatment, (d) arrangement of spectacle and (e) cataract surgery. For successful implementation of the project and achievement of goal governance, human resource, finance and 'analyze-plan-do-review' (WHO) cycle have been considered as key components. Time table, technical guideline and allocation of responsibilities required for implementation of the vision have been incorporated in the framework.

11. References

1. World Health Organization. Expert Committee on Health Statistics. Third Report of a Meeting Health in Geneva from 21 to 26 November 1951. WHO; 1952. Available from: http://www.who.int/iris/handle/10665/40190. [Last cited on 2017 Jan 18].
2. World Health Assembly 25. Prevention of Blindness: Report by the Director-General. Geneva: WHO;1972.
3. Vashist P, Serjam SS, Gupta V, Gupta N, Kumar A. Definition of blindness under National Programme for Control of Blindness: Do we need to revise it?. Indian J Opthalmol 2017; 65: 92-6.
4. Revision in Definition of Blindness. Press Information Bureau, Govt. of India, Ministry of Health and Family Welfare, 18-July-2017.
5. Blindness and vision impairment. World Health Organization report. 14th October 2021. https://www.who.int/news-room/fact-sheets/detail/blindness-and-visual-impairment (accessed on 06-03-2022)
6. Department of Health. Certificate of Vision Impairment: Explanatory Notes for Consultant Ophthalmologists and Hospital Eye Clinic Staff. United Kingdom; 2013. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213286/CVI - Explanatory-notes-inDH-Template.pdf. [Last cited on 2017 Jan 19].
7. Global economic productivity loss from vision impairment and blindness. April 25, 2021. DOI: https://doi.org/10.1060/j eclinm.2021. 1000852.
8. Sunny M, Borah RR, Shamanna BR. Current estimate of the economic burden of blindness and visual impairment in India. A cost of illness study. Indian JR Ophthalmol 2022,70:2141-2145.
9. https://des.assam.gov.in/information-services/state-profile-of-assam
10. North East Region Vision 2035. http://www.megaplanning.gov.in>circular>3rd
11. Phukan P and Barman U. Livelihood problems of small and marginal farmers of Assam. International Advanced Research Journal in Science, Engineering and Technology. 2021.8. 254-257. DOI:10.17148/IARJST.2021.8645. Accessed on Jan, 2022.
12. https://pib.gov.in>PressRelease page:, https://www.niti.gov.in>sites>default>tiles>SD..
13. https://transdev.assam.gov.in (last accessed on 18/07/2022)
14. Gilbert C, Foster A. Childhood blindness in the contex of vision 2020 – The right to sight. Bull World Health Organization 2001;79:227-32
15. West S and Sommer A. Bulletin of the World Health Organization, 2001; 79:244-248
16. Bhattacharjee H, Magdalene D, JagdipJaveri H, Buragohain S, Mohapatra SD, Garg M. Indian J Ophthalmol 2022;70:214-22.
17. Bhattacharjee H, DasK, Borah RR, Guha K, Gogate P, Purkayastha S, et al. Causes of childhood blindness in the northeastern states of India, Indian J Ophthalmol 2008;56:495-9.
18. Srinivas M, Vijaya KV, Thirupathi RK, Satayabrahmanandan M, Ratnakar Y, Sanjana A, Jill K. Population based assessment of various for uptake of eye care services among elderly people; findings from rapid assessment of visual impairment studies form Telengana India. Indian Jr. Ophthalmol 2022;70:1749-1753.
19. Kumar SGP, Mandal A, Viswakarma P, Kundu S, Ralte L, Elizabeth K. Factors limiting the Northeast elderly population from seeking cataract surgical treatment. Evidance from Kalashib district. Mizoram India. Indian Jr. Ophthalmol 2018;66:969-974.
20. WHO reference number ISBN 9789241516570.
21. Vision document Ministry of Development of Northeast, 2021 https://mdoner.gov.in>activities>visiondocument:

22. Vision 2020: The right to sight, ME-Series No.9. available from: http//:www.aios.org/cme/emeseries9.pdf. Accessed on 31.03.2022.
23. Ho CK, Stapleton F, Wiles L, Hibbert P, Alkhawajah S, White A, Jalbert I. Systematic review of the appropriateness of eye care delivery in eye care practices. BMC Health Service Research. 2019.19:646. https://doi.org/10.1186/s.12913-019-4493-3.
24. Vashist P, Senjam SS, Gupta V, Gupta N, Shamanna BR, Wadhwani M, Shukla P, Manna S, Yadav S, Bharadwaj A. Blindness and Visual impairment and their causes in India: Results of a nationally representative survey. PLoS One. 2022; 17(7):e0271736. Published online 2022 Jul 21. Doi: 10.1371/journal.pone.0271736. PMCID: PMC9302795 PMID:35862402. Last access 27/07/2022
25. Tuasiraj RD, Nirmalan PK, Ramkrishanan R, Krishnadas R, Manimekalai TK, Baburajan NP, etal. Blindness and vision impairment in rural South Indian population: The Aravind Comprehensive Eye Survey. Ophthalmology 2003; 116:1149-1498
26. Murthy GVS, Gupta S, Ellwein LB, Munoz SR, Bachani D, Dada VK. A population based eye survey of older adults in a rural district of Rajasthan: 1. Central Vision Impairment, blindness and cataract surgery. Ophthalmology 2001; 108:679-85.
27. https://dghs.gov.in/content/1354_3_NationalProgrammeforControlofBlindnessVisual.aspx
28. Cataract surgery strategies comprehensive eye checkup Active survey NPCB statistics available from https://www.npcb.nic.in
29. Kumar R. Ophthalmic manpower in India - need for a serious review. Int. Ophthalmol 1993;17:269-275.
30. Murthy GVS, Gupta SK, Bachani D, Tewari HK, John N. Human resource and infrastructure for eye care in India Current Status. The National Medical Journal of India 2004;17:128-134.
31. Towards Developing India Eye Health Action Plan. A background document for national consultation 29-30 October 2015. Available at https://www.vision2020india.org/wp-content/uploads/2016/10/.GAP India background document 27102015.
32. Dandona R, John RK. Estimation of blindness in India from 2000 through 2020: Implicatio for the blindness control policy. NaH Med J India 2000;14:327-334
33. Fletcher AE, Donoghue M, Devvarma J, Tulsiraj RD, Scoll S, Abdulla M, Shanmugham CAK, Muragan B. Low Uptake of Eye Services in Rural India. A challenge for programs of blindness prevention. Arch Ophthalmol. 1999;117:1393-1399
34. Dassault G, Dubois CA. Human resources for health polices : A crucial component in health policies. Hum Resource Health 2003:1:1.
35. Resnikoff S, Parajasegaram R. Blindness prevention programmes : Post, Prevent and future. Bull World Health Organ 2001; 79:222-226
36. Keel S, Muller A, Block S, Bourne R, Burton MJ, Chatterji S, et. Al. Keeping an eye on eye care: Monitoring progress towards effective coverage. Lancet Glob Heal 2021;9:e1460-4.

12. Annexure

Annex – 1: Eye Screening Manual. Education and capacity building for ASECA
Annex – 2: CME and training module for SSDNECC optometry
Annex – 3: Community eye worker training module
Annex – 4: List of adopted villages under SSDN Community Vision for Sight

Annex – 1: Eye Screening Manual, Education and capacity building for ASECA. Virtual and in class room

DEPARTMENT

OF

COMMUNITY OPHTHALMOLOGY

SRI SANKARADEVA NETHRALAYA

96, Basistha Road, Guwahati

Eye Screening Manual, Education and capacity building for ASECA. Virtual and in class room

Dr. Harsha Bhattacharjee
President, SSDN Group of Institute


SSDN COMMUNITY MISSION FOR SIGHT

The Eye is an important sense organ. It is a part of the sensory nerve system also. Eye receives light from the various objects in the external world and forms an image of these objects in a structure known as retina located at the back part of the eye. In the retina the image generates electromagnetic impulses which are transmitted to the brain and the brain interprets electrical signal correlates and coordinates with different parts of the brain and allows vision. For vision object, light, good functioning eye and the brain all are necessary. Major part of the human development and life depends on vision. Vision provides us overall protection and helps to acquire all resources to sustain and develop our life. The vision can be affected by different diseases. Many of the diseases can be detected through screening and finding the warning signs. 80% of blindness is preventable and curable by treatment. For that early detection of disease and early treatment are of paramount importance. This SOP is for the ASECAs so that at the field level by home screening many of the eye diseases can be detected and thus blindness can be prevented at the same time public awareness can be increased on general health, eye health as well as the various eye and health programmes of the government and thus to protect vision of our citizen.

Content

Last man connectivity and avoidable blindness free village programme of SSDN, Guwahati

1. Introduction to Eye Health
    i. Definition of wellness and its aim
    ii. Health Promotion and prevention of disease

2. Primary eye care (and Primary health care) objectives

3. ASECA
    i. Job description
    ii. Requirement
    iii. Ideal capacity

4. Primary eye care goal of Sri Sankaradeva Nethralaya
    i. Last man connectivity
    ii. Integration of primary eye care and primary health care
    iii. Prevention, treatment and avoidable blindness free village

5. Duty and responsibility of ASECA
    i. Five duties
    ii. Promotion of eye health and general health
    iii. Three steps of actions in the community to prevent diseases which can cause blindness

6. Survey, vision screening, eye screening, blind register and record maintenance

    i. Anatomy and function of the eye
    ii. How to use screening card, adult
    iii. How to use screening card, children

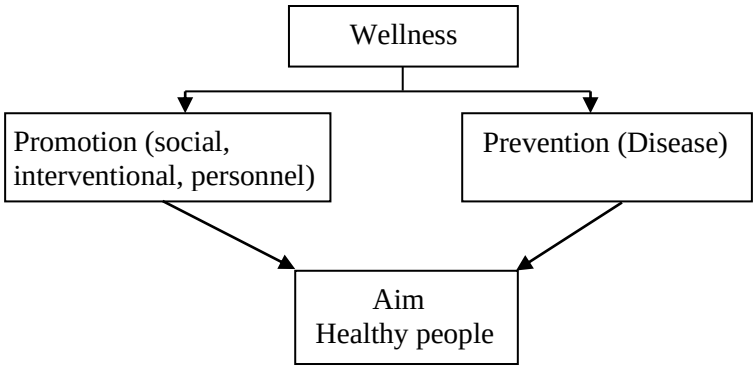
7. Different government programmes and integration

Attachment -1 : Tips to save vision
Attachment -2: Different government programmes
Attachment -3: Screening card for adult
Attachment -4: Screening card for paediatric
Attachment -5: Vision Screening Kit

Last man connectivity and avoidable blindness free village programme of SSDN, Guwahati

1. Introduction to Eye Health.

1.1 Definition of wellness and its aim.



1.2. What is health promotion and prevention of disease.

Promotion of Health	**Prevention of Disease**
HEALTH = positive, multifactorial conception of it	HEALTH= absence of disease
This model of health relies on patients compliance	Medical model
This model is directed to the whole society and its environment	It is mainly directed to high risk groups of the population
Concerns broad variety of problems	Concerns specific pathology
Proposes stimulating measures to the population	Realizes in practice direct measures
Seeks changes in humans health and the environment	Concentrates on special individuals and groups
Use mainly not medical organizations and civil groups	Use medical specialists from different specialties

Source: Stachenko S & Jenicek, Differences Between Prevention and Health Promotion & Research Implicator for Community Health Progress, Can.J.Publ.Health,81,1990

2. Primary eye care (and primary health care) objectives.

i. Promotion of eye health
ii. Prevention of blindness by detection of disease and preventive measure by screening
iii. Reorganization of underlying causes responsible for loss of vision, pain and redness of the eye.

Primary eye care target

i. Increased accessibility and better eye care
ii. Improvement coordination
iii. Reduction of cost of service
iv. Adequate service to rural population
v. Information, education and communication activities in targeted manner

3. ASECA: Job description, Requirement and Ideal capacity

i. Job description

- Job is not simple but very much rewarding.
- Committed and Focused
- Effective in the Job.
- Competent and Knowledgeable.
- Self Motivated and Compassionate.
- Help People in Need to Improve their eye health, general health and even save live.

ii. Requirement

- Knowledge of the subject and different terminology
- Excellent working knowledge
- Adequate communication skill
- Ability to motivate people to cooperate, participate and take ownership of the activities
- Adaptation with various local scenario
- Honest, calm, intelligent, caring, non prejudiced, non judgmental, strong both mentally & physically.

iii. Ideal capacity

- Unique Medical Entity
- But Eye care Guardian (Health Guardian) of the Community
- Not Nurse nor Paramedics, neither Physical assistance to Physician
- Not Independent Service provider

4. Primary eye care goal of Sri Sankaradeva Nethralaya

i. Last man connectivity

ii. Integration of primary eye care and primary healthcare

iii. Prevention, treatment and avoidable blindness free village (sustainably)

5. Duty and responsibility of ASECA

i. Five duties

- Promotion of eye and general health
- Action in the community to prevent conditions which may cause blindness
- Recognition and arrangement of treatment of common eye conditions at the SSDNECC
- Identification of patients who need referral to SSDNECC
- Integration of primary health care and primary eye care

ii. Promotion of eye health and general health:

During home visit and community meeting the participants to be explain on health promotion on the following points.

- Importance of good vision in life
- Importance of screening
- Individual responsibility of maintenance of good health
- Importance of prevention of disease
- Role of early diagnosis and early treatment
- How to maintain eye health and good vision
- Counseling and motivation
- People's participation and ownership in the programme
- General eye and environmental hygiene
- Importance of safe water, healthy food and physical exercise

iii. Three steps of actions in the community to prevent diseases which may cause blindness

Step – 1:

- Eye and health education to change the health care seeking behavior through Information, Education and communication (IEC) activities

a. Explain – What are the disadvantage of blindness and low vision and its impact on life

- Disability, fall and accident, hearing problem, depression, cognitive defects, inability to maintain day to day life, loss of income, poverty and early death.

b. Explain – Important causes of blindness

- Improper (maternal) prenatal care
- Premature birth
- Poor hygiene
- Poor nutrition
- Addiction
- Trauma
- Family history of blindness
- Old age
- Various eye disease
- Various systemic disease like diabetes, blood pressure etc.

c. Explain – Most of the blindness are preventable and curable.

- The goal is achieved by early screening, early detection and early treatment of any disease
- Cooperation from the patient
- Understanding on importance of health and individual responsibility to maintain health, personal hygiene and environmental hygiene

d. Explain – "I am healthy, I have no disease", it may be a wrong conception. This behavior needs a change

- Until and unless proper screening is done and the screening result is negative at that time it can be presumed good health.
- Screening is not for one time only. Repeated screening at recommended interval are essential
- Make the people conscious of general health, eye health, personal hygiene, environmental hygiene.
- Make people aware on individual responsibility to maintain good health
- Make people aware on Atal Amrit Abhiyan (AAA), Prime Minister Jan Aarogya Yojna (PMJAY) of the government and the private health insurance

Step – 2

- Increase adoption of scientific health care behavior
- Adherence to the health tips to keep the eyes healthy and safe vision (**Attachment-1**)
- Link with primary health care, Immunization and General nutrition
- Method of personal hygiene and environmental hygiene
- Linking with the various SSDN eye care programme and government health care programme

Step – 3

- Motivation to uptake the various services

6. Survey, Vision screening, Eye screening, Blind register and record maintenance

Step – 1

Introduction of self & the programme

Step – 2

Home screening, IEC and other activities of the following points

- Encourage and motivate to follow proper hand, face and body hygiene.
- Motivate to eat safe food and drinking water
- Encourage and promote environmental hygiene.
- Encourage to take all vaccinations.
- Motivate to use soap regularly.
- Integrate with all government programmes (like ASHA programme, Immunization programme, Maternal and Child health programme) (**Attachment-2**)
- Work in collaboration and coordination with ASHA, Anganwadi and other ASECAs.
- Escort eye patient if necessary up to SSDNECC.

- Follow up patients who are undergoing treatment and during post-operative recovery time.
- Survey, Enumeration, validation of finding, maintain blind register
- Proper counseling
- Organize mini camps (awareness session of eye and general health)
- Adhere to the target and achieve the target

Step – 3

Questions to be asked to the participants

a. Questions to be asked before eye screening of infant and children to the parent/guardian

- Gestational age, birth weight and hospitalization history of the new born
- Any discharge and redness of the eye. Gluing of the eyelids.
- Can the child open the eye comfortably in bright light
- Can the child fix the eye to mothers eye (if the baby is more than 3 months age)
- Either any deviation or abnormal movement of the eye.
- Any family history of blindness or major eye disease.

Thereafter Vision and physical screening to be performed

b. Questions to be asked before eye screening to adult

- Is there any difficulty in the eye like watering, discharge, redness, pain and any history of eye injury
- Can the person see near objects clearly
- Is there any difficulty in distance vision
- Is there any history of diabetes, blood pressure or any disease in the body
- Is there anybody in the family is blind

Thereafter Vision and physical screening to be performed

Step –4

Different steps of vision screening

- Call the patient in a place of his/her house compound where there is bright and adequate light (not in a dark place like inside the home)
- Measure 6 miter distance using the measuring rope. Place the screening vision chart and the seating chair for the patient at 6 miter apart
- Ask the patient to seat comfortably
- Make the patient understand the chart properly
- Ask the patient which eye is having more difficulties in vision

- Ask the patient to close the better eye first
- If patient has no complain in either eye then ask the patient to right eye first
- Take the vision in that eye
- Repeat the same procedure for other eye

Step – 5

Eye screening

i. Anatomy and function of eye (**Attachment – 3**)

ii. Eye screening of adult (**Attachment – 3**)

iii. Eye screening of children (**Attachment – 4**)

Motivate all patients to attend SSDNECC for detail eye screening if anyone or more of the following findings present

i. Defective distance or near or both vision
ii. Any complain in the eye like dimness of vision, redness, pain, discharge inching etc.
iii. Any history of eye injury
iv. Any history of eye operation
v. Any history of blindness in the family
vi. Any history of diabetes and blood pressure
vii. If appearance of the eye does not match with the picture of the screening card

Eye screening to be done at birth, at 5 years, at 20 years, at 40 years and every year after 40 years of age.

Blind registration, record and maintenance

7. **Integration with all government programmes and the different health programmes (Attachment – 2)**

Attachment – 1: Tips to save vision

i. Protect eyes from sun light – Wear proper sunglasses which blocks 100% Ultra Violet (UV) Rays (UV A,B and C). It will prevent Cataract, Macular Degeneration, Wrinkling of Eye Lid Skin and Skin Cancer around the eye.

ii. Avoid Smoking – Tobacco may cause Cataract and Age Related Macular Degeneration (ARMD)

iii. Right – Variety of vegetables, especially green leafy vegetables, fruits and fish etc., are good for eyes.

iv. Eye Hygiene – Don't touch your eyes with unclean finger tip, handkerchief etc. Don't splash water in the eyes. Keep adnexal skin clean.

v. Baseline Eye Examinations – Any person including child, even with apparently healthy eyes should undergo baseline eye screening. Anyone with symptoms or family history of eye disease, high blood pressure or diabetes should see an Ophthalmologist to determine how frequently your eyes be examined.

vi. Eye Protection – Wear proper eye protection to avoid eye injury during sports or during work and handling chemicals. Take advice from an eye doctor. He will advice you the proper protective eye wear for you.

vii. Know Your Family History – Many eye disease like Diabetic Retinopathy, Glaucoma, Age Related Macular Degeneration (ARMD) and Retinities Pigmentosa including Cataract runs in family. If you are having a positive family history, contact an eye doctor.

viii. Protect Your Child's Eye – Don't allow your child to play with sharp objects or projectile objects, chemicals etc.

ix. Early Intervention – If the disease can be early diagnosed, early intervention will prevent vision loss in many eye diseases.

x. Know Your Eye Care Provider – Optician, Optometrist and Ophthalmologist provide eye care at different capacity but Ophthalmologist are specially trained to provide full spectrum of eye care, from prescribing glasses to complex eye surgeries.

xi. Contact Lens Care – Take care of Contact Lens and follow the instruction for its use. Otherwise, it may lead to serious eye problems.

xii. Eye Fatigue – If your eyes get fatigue of working from close distance work or working on a computer, you can follow the 20:20:20 rule. Look from your work every 20 minutes at an object 20 feet away for 20 seconds. If eye fatigue persists you can contact a doctor to know the care to be taken and possible remedy.

xiii. If you are a diabetic – Control diabetes and get your eyes checked at least once a year. Diabetic eye disease can cause blindness.

- Hypertension control
- Metabolic disease control

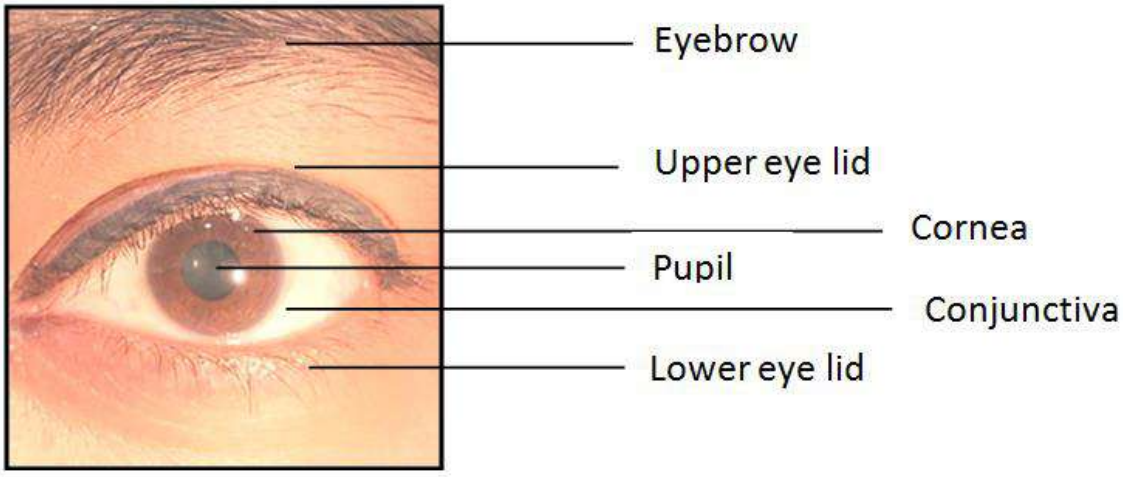
Attachment – 2: The different health programmes of the government in the district of Assam.

i. Pradhan Mantri Surakhshit Matritva Abhiyan (PMSMA)
ii. Wage compensation scheme for pregnant women in tea garden districts
iii. Chief Minister's free diagnostic services programme
iv. Health and wellness center (H&WCs)
v. Pradhan Mantri Jan Arogya Yojana (PMJAY)
vi. Rasthtriya Kishor Swasthya Karyakram (RSKS)
vii. Rastriya Bal Suraksha Karyakram (RBSK)
viii. Janani Shishu Suraksha Karyakram (JSSK)
ix. Weekly Iron Folic Supplementation (WIFS)
x. National Iron Plus Initiative (NIPI)
xi. Nutrition Rehabilitation Centre (NRC)
xii. Mothers' Absolute Affection (MAA)
xiii. Boat Clinic
xiv. Janani Shishu Suraksha Karyakram (JSSK)
xv. Janani Suraksha Yojana (JSY)
xvi. Integrated 108 Mrityunjoy Emergency Response Service
xvii. Sanjeevani - Village Health Outreach Programme
xviii. Mobile Medical Unit (MMU)

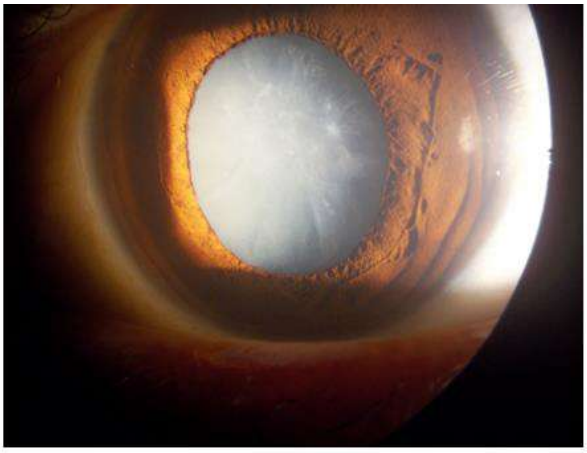
Out of all these programmes No.i, iii, iv, v, vi, vii, xi, xvi and xvii are important for eye.

Attachment – 3: Screening card for adult

Picture card Adult eye screening for common eye diseases*(Simulation card for Door to door eye screening)*

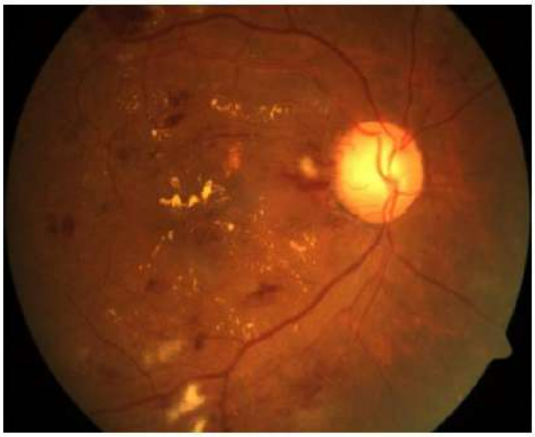


Normal eye

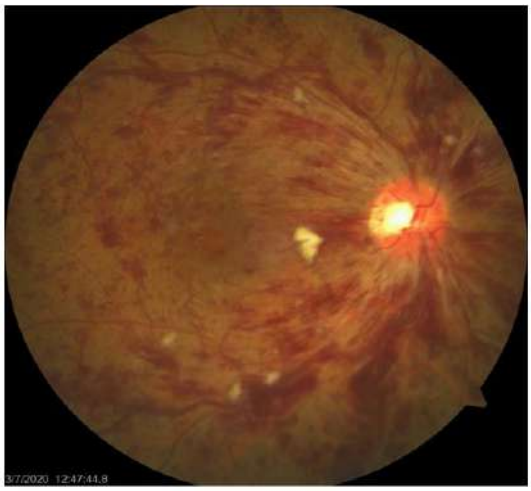


Cataract

Cataract & Pterygium



Diabetic Retinopathy



Retinal vein thrombosis

Acute Dacryosistitis

Attachment – 4: Screening card paediatric

Picture card for paediatric eye screening for common eye diseases

(Simulation card for Door to door eye screening)

White pupillary reflex

Leukocoria

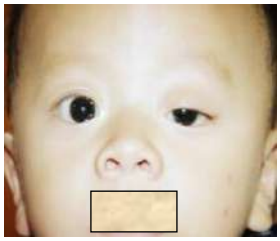
Redness of the eye

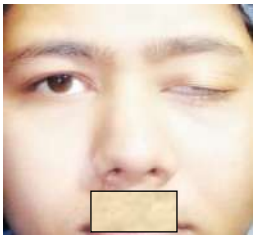
Discharge

Cornea leucoma

Corneal ulcer

Drooping of eyelids





Ptosis

Enlarged cornea

Buphthalmos

Abnormal position of eyeball

Proptosis

Staphyloma

Excessive tearing

Dacryocystitis

Shrunken eye. Phthisis Bulbi

Deviated eye

Squint

Abnormal head posture

Small eye

Microphthalmos

Premature baby and low birth weight

Retinopathy of Prematurity

Attachment -5: Vision screening kit

i. Bag
ii. Torch light
iii. 6 mitre rope
iv. E-Chart
v. Near vision chart
vi. Pinhole
vii. Occlude
viii. Blind register
ix. Survey summery register
x. Pen
xi. Note pad
xii. Mask
xiii. Hand gloves
xiv. Sanitizer

Acknowledgement

We wish to tender our humble acknowledgement to Dr. Kasturi Bhattacharjee, Dr. Kalyan Das, Dr. Pankaj Bhattacharyya, Dr. Shyam Sundar Das Mahapatra and Dr. Amjad Ali for academic and technical support. Mr. Randip Prasad Kakoti, Mr. Tarit Das and Mr. Anupam Goswami for administrative support. Mr. Dipjyoti Medhi and Mr. Upam Handique for the field programme. Mrs. Geeta Baruah (Member, Ethics Committee, SSDN & Retired Principal, Handique Girls College) for preparing the document. We also acknowledge Mr. Prasanta Kumar Sarma, Mr. Jyotirmoy Sarma, Mr. Rajiv Daloi, Mr. Santanu Barman and Ms. Kristi Borah for secretarial assistance.

Annex – 2: CME and training module for SSDNECC optometry

Optometry training course curriculum

Purpose

Build capacity of optometrist to manage the SSDNECC and its activities both in the field and in the center and liaisoning with base hospital.

Objectives

1. Optometrist to know the common eye conditions, accurate diagnosis.
2. Comprehensive eye examination and proper glass prescription to improve the quality of life in the community.
3. Capacity building of optometrist on eye screening, tele-ophthalmology, follow-up methods of post operative cases and simple medicine prescription.
4. Development of managerial skill to run the SSDNECC and the service cluster.
5. Capacity building to assist in programme implementation and to guide and monitor field activities
6. To know micro planning and strategic actions to achieve the target.
7. To develop mass communication and soft skill for discharging the duties and responsibilities.
8. Data collection, recording, data analysis and reporting.
9. To know an establish referral pathway for patients inclusively even for people residing in the last mile of the project area liaisoning with the base hospital.

Teaching and learning method

1. Classroom
2. Demonstration
3. Practical
4. Virtual capacity building one class every week.

Course material

The teacher will prepare in the form of lectures and notes.

Training module for SSDNECC optometrists

Sl. No.	Subject	Time in hours	Faculty
1.	Duties and responsibilities of optometrists	1	Faculty from SSDN School of Optometry
2.	Clinical examination and use of instruments	8	
3.	Glass prescription & verification	2	
4.	Common eye diseases	8	
5.	Medicine prescription	4	
6.	Tele-consultation	2	
7.	Referral to base hospital	1	
8.	Follow up for surgical cases	1	
9.	Follow up for other cases (OPD)	1	
10.	Managerial tasks & duties	1	
11.	Soft skills	2	
12.	Supervision (of SSDNECC & ASECA)	2	

13.	Integration of primary eye care and primary healthcare (PEC & PHC)	2	
14.	Monitoring, data verification & evaluation	2	
15.	Responsibilities regarding ASECA field survey work - screening methodology	2	
16.	Patient feedback & IEC activities	1	
17.	Maintenance of blind register	1	

Annex – 3: ASECA training course curriculum

Module 1. Classroom (maximum for 10 days)

Module 2. Online. Every week 1 session

Purpose

1. Capacity building of the ASECA to perform comprehensive door to door screening
2. To identify eye disease/blindness, facilitation of treatment/surgery
3. Community empowerment

Objectives

1. ASECA to develop knowledge on anatomy and physiology of the eye, and common eye diseases.
2. To develop skill on door to door vision recording, eye screening of adult and children using eye screening manual and grading of vision impairment and blindness.
3. To develop knowledge on primary health care and primary eye care, and different health programmes of the government.
4. Primary prevention of eye disease in order to save vision and integration of PHC and PEC.
5. Community motivation and empowerment, engagement with eye care programme of SSDN.
6. To know about primary health care measures and its implementation in the project area.
7. Promote vaccination and maternal child health care.
8. Survey methodology, recording, maintenance of register and reporting.
9. Organization of minicamp, assistance to micro planning, social marketing and target achievement.
10. To know about the referral pathway of patients and arrangement.
11. To develop soft skill communication and personal protection during community service.

Teaching and learning method

Classroom

1. Classroom teaching by the designated teacher
2. PowerPoint presentation on the concept of the topic, theoretical explanation of the topic, group discussion, interaction, question answer and assessment.
3. Demonstration by 3D/Video, survey kits and instruments used.
4. Practical. How to do screening and use of tools, vision examination and recording, monitoring and people empowerment.
5. Register and record maintenance and referral method.
6. Cluster micro planning and target.

Field

1. Orientation and guided tour of base hospital, SSDNECC and in the cluster by the SSDNECC In-charge.
2. Demonstration in the field by the designated person.

Assessment by the project manager/ project coordinator

Programme

Day	Subject	Time in hours	Faculty
1	Inauguration and welcome to the candidate	1	Institution head, Senior faculties and others
	Self introduction of the candidates		
	Presentation on SSDN and Community Mission for Sight		
	Duty and responsibility and limitation of ASECA		
	Anatomy and physiology of the eye	1	Ophthalmologist
	Cause of blindness	1	Ophthalmologist
	Causes of redness of eyes	1	Ophthalmologist
	Power point slide presentation on common eye diseases and disease causing blindness (Ptosis, squint, dacryocystis, pterygium, cataract, glaucoma, corneal ulcer, trauma)	1	Ophthalmologist
	Use of screening manual	1	Ophthalmologist
2	OSCE on eye disease (spot identification by the ASECA)	2	Ophthalmologist
	Do's and don'ts during field work	0.5	Project Manager
	Enumerations, survey, vision screening, eye screening, blind register and its 5 steps	3	Project Manager
	Three steps of action in the community to prevent blindness	1	Project Manager
3	Promotion of eye health and general health during home visit Importance of good vision in life	0.5	Project Manager
	Importance of screening, early detection, early treatment and its benefit	0.5	Ophthalmologist
	Importance of prevention of disease	0.5	Ophthalmologist
	How to maintain good health, personal and environment hygiene, safe water, healthy food, exercise	1	Ophthalmologist
	Tips to save vision	2	Ophthalmologist
	Individual responsibility to maintain good health	0.5	Ophthalmologist
	Personal protection during field work	1	Ophthalmologist
4	Action plan and micro planning in the cluster	1	Project Manager
	Soft skill and communication	0.5	Invited faculty
	Counseling and community motivation towards good health care attitude, theory and practice	1	Invited faculty
	Encouraging peoples participation in the programme and benefit of the programme, theory and practical	1	Project Manager
	Minicamp organization	0.75	Project Manager

	Different government health programme	0.75	Project Manager
	School survey	1	Senior Optometrist
5	Community OPD posting for hands on training, practical demonstration of vision, screening and case detection	4	Ophthalmologist / Optometrist
	Hospital visit OPD, Investigation, Academic department, SSDNICO	2	Project Coordinator
6	KAP analysis methodology	1	Project Manager
	Assistance to programme implementation, Assessment of community empowerment	0.5	Project Manager
	Referral path and treatment	0.5	Project Manager
	OPD posting for hands on training	4	Project Manager
7	Site visit and hands on training on screening, enumeration, vision reading, eye screening, blind register, reporting, liasoning with SSDNECC and base hospital	1 day	Project Manager, Project Coordinator, Optometrist from SSDNECC
8	Recap 7 day lesion	2	Project Manager
	Different registers and records	2	Project Manager
	Interaction and clarification of doubt	1	Project Manager
	Socialization and valedictory function, log book	1	Institution head and others

Every day 1 hr lunch break

From the 2nd day onwards the session will starts with recap of previous day topic

Annex – 4: List of adopted villages under SSDN Community Vision for Sight

Adopted Villages under Sonapur SSDN Eye Care Center
Established: August, 2014
Total Villages - 178, Dimoria Development Block, Kamrup Metro, Assam

1. Amarapathar N.C.
2. Amarapathar
3. Ambher Gaon
4. Ambher N.C.
5. Amerigog N.C.
6. Amseng
7. Amseng N.C.
8. Aprikola Gaon
9. Aprikola N.C.
10. Bagibari Pathar
11. Bhejni Gaon
12. Bamunkhat
13. Bamunkhat N.C.
14. Bandargog N.C.
15. Bargog
16. Bargog N.C.
17. Barkachang N.C.
18. Barkhat Gaon
19. Barkhat N.C.
20. Barkuchi
21. Barkuchi N.C.
22. Barni
23. Baruabari Gaon
24. Batakuchi
25. Batakuchi N.C.
26. Bejni Grant
27. Bejni N.C.
28. Bhakuagog
29. Bhakuagog N.C.
30. Bherakuchi Gaon
31. Bherakuchi N.C.
32. Bherakuchi Pathar
33. Bhogpur
34. Bhogpur N.C.
35. Borza
36. Borza N.C.
37. Chamata Pathar
38. Dakhin Dimoria
39. Damara Pathar
40. Dhangiri
41. Dharbam
42. Dhemai Gaon
43. Dhemai N.C.
44. Digaru Gaon
45. Digarupar N.C.
46. Dikchak
47. Dikchak N.C.
48. Durung
49. Gaon Dimoria
50. Ghagua Gaon
51. Gomaria Bagicha
52. Gomaria Gaon
53. Gomaria N.C.
54. Gomaria Pathar
55. Hahara Gaon
56. Hahara N.C.
57. Hhara Pathar
58. Helagog
59. Juboi
60. Kachia Gaon
61. Kachutali Pathar
62. Kahikuchi
63. Kakar N.C.
64. Kalangpur N.C.
65. Kamalajari Gaon
66. Kamaljari N.C.
67. Kamarkuchi
68. Kamarkuchi N.C.
69. Karchia N.C.
70. Kendubam
71. Kendubam Bagicha
72. Khaloibari
73. Khaloibari N.C.
74. Khat Trtelia
75. Khat Trtelia N.C.
76. Killing N.C.
77. Lofar Gaon
78. Lofar N.C.
79. Loflong
80. Loflong N.C.
81. Lomati
82. Lamsum Gaon
83. Lomsum N.C.
84. Lomsum Pathar
85. Luri Gaon
86. Luri Grant
87. Luri N.C.
88. Maloibari Gaon
89. Maloibari Jungle
90. Maloibari N.C.
91. Maloibari Pathar
92. Maragdala
93. Maragdola N.C.
94. Mitani Gaon
95. Mitani N.C.
96. Mitani Pathar
97. Mairakuchi
98. Manpur Gaon
99. Manpur N.C.
100. Murkata
101. Nartap
102. Nartap N.C.
103. Nibira
104. Nibira N.C.
105. Niz - Dimoria
106. No.1 Ouzari
107. No.1 Tegheria Gaon
108. No.2 Ouzari
109. No.2 Tegheria Gaon
110. No.3 Ouzari
111. Pub - Maloibari
112. Rewa Gaon
113. Rewa N.C.
114. Rewa Pathar
115. Sakurabori
116. Salana
117. Sarutari Gaon
118. Sarutari N.C.
119. Senabar
120. Sailekhaiti
121. Sonai Gaon
122. Sonai N.C.
123. Sonapur Gaon
124. Sonapur Pathar
125. Talani N.C.
126. Tamhalong
127. Tamulikuchi N.C.
128. Tamulikuchi Gaon
129. Tegharia N.C.
130. Tegheria N.C.1
131. Tepechia
132. Tepechia N.C.
133. Tetelia Gaon
134. Tetelia N.C.
135. Tetelia Pathar
136. Teteliguri
137. Teteliguri N.C.
138. Teteliaguri N.C.
139. Topatali Gaon
140. Topatali N.C.
141. Ullani
142. Ulubam
143. Upar Tepechia N.C.
144. Upper Killing N.C.
145. Uttar Dimoria
146. Hatimura
147. Borogharia
148. Milanpur
149. Sarugaon
150. Namgaon
151. Rajakhat
152. Bharagaon
153. Lotabari
154. Baruabari
155. Jalukbari
156. Jhargaon
157. Kapalkata
158. Sagaligaon
159. Sakonibari
160. Hastinapur
161. Amerigog
162. 10th Mile
163. Adarsa Nagar
164. 2 No. Baruabari
165. Sankardev Nagar
166. Bar Bituli
167. Baro Basti
168. Kamarpur Gaon
169. Kasutali
170. Dhubighat
171. Mohmara
172. Hatimura
173. Rupjyotinagar
174. Tetelia
175. Ural
176. Kushal Nagar
177. Medhikuchi
178. Jogdal

Adopted Villages under Bijoynagar SSDN Eye Care Centre
Established: November, 2016
Total Adopted Villages - 124, Rampur & Chayani Block, Kamrup R, Assam

1. Dakhala
2. Uparpara
3. Baniapara
4. Santipur
5. Besapara
6. Mandalpara
7. Nawapara
8. Bholapara
9. Gawburhapara
10. Dawapara
11. Majpara
12. Boripara
13. Parepara
14. Dahali
15. Ojhapara
16. Majpara
17. Dahali Korka
18. Kocharipara
19. Chengapara
20. Gosaipara
21. Bhouriapara
22. Telghawapara
23. Tamulpara
24. Gadhuwapara
25. Parepara Batarhat
26. Gokhai Medhipara
27. Medhipara
28. Jagenpara
29. Rangamati
30. Medhipara
31. Muslimpara
32. Milipara
33. Hakrapara
34. Malipara
35. Nathpara

36. Kalitapara
37. Bakrapara
38. Owtulpara
39. Hujuripara
40. Rampara
41. Mahilapara
42. Bamunpara
43. Magurpara
44. Medhipara 2
45. Rajpukhuri
46. Kumarpara
47. Nathpara
48. Bhekulipara
49. Bamunpara
50. Natun Karipara
51. Gathiapara
52. Uparhali
53. Kakilapara
54. Talukdarpara
55. Jamunpara
56. Cilarainagar
57. Ojhapara
58. Thakuriapara
59. Sobhadiapara
60. Bhawripara
61. Lakhipara
62. Kholabondhapara
63. Deiripara
64. Parlly
65. Gayanpara
66. Bhakatpara
67. Thakuriapara
68. Nawapara
69. Natunbasti
70. Dawapara
71. Charepara
72. Nathpara
73. Sadilapur
74. Manpur
75. Goswamipara
76. Sarapara
77. Barkushi
78. Barkuchi Colony
79. Kokjhar Choudhuripara
80. Kokhjar
81. Gokhaipara
82. Majhpara
83. Malipara
84. Nathpara
85. Charalpara
86. Hudumpur
87. Laheswari
88. Bartuli
89. Hudumpur Gowmer
90. Bamunpara
91. Kukriapara
92. Barhudumpur
93. Dakhala Colony
94. Naradpara
95. Mirza
96. Konchpara
97. Batiapara
98. Natun Batiapara
99. Narayanpur
100. Jamarta
101. Sadagarpara
102. Ganeshpara
103. Santipur
104. Babupara
105. Gopalpur
106. Lachitnagar
107. Krishnanagar
108. Bishnupur
109. Milanpur
110. Janakipur
111. Sarpara
112. Chouduripara
113. Majpara
114. Hatuapara
115. Kadaltalpara
116. Dewanpara
117. Jalkhuapara
118. Pub Sarpara
119. Pashim Sarpara
120. Sutarpara
121. Jonakipur
122. Sadagapur
123. Natun Nagar
124. Milanpur

Adopted Villages under Hajo SSDN Eye Care Centre
Established: February, 2018
Total Adopted Villages - 102, HAJO Block, Kamrup R, Assam

1. Abhoypur
2. Akadi
3. Ambari
4. Andhupara
5. Bahana
6. Pub-Dadora
7. Sastar
8. Ujankuri
9. Bangal Tola
10. Bangalpara
11. Bansar
12. Barbakara
13. Bardadhi
14. Bardampur
15. Bargaon
16. Barijani Pathar Pacharia
17. Barlah
18. Barni
19. Barsapari
20. Bathan
21. Bathan Pam
22. Bausiloutoli
23. Bihdia
24. Chilardia
25. Dakshin PakorKona
26. Dakshin Singra
27. Dehar Kuriha
28. Dihina
29. Gandheli Tari
30. Gaonburar Pam
31. Garia Para Pacharia
32. Gerua
33. Pacharia
34. Hablakha
35. Hadala
36. Hahdia
37. Hainadi
38. Hardia P.G.R.
39. Hardia Pam
40. Hatimura
41. Helesha
42. Hirajani
43. Japia
44. Kalita Kuchi
45. Kamarpur
46. Keotarbari Pacharia
47. Ketekibari
48. Khetri Hardia
49. Khopani Kuchi
50. Khudra Kulhati
51. Pacharia
52. Kismat Kuriha
53. Majarkuri (CT)
54. Maldhar Pam
55. Manah Kuchi
56. Mokhania
57. Na-Para Pacharia
58. Nadia
59. Niz-Bansar
60. Niz-Hajo (CT)
61. Niz-Hardia
62. No.1 Bagta
63. No.1 Bhelkar
64. No.1 Dalibari
65. No.1 Gandh Mow
66. No.1 Halo Gaon
67. No.1 Khalihamari
68. No.1 Khetri Hardia
69. No.1 Kulhati
70. No.1 Sarudam Pam
71. No.1 Shrihati
72. No.1 Singimari
73. No.1 Sobanshah
74. No.1 Solmari
75. No.2 Halogaon
76. No.2 Bagta
77. No.2 Bhelkar
78. No.2 Dalibari
79. No.2 Dokania
80. No.2 Dokania Reserve
81. No.2 Gondh Mow
82. No.2 Khalihamari
83. No.2 Khetri Hardia
84. Guimara Pathar
85. No.2 Kismat Bansar
86. No.2 Kulhati
87. No.2 Sarudam Pur
88. No.2 Shrihati
89. No.2 Sarudam Pur
90. No.2 Singimari
91. No.2 Sobanshah
92. No.2 Solmari
93. No.3 Bagta
94. No.3 Dokania
95. No.3 Shrihati
96. No.3 Singimari
97. No.3 Sobanshah
98. No.4 Bagta
99. No.4 Dokania Reserve
100. No.4 Sobanshah
101. Pacharia Dalar Pathar
102. Pachim Dadora Patni

Adopted Villages under Sualkuchi SSDN Eye Care Centre
Established: February, 2018
Total adopted villages – 95
Block - Hajo & North Guwahati
Kamrup R, Assam

1. Keotpara
2. Kumarpara
3. Kabirtapara
4. Bamunpara
5. Pub Phulbari Paher
6. Madhya Phulbari Paher
7. Pachim Phulbari Paher
8. Sonaripara
9. High School Road
10. Barnijora
11. Adaboi
12. Kalita Para
13. Charikhuta
14. Majtol
15. Bhatipara
16. Sidheswari Dewaloi
17. Sm Road

18. Naktadol
19. Damodar Mandir Road
20. Mahtele Bari
21. Collage Road
22. Shanti Tol
23. Bagheswerl Paher
24. Gaonbura Pam
25. Lakshmi Road
26. Ib Road
27. Rajgor
28. Bathan
29. Srihati
30. Sarulah
31. Borlah
32. Mati Parbot
33. N Para
34. Sadhu Tol
35. Bamun Ghageri Chok
36. Bongsor
37. Dadara
38. Gandhmow
39. Madhya Sualkuchi
40. Pacharia
41. Paschim Sualkuchi
42. Pub Sualkuchi
43. Singimari
44. Amingaon
45. Moriyapatty
46. Medhipara
47. Paul Para
48. Icd Colony
49. Srinath Patty
50. Loco Colony
51. Oko Colony
52. Dayal Para
53. Kosari Potty
54. Madhu Patty
55. Abhaipur
56. Shilkhaku
57. Daul Gobinda Mandir
58. Agyathuri
59. Athiabai
60. Balaibill
61. Bamuni Gaon
62. Bar Nizara
63. Barchandra
64. Berbaka
65. Bonmaja
66. Changsari
67. Dakhin Fulung
68. Dakhin Lenga
69. Dirgheswari
70. Dhopatari
71. Fulung
72. Gauripur
73. Ghorajan
74. Jalah
75. Kali Pahar
76. Karaibari
77. Malang
78. Manik Nagar
79. Niz Sundari Ghopa
80. North Guwahati Gaon
81. Numalijalah
82. Rangmahal
83. Rudreswar
84. Sarubaka
85. Satgaon
86. Satgaon Grant
87. Sila
88. Silagrant
89. Silamahekhaity
90. Silbharal
91. Tiling Gaon
92. Uttar Fulung
93. Uttar Lenga
94. Rajaduar
95. Silchaku

Adopted Villages under Morigaon SSDN Eye Care Centre
Established: April, 2018
Total Villages – 157
Mayong , Kapili & Bhurbandha Block, Morigaon, Assam

1. Ahatguri
2. Ahatguri Pam
3. Ahaturi Natua Gaon
4. Ajarbari
5. Alisinga
6. Amguri
7. Amzari
8. Athubhanga
9. Auguri
10. Aujari Pathar
11. Aujarigaon
12. Baghara gaon
13. Baghara pathar
14. Baha Bajari Pathar
15. Bakari Chapari
16. Bakharbori
17. Baltala
18. Bangaldhara
19. Banpara
20. Banpara Darapani
21. Bar-Manipur
22. Barangabari
23. Barbari
24. Barbari Pathar
25. Bargog
26. Bargog 1
27. Barigaon
28. Barjalah
29. Barkhal
30. Barpayak No.1
31. Barpayak No.2
32. Barunguri
33. Basanaghat
34. Basundhari Jalah
35. Belguri
36. Bhairaguri
37. Bhalukaguri
38. Bhangamur
39. Bhugduba Bill
40. Bhugduba Habi
41. Bhurbandha
42. Bihubari
43. Block No.27
44. Block No.8
45. Bowalguri
46. Bordolpathar
47. Borthal [Patkomai]
48. Buhagaon
49. Chakdharbari
50. Chamkata
51. Chanuabari
52. Chanuabari Dikchang
53. Charubari
54. Charaihagi
55. Charal Pam
56. Chatanguri
57. Chipiri
58. Chutiakhal
59. Da Chikabori
60. Dahali Makaria
61. Dahuti Habi
62. Dahuti Padum Pukhuri
63. Dakhin Dharamtul
64. Daloichuba
65. Damal
66. Danduabilar Tup
67. Dapunibari
68. Dhekiphala Bari
69. Dighalbori
70. Dihukichamaka
71. Doani
72. Dombaha
73. Durula Dubi
74. Garmari
75. Gegera N.C.
76. Ghoramara Pathar
77. Gunamara No.1
78. Gunamara No.2
79. Hagaltali
80. Hakanamara
81. Hatihulunga
82. Hatkhula
83. Jarabari
84. Jerengabari
85. Jurgaon
86. Kachomari Pathar
87. Kalbari
88. Kalbari 1
89. Kaliajari
90. Kanphala Bori
91. Karaibari
92. Karaiguri
93. Katahguri
94. Katalamara Bari
95. Khatarbari
96. Khokhanagog
97. Khuapar
98. Khulahat Forest
99. Khulapathar
100. Killing Bagicha
101. Konwargaon
102. Kumarbari
103. Lathabori
104. Losonabari
105. Lukakuchi
106. Maidhali Pathar
107. Makaria
108. Malputa
109. Manipur No.1
110. Manipur No.2
111. Mantabari
112. Marakolong No.1
113. Marakolong No.2
114. Matiparbat
115. Meruagaon
116. Mikirbari
117. Mikirgaon
118. Kolong Par
119. Marakolong
120. Moukhuliamjari
121. Muladhari
122. Naramari No.1
123. Naramari No.2
124. Naukata
125. Neli Bagisa No.1
126. Neli Bagisa No.2
127. Niz Dandua
128. Khula Gaon
129. Nowagaon
130. Pakamura
131. Palahguri
132. Parajari
133. Pasatia Morigaon
134. Patidaya
135. Patrabari
136. Pub Dharamtul
137. Raina Pathar
138. Ralipathar

139. Rupahi Bori
140. Rupaibari
141. Salmari
142. Salmari Mikir Gaon
143. Salmari No.1
144. Salmari No.2
145. Saapmari
146. Saru Doani
147. Matir Parbat
148. Sidhabari
149. Silbheta
150. Silsaku
151. Simaluguri
152. Singimari
153. Telahi Bhakattgaon
154. Tengaguri
155. Tetelia
156. Tetelia Pahar
157. Thekera

Adopted Villages under Mangaldoi SSDN Eye Care Centre
Estyablished: August, 2019
Total adopted villages – 100
Block - Mangaldoi & Kalaigaon
Darrang, Assam

1. Besmari
2. Neogpara
3. Kamarpara
4. Kapili Satra
5. Durgagaon
6. Oklibari
7. Bengabora
8. Mathanga
9. Ohaka
10. Adhikari 1
11. Adhikari 2
12. Chamuapara 1
13. Chamuapara 2
14. Barngabari
15. Adhamapara
16. Lankapuri
17. Alekjhari
18. Jugipara
19. Naharbari
20. Adhamapara
21. Barampur
22. Barkumar Para
23. Boinapjapara
24. Chengeliapara
25. Dariapara
26. Dahachuburi
27. Bamunpara
28. Bezpara
29. Jhargaon
30. Keotpara
31. Konwarpara
32. Kanaichuba
33. Kuipani
34. Na-Howly
35. Niz-Chopai
36. Punia
37. Ramharichuba
38. Kabikara
39. Nagaon
40. Pakabangipara
41. Mohanpur
42. Tengabari
43. Chotoathiabari
44. Barangabari
45. Gakhirkhoa Para
46. Gariapara
47. Mollapara
48. Patalsingpara
49. Daria Para
50. Kamarpara (Punia)
51. Hirapara
52. Bakbari
53. Tiajhar
54. 1no. Mazgaon
55. 2no. Mazgaon
56. Chenialpara
57. Karmipra
58. Baghpori
59. Bandia Chapori
60. Chereng Chapori
61. Bezpara
62. Bhebarghat
63. Dewanagaon
64. Gerimari Chapori
65. Hengrajhar
66. Keotpara
67. Mangaldoi Gaon
68. Medhipara
69. Nizchopai
70. Tamulipara
71. Mohanpur
72. Chengeliapara
73. Lankapuri
74. Nhetow Chapori
75. Saikia Para
76. Saloipara
77. Tamulipara
78. Tengbari
79. Upahupara
80. Bhakatpara 1
81. Bhakatpara 2
82. Kalitapara
83. Kharpuri
84. Ondulajhar
85. Gadhia Para
86. Mudoibari
87. Dhula
88. Dewanagaon
89. Baloboratuk
90. Punia
91. Chandowalpara
92. Dekargaon
93. Kachomari
94. Gelaidingi
95. 1 No Gadhuwa
96. Lengeripara
97. Niz-Mogalbecha
98. Shyamabari
99. Balabari
100. Sherpur

Adopted Villages under Nagaon SSDN Eye Care Centre
Establishad: September, 2019
Total adopted villages – 109
Nagaon, Assam

1. Lakhinagar
2. Mulapatty – 1
3. Islampatty – 1
4. Hujgaon
5. Teliapatty
6. Teliagaon
7. Ratnakanta Nagar
8. Santipur
9. Sorubazar
10. Haiborgaon
11. North Haiborgaon
12. Lakhimi Nagar
13. Lawkhowa
14. Gandhi Magar
15. Itachali
16. Chinapatty
17. Panigaon
18. Rupnagar
19. Jyotinagar
20. Anil Bora Nagar
21. Bishnu Nagar
22. Kalibari
23. Amtol
24. Joymoti Nagar
25. Siva Nagar
26. Kachalokhowa
27. Senchowa
28. Upadimoruguri
29. Dimoruguri
30. Kecha Ali
31. Sepagali
32. Morikolong
33. Charikhuti
34. Majorati
35. Bishnu Jyoti Nagar
36. Tribeni Nagar
37. Chandanpur
38. Amolapatty
39. Meturpatty
40. Christianpatty
41. Mahlur
42. Uriagaon
43. Arabari
44. Bhutaigaon
45. Bamunbari
46. Natun Bazar
47. Chakarigaon
48. Pohukata
49. Koroioni
50. Aowniati
51. Khutikatia
52. Bhuyapatty
53. Siv Mandir Road
54. Khutikatia Namghar Road
55. Dakual Gaon
56. Telia Panigaon
57. Telia Borjaha
58. Jiten Saikia Road
59. Kadamani Nagar
60. Kohuatali
61. Borghat
62. Fauzdaripatty
63. Milanpur
64. Baidyatup
65. Sialmari
66. Nazirajan
67. Madhupur
68. Khagarijan
69. Dhakaipatty
70. Aminpatty
71. Borbazar
72. Alphiniston
73. Jail Road
74. Police Reserve
75. South Haiborgaon
76. Senchow Das Gaon
77. Kolongpar
78. Dipholu
79. Henguli Nagar
80. Ratnapur
81. Chakitup
82. Beltoligaon
83. Greenland
84. Aluk Nagar
85. Rupkonwar Nagar
86. Nandanpur
87. Rupnagar
88. Ranthali
89. Deodhar
90. Dakarghat
91. Mahkhuli
92. Marangial
93. Mahoriati

94. Pathari
95. Kharampatty
96. Chalchali
97. Chilangani Farm
98. Jamtol
99. Sati Radhika Nagar
100. Bhogoniya Suk
101. Borbheti
102. Kasamari
103. Chamowa Gaon
104. Jamuguri
105. Pream Nagar
106. Kawoimari
107. Morikalong Marangial
108. Beltali
109. Dimaruguri Bhotai Ati

Adopted Villages under Bongaigaon SSDN Eye Care Centre
Established: August, 2021
Total Villages – 100
Bongaigaon, Assam

1. Dolaigaon 1
2. Dolaigaon 2
3. Dolaigaon 3
4. Chunga Phota
5. Bholaguri
6. Jhelkajhar 1
7. Jhelkajhar 2
8. Tilpukhuri
9. Dholapukhuri
10. Tengaigaon
11. Atugaon
12. Barshangaon 1
13. Barshangaon 2
14. Tilokgaon
15. Kachuagaon
16. Saonagaon
17. Mulagaon Chennapara
18. Mulagaon Ravapara
19. Mulagaon Totpara
20. Mamugaon
21. Nagariyagaon
22. Nowagao
23. Dossimapara
24. Nowagaon
25. Mathigaon
26. Rashigaon
27. Bhitor Chengmari
28. Bahira Chengmari
29. Dholagaon Ujanpara
30. Dholagaon Bhatipara
31. Dholagaon Maspara
32. Dewan Gaon
33. Dewangaon Sutradharpara
34. Bashbari 1
35. Bashbari 2
36. Amguri
37. Birpara
38. Jajanabhita
39. Jolakhaia
40. Barkhata 1
41. Barkhata 2
42. Barkhata 3
43. Kasharpara
44. Bajitpara
45. Raghunandanpur1
46. Raghunandanpur2
47. Moligaon 1
48. Moligaon 2
49. Salbari
50. Bechimari
51. Salbari
52. Kharija Dolaigaon1
53. Kharija Dolaigaon2
54. Bhakaribhita
55. Birjhora Te
56. Chitkagaon
57. Ravapara
58. Nayapara 1
59. Nayapara 2
60. Hirapara
61. Chaparakata 1
62. Chaparakata 2
63. Mechpara
64. Bakharapara 1
65. Bakharapara 2
66. Deoripara
67. Jobipara
68. Bhatipara 1
69. Bhatipara 2
70. Chaparakata 3
71. Jhakuapara 1
72. Jhakuapara 2
73. Chiponsila 1
74. Kahibari
75. Jogipara
76. Majgaon Pbnc
77. Kashidoba
78. Chiponsila 2
79. Chiponsila 3
80. Chiponsila 4
81. Kamarpara
82. Chokapara
83. Majgaon 1
84. Kashidoba
85. Ghondol
86. Majgaon 2
87. Nigomghola
88. Khakapur 1 Nc
89. Khakarpur 3
90. Khakarpur 2
91. Khakarpur 3
92. Khakarpur 4
93. Khakarpur 5
94. Khakarpur 6
95. Khakarpur 7
96. Khakarpur 8
97. Nigamghola Nc
98. Kandulimari Nc
99. Kandulimari
100. Betbari

Adopted Villages under Goalpara SSDN Eye Care Centre
Established: August, 2021
Total Villages - 100,
Goalpara, Assam

1. Pahartoli
2. Borobazar
3. Alipara
4. Ambari
5. Bausiapara
6. Kalitapara
7. Baidalpara
8. Bhatipara
9. Nayapara
10. Sorazroad
11. Baladmari
12. Beltola
13. Foresgat
14. Notunbasti
15. Nasingbari
16. Baniyapara
17. Kalani 1
18. Kalani 2
19. Birsilaray Path
20. Sondoriya
21. Santinagar
22. Sastinagar
23. Bamunpara
24. Tilapara
25. Jokduba
26. Ujanpara
27. Goaltoli
28. Rupnagar
29. Pithbari
30. Matia
31. Nodirpar
32. Baladmari 2
33. Nobinnagar
34. Dekdowa
35. Dubapara
36. Rakhasni
37. Jambari
38. Moijonga
39. Harimura
40. Dolgoma
41. Dakaidal
42. Mornoi
43. Khalapara
44. Nepalikhuti
45. Helapakhi
46. Pharsingpara
47. Futripara
48. Tinkoniapara
49. Kodomtola
50. Sidhabari
51. Dostinagar
52. Bakurpara
53. Karbala
54. Hasilapara
55. Kalpananagar
56. New Bakurpara
57. Gobindopur
58. Sala
59. Kismatpur
60. Borpahar
61. Bihufield
62. Durgamandir
63. Bapujinagar
64. Bhalikdubi
65. Agia
66. Solmari
67. Headetpur
68. Aslampara
69. Balijana
70. Kumri
71. Makri
72. Kabaitari
73. Jogighopa
74. Paglatek
75. Budipara
76. Bougan
77. Lakhipur
78. Gojapara
79. Pancharatna
80. Kalyanpur
81. Priyanagar
82. Milannagar
83. Pragatinagar
84. Garopara
85. Bogulamari
86. Sarapara
87. Deauli
88. Gojapara
89. Salpara
90. Majerburi
91. Darka
92. Dorapara

93. Bolbola
94. Tukra
95. Chamaguri
96. Dhoptola
97. Hasilabil
98. Hurkakuchchi
99. Kharboja
100. Kumripara

Adopted Villages under Udalguri SSDN Eye Care Centre
Established: October, 2021
Total Villages – 100
Udalguri, Assam

1. Amjuli No.2
2. Amjuli No.3
3. Amjuli No.4
4. Amjuli No1
5. Amjuligaon
6. Badagaon
7. Bakchaichuburi
8. Bakchalchuburi
9. Bandorguri 1
10. Bandorguri 2
11. Barnagaon
12. Batabari 1
13. Batabari 2
14. Begapara
15. Bekigaon
16. Belochuburi
17. Besengaon
18. Bhalukmari
19. Bhoiraguri
20. Bhoirapur
21. Bogapani
22. Bogoribari
23. Bongalibosti
24. Borigaon
25. Borigaon 1
26. Borigaon 2
27. Chandrapur
28. Degapara
29. Dhalkata
30. Dhulachuburi
31. Dungamukha
32. Ekorabari
33. Garobosti
34. Gelagaon
35. Gergemukha
36. Ghagrabari
37. Golmagaon
38. Golondi Habi
39. Goraibari No. 1
40. Goraibari No. 2
41. Harpur
42. Hatkatagaon
43. Jabretola
44. Jharabari
45. Jhargaon 1
46. Jhargaon 2
47. Jongalborigaon
48. Kahibari
49. Kajiamati
50. Kanpur
51. Khangkhlabari
52. Khoirabari
53. Kothalbari
54. Kothalguri
55. Kuktimari
56. Lamagonobosti
57. Majgaon
58. Medhipara
59. Mohendrapur
60. Mohonpur
61. Mongabosti
62. Monpur
63. Nalbari
64. Nalkhamra
65. Narzanpara
66. Nepalpara
67. Nepalpara Grazing
68. Nigarbosti
69. Niz Ambagaon
70. Niz Rangapani
71. Niz Udalguri
72. No. 1 Batabari
73. No. 1 Phulbari
74. No. 1 Rangapani
75. No. 2 Batabari
76. No. 2 Chandana TE
77. No. 3 Barigaon
78. No. 4 Barigaon
79. No.1 Chandana TE
80. No.1 Sumabari
81. Paharpur
82. Pakribari
83. Phulbari
84. Phurabari
85. Puroni Goraibari
86. Ramendrapur
87. Rangamukha
88. Santipur Nagar
89. Santoshinagar
90. Sapkati 1
91. Sapkati 2
92. Sapkati 3
93. Sindrijora
94. Singigaon
95. Sonapur
96. Taljari
97. Thana Udalguri
98. Tibitola
99. Ulubari
100. Uttar Rangagara

Adopted Villages under Barpeta SSDN Eye Care Centre
Established: February, 2021
Total Villages – 100
Barpeta, Assam

1. Aichara Para
2. Ambari
3. Ata
4. Bagaijan Para
5. Bagudi
6. Bahmura
7. Balarbhitha
8. Bamun Baradi
9. Bamun Bari
10. Bamun Kuchi
11. Bamuna
12. Banbaria
13. Baniara Para
14. Banti Pur
15. Bar Agdia
16. Bar Baradi
17. Bar Ghol
18. Bar Suha
19. Bara
20. Baradi
21. Baramara
22. Barbala
23. Barbila
24. Bariar Pathar
25. Batikuriha
26. Belortari
27. Betbari Gaon
28. Betbari Pathar
29. Bhakuamari
30. Bhalukabari Gaon
31. Bhalukabari Pathar
32. Bhayraguri Pam
33. Bhella
34. Bheraldi
35. Bunbahar
36. Chaka Bausi Gaon
37. Chaka Bausi Pathar
38. Chakda
39. Chakir Bhitha
40. Charag Para
41. Dabalia Para
42. Dakreswar
43. Damal Jar
44. Dambra Bawa
45. Dangarkuchi
46. Datta Kuchi
47. Debradi
48. Deuri Kuchi
49. Dewlipara
50. Dhakalia Para
51. Dhakua
52. Dhan Bandha
53. Dokania
54. Dona Kuchi
55. Dongra
56. Fatig Grah
57. Fulor Guri
58. Gaher Pam
59. Gandhi
60. Garemara Gaon
61. Garemara Pathar
62. Garemari Gaon
63. Garemari Habi
64. Garemari Pathar
65. Ghilajari
66. Hahchara
67. Hajipara
68. Hatijana
69. Itarbheta
70. Jabrikuchi
71. Jaher Pam
72. Jarabari
73. Jochihati
74. Jogir Pam
75. Joti Gaon
76. Joypur
77. Kachari Para
78. Kadam Guri
79. Kahibari
80. Kahikuchi
81. Kaljahi
82. Kaljar
83. Kamalpur
84. Kamalpur Pam
85. Kathalor Tari
86. Kathlijar
87. Keot Para
88. Keotkuchi
89. Khablar Bhitha
90. Khandakar Para
91. Khandar Par
92. Khandarkur
93. Khankarpara
94. Khapan Baria Bhitha
95. Kharadhara Pathar
96. Kharua Para
97. Kujarpith
98. Kumulli Para
99. Kuriha
100. Majkuchi

Adopted Villages under Pathsala SSDN Eye Care Centre
Established: February, 2021
Total Villages – 100
Bajali District, Assam

1. Bagapara
2. Balipara
3. Bamunkuchi
4. Bamunpara
5. Ban Gaon
6. Bangna Bari
7. Bania Gaon
8. Bar Bamakhata
9. Bar Bhaluki
10. Bar-Bairagi
11. Barbang
12. Barbatabari
13. Barbhala
14. Bargandubi
15. Bargunari
16. Barsahan
17. Bebejiapara
18. Belona
19. Bhajkuchia Para
20. Bhethua
21. Bhogpur
22. Bhotanta Mohitara
23. Bichan Kuchi
24. Bilpar
25. Bornalikuchi
26. Borsaderi
27. Chomua Ulua
28. Dharamtala
29. Doloi Gaon
30. Doloi Gaon
31. Dubi
32. Dumuria
33. Garemari
34. Ghotbar Saderi
35. Gobindapur
36. Haguri Gaon
37. Jalikhata
38. Khara Dhara
39. Khudra Bhaluki
40. Kochdiga
41. Konimara
42. Kukua Batabari
43. Kurobaha
44. Lechera Para
45. Maguri
46. Majarkhat
47. Maripur Anandapur
48. Muguria
49. Nagar Gaon
50. Nalana
51. Nali Para
52. Nimua
53. Nitananda Panbari
54. Niz-Sariha
55. Niz-Sathi Samukha
56. Pahala Simalu Bari
57. Pakha Keteki Bari
58. Panara
59. Patacharkuchi
60. Pathsala Gaon
61. Pipla
62. Rahadhar Birkala
63. Bagapara
64. Balipara
65. Bamunkuchi
66. Sariha Chakla
67. Tihu Dekhata
68. Titka Garia
69. Titkataje
70. Tuple Panbari
71. Uparnoi
72. Bongaon
73. Rampur
74. Barakahi
75. Helona
76. Kaoimari
77. Hasina Pur
78. Bagana
79. Teptari
80. Sagarsari
81. Debra Bunari
82. Puran Belona
83. Natun Belona
84. Bogapara
85. Vethuwa
86. Kanoibari
87. Nodipar
88. Baguriguri
89. Amdoh
90. Barla
91. Bangjuli
92. Niz Khaldoh
93. Khaldoh
94. Phkua
95. Titka
96. Keotpara
97. Bamunpara
98. Napara
99. Patlah
100. Muguria

Adopted Villages under Nalbari SSDN Eye Care Centre
Established: March, 2021
Total Villages – 100
Nalbari District, Assam

1. Alengidal
2. Amaya-Pur
3. Arara
4. Balakuchi
5. Balikoria Kharjara
6. Balikuchi
7. Balilesha
8. Bar Khanajan
9. Bar-Agra
10. Bar-Agra
11. Barchenikuchi
12. Bardhantali
13. Barkura
14. Barmurikona
15. Barpipalia
16. Barsarkuchi
17. Bhadra
18. Bhutkatra
19. Bhuyarkuchi
20. Bistupur
21. Budru Kuchi
22. Chandra Kuchi
23. Charia
24. Chengnoi
25. Cherabari
26. Dakhin Bejera
27. Dehar Katara
28. Deharkalakuchi
29. Dhamdhama
30. Dhantala
31. Dhekiabari
32. Dokuchi
33. Garemara
34. Gobindapur
35. Guakuchi
36. Haripur
37. Jaha
38. Jaijabari
39. Jamtola
40. Janigog
41. Japarkuchi
42. Joy Mangla
43. Kardohola
44. Katahkuchi
45. Katla Barkuchi
46. Kendukuchi
47. Khat-Katra
48. Khudra Katra
49. Khudra Sankara
50. Khudra Sonkara
51. Khudrachenikuchi
52. Khudrakatla Barkuchi
53. Khudrapipalia
54. Kumarikata
55. Madan-Mohan Sakhowa
56. Madhapur
57. Mairadonga
58. Majdia
59. Makal Daba
60. Mugkuchi
61. Nalbari Gaon
62. Namati
63. Namdonga
64. Nanda Gaon
65. Nankar Bhaira
66. Niz-Batahgila
67. Pachimkhatar Kalakuchi
68. Paikarkuchi
69. Paila
70. Pajipar
71. Parowa
72. Pitnipara
73. Porakuchi
74. Pub-Kalakuchi
75. Sahpur
76. Sandha
77. Sandha Kairara
78. Sariahtali
79. Tantra Sankara
80. Terechia
81. Tilana
82. Poila
83. Digheli
84. Bhadra
85. Ajara
86. Bezera
87. Barkuriha
88. Budru Kuchi
89. Kardoitala
90. Balamug Kuchi
91. Balilesa
92. Sondha
93. Chowkbazer
94. Nizbahjoni
95. Baliluria
96. Japarkuchi
97. Namati
98. Tarecia
99. Balitara
100. Bhankuchi

Adopted Villages under Dhekiajuli SSDN Eye Care Centre
Established: April, 2021
Total Villages – 100
Sonitpur District, Assam

1. Gadhajuli
2. Mitha Aam Bangali
3. Danga Basti
4. Krishna Nagar
5. Abiya Gaon
6. Sirajuli
7. Pira Kata
8. Ratanjuli
9. Pauri Pata
10. Naam Bogoribari
11. Palash Basti
12. Singri Line

13. Bogi Pukhuri
14. Belseri Line
15. Dhekiajuli T.E
16. Parwatipir
17. Dholouguri
18. Singri Tatla
19. Ghoramara Pathar
20. Natun Singri
21. Bhanga Mandir
22. Narayanpur T. E.
23. No. 1 Nijibari
24. No. 2 Nijibari
25. Nanhe Basti
26. Lulukai
27. Sulal Bheti
28. Balisiya
29. Kalisthan
30. Sirajuli Khatra
31. Bogoribari
32. Pira Kata Line
33. Adabil
34. Jay Nagar
35. Pira Kata Kachari Line
36. Tulip T. E.
37. Arun T. E.
38. Bhoot Para
39. Barsola
40. Salmilam
41. Pabbar Tala
42. Podo Bil
43. Manmohuni Pur
44. Mona Bhag
45. Panbari
46. Gorjuli Gagora
47. Hirajuli
48. Julia
49. Dibrudalong
50. Sapai
51. Samuguri
52. Raikasmari
53. Batasipur
54. Singimari
55. Barpeta
56. Belseri
57. Silbori
58. Thanabari
59. Gangapur
60. Santipur
61. Ghagara
62. Kachari Ghagara
63. Dhirai
64. Garmora
65. Kathala Duba
66. Keheru Khunda
67. Upper Panbari
68. Civil Road
69. Janghal Basti
70. Ward No. 9
71. Ward No. 8
72. Ganguly Road
73. Netaji Road
74. Ward No. 7
75. Tamuli Road
76. Ward 4
77. Lechu Bagan
78. Ward No. 5 Bangalipara
79. Govt Boys Road
80. Ward No. 3
81. Thakurbari
82. Ward No. 10
83. Musjid Patti
84. Anil Borah Path
85. Upper Panbari
86. Jiaur Rahman Road
87. PNGB Road
88. Vivekananada Road
89. Swahid Muzammil Road
90. Thakurbari
91. LOKD Road
92. Medhi Chuburi
93. APJ Abdul Kalam Road
94. Bhokua Mari
95. Bodai Jaroni
96. Ward No. 1
97. Rohiniborapath
98. Santiparapath
99. Shani Mandir Road
100. Ward No. 5

চকু চিকিৎসাৰ কীৰ্তিস্তম্ভ
শ্ৰীশংকৰদেৱ নেত্ৰালয়

চকুৰ বিভিন্ন ৰোগত আক্ৰান্ত হেজাৰ-বিজাৰ ভুক্তভোগীক অবিৰাম সুফল প্ৰদান কৰিবলৈ এক মহান ব্ৰতত ব্ৰতী উত্তৰ-পূব ভাৰতৰ এখন চকু চিকিৎসালয়। গুৱাহাটী মহানগৰীৰ বেলতলাত অৱস্থিত এই প্ৰতিষ্ঠানৰ নামৰ শ্ৰীশংকৰদেৱ নেত্ৰালয়। সুধাকণ্ঠ ড° ভূপেন হাজৰিকাৰ ভাষাত— 'নেত্ৰালয় পূব ভাৰতৰ আশাৰ আলয়'। মানৱীয়তাৰ আদৰ্শৰে অনুপ্ৰাণিত কেইগৰাকীমান দয়ালু আৰু পৰোপকাৰী ব্যক্তিৰ মহৎ চিন্তা আৰু দূৰদৰ্শিতাৰ ফলত ১৯৯৪ চনতে গঢ়ি উঠা এই চিকিৎসালয়খনে প্ৰগাঢ় নিষ্ঠা আৰু সেৱাৰ ভাৱনাৰে নিৰৱচ্ছিন্নভাৱে জনগণলৈ সেৱা আগবঢ়াই আহিছে। এনে প্ৰতিষ্ঠাপকসকলৰ ভিতৰত নেত্ৰালয়ৰ বৰ্তমান চিকিৎসা সঞ্চালক আৰু দেশৰ ভিতৰতে এগৰাকী যশস্বী চকু বিশেষজ্ঞ ডাঃ হৰ্ষ ভট্টাচাৰ্যৰ নাম বিশেষভাৱে উল্লেখনীয়। ডাঃ ভট্টাচাৰ্যৰ নেতৃত্বত এদল অতি দক্ষ আৰু সুনিপুণ চিকিৎসক আৰু কৰ্মীয়ে চকু-স্বাস্থ্য সুৰক্ষাৰ ক্ষেত্ৰত জনসাধাৰণৰ প্ৰতি থকা দায়বদ্ধতাৰ এক অপূৰ্ব নিদৰ্শন দাঙি ধৰিছে। চকুৰ ৰোগ আৰু চকু-স্বাস্থ্যৰ বিভিন্ন দিশ সামৰি, ৰোগীক ৰোগমুক্ত কৰিবলৈ এই প্ৰতিষ্ঠানত অহৰহ প্ৰসাৰিত হৈছে শিক্ষা আৰু গৱেষণাৰ নিতৌনতুন দিগন্ত। শ্ৰীশংকৰদেৱ নেত্ৰালয়ক এখন আন্তৰ্জাতিক খ্যাতিসম্পন্ন চকু চিকিৎসালয় হিচাপে গঢ়ি তুলিবলৈ ইয়াৰ পৰিচালনাৰ গুৰুদায়িত্ব বহন কৰি থকা ন্যাসৰ সদস্যসকল, চিকিৎসা সঞ্চালক ডাঃ ভট্টাচাৰ্য, প্ৰতিগৰাকী চিকিৎসক আৰু কৰ্মীৰ

যি কৃচ্ছ্রসাধন, যি অহোপুৰুষাৰ্থ, সেয়া নিঃসন্দেহে দৃষ্টান্তমূলক। মানৱ সেৱাৰ মহৎ ভাৱনাৰে উজ্জীৱিত এদল ব্যক্তিৰ উৎসাহ, উদ্যম আৰু কৰ্মতৎপৰতাই নেত্ৰালয়ক এখন ব্যতিক্ৰমী অনুষ্ঠানলৈ ৰূপান্তৰিত কৰিছে। চকু চিকিৎসাৰ বিশ্বমানৰ যন্ত্ৰপাতি, সা-সৰঞ্জাম, যথাসাধ্য চিকিৎসাব্যৱস্থা, ৰোগীৰ সৈতে সৌহাৰ্দ্যপূৰ্ণ মিত্ৰতা আৰু সংযোগ স্থাপন কৰিবলৈ চিকিৎসক আৰু কৰ্মীসকলৰ আগ্ৰহ আৰু তৎপৰতা, তেওঁলোকৰ অভূতপূৰ্ব সহযোগিতা আৰু সহমৰ্মিতা— এই সকলোবিলাকে চকু চিকিৎসা বৃত্তিটোক গৰিমামণ্ডিত কৰি তুলিছে। প্ৰতি প্ৰভাতত হাজাৰো অধিক ৰোগী উত্তৰ-পূব ভাৰত তথা দেশৰ বিভিন্ন প্ৰান্তৰ পৰা নেত্ৰালয়ৰ প্ৰাংগণত সমবেত হয়হি চিকিৎসা লাভৰ আশাত। অন্ধতা নিবাৰণৰ পৰা আদি কৰি চকুৰ প্ৰতিটো অংশৰ অসংখ্য জটিল ৰোগৰ সৈতে মোকাবিলা কৰিবলৈ নেত্ৰালয়ত আছে আধুনিক প্ৰযুক্তিবিদ্যাৰ স্বাক্ষৰ বহনকাৰী বিশ্বমানৰ যন্ত্ৰপাতি। আছে এদল নিজ কৰ্মত আত্মনিয়োগ কৰি থকা দক্ষ চিকিৎসক আৰু

পৰিচালিত হয় অতি নিয়াৰিকৈ, সুচাৰুভাৱে। পানীকেঁচুৱাৰ পৰা আৰম্ভ কৰি অশন-অচৰ বয়সীয়াল ব্যক্তিলৈকে সকলোৱে ইয়াত লাভ কৰে সৌজন্যমূলক আচৰণ আৰু মনোযোগ। এনে ভাব হয়— সহমৰ্মিতা আৰু সহানুভূতিৰ বিশাল দুহাত প্ৰসাৰিত কৰি এই অনুষ্ঠানখন যেন ৰৈ থাকে আৰ্তজনক আদৰ-সম্ভাষণ জনাবলৈ, তেওঁলোকক সকাহ আৰু আশ্বাস দিবলৈ। চকুত ৰোগ সংক্ৰমণ, ৰেটিনাৰ বিকাৰ, গ্লকমা, চকুৰ টেমুনা, আঘাতপ্ৰাপ্ত চকু, চকুৰ স্নায়ৱিক দুৰ্বলতা, কৰ্ণিয়া, কৃত্ৰিম চকু, দুৰ্ঘটনাৰ ফলত হোৱা চকু-মুখৰ বিকৃতি— এই সকলোবিলাক সমস্যা সমাধানৰ বাবে নেত্ৰালয়ৰ বিশেষ ক্লিনিকসমূহ অহৰহ সক্ৰিয় আৰু ব্যস্ত হৈ থাকে। লক্ষ্যণীয় যে, চকুৰ গতানুগতিক চিকিৎসা, অস্ত্ৰোপচাৰ, আনকি ৰোগীৰ চকুত প্ৰয়োগ কৰিবলগীয়া দৰবপাতি আদিৰ ক্ষেত্ৰতো নেত্ৰালয়ৰ চিকিৎসকসকলে তেওঁলোকৰ সুগভীৰ গৱেষণাৰ দ্বাৰা অভিনৱ কৌশল আৰু উদ্ভাৱনী শক্তিৰ পৰিচয় দাঙি ধৰিছে। এই সকলোবিলাকৰ উপৰি শ্ৰীশংকৰদেৱ নেত্ৰালয় দেশত এখন ব্যতিক্ৰমী অনুষ্ঠান হিচাপে পৰিগণিত হৈছে এনে কিছুমান জনহিতকৰ আঁচনি আৰু প্ৰকল্পৰ বাবে, যিবিলাকে ইয়াৰ কল্যাণকামী দিশ এটা জনমানসত উজ্জলাই তুলিছে। এই প্ৰতিষ্ঠানৰ মূলমন্ত্ৰ হ'ল— work is worship- কৰ্মই জীৱনৰ আৰাধনা। এনে কৰ্ম উৎসৰ্গিত হৈছে উত্তৰ-পূব ভাৰতৰ শতসহস্ৰ বঞ্চিত, অৱহেলিত, দৰিদ্ৰ আৰু অজ্ঞানতাৰ আন্ধাৰত ডুবি থকা জনগণৰ বাবে। সেয়ে নেত্ৰালয়ৰ চিকিৎসক আৰু কৰ্মীসকলৰ কৰ্মক্ষেত্ৰ কেৱল নেত্ৰালয়ৰ চাৰিবেৰৰ মাজতে সীমাবদ্ধ নহয়, তেওঁলোকৰ কৰ্মক্ষেত্ৰ বিশাল আৰু বিস্তীৰ্ণ। শ্ৰীশংকৰদেৱ নেত্ৰালয়ৰ সৈতে ওতঃপ্ৰোতভাৱে জড়িত হৈ থকা বাজহুৱা চকু-স্বাস্থ্য উন্নয়ন প্ৰকল্পটোৱে হাতত লোৱা বিভিন্ন উন্নয়নমূলক আঁচনিৰ ফলস্বৰূপে উত্তৰ-পূব ভাৰতৰ আটাইকেইখন ৰাজ্যৰ ভিতৰুৱা অঞ্চলসমূহত চকু ৰোগ সম্পৰ্কে এক অভূতপূৰ্ব সজাগতাৰ সৃষ্টি হৈছে। অসম, মণিপুৰ, মিজোৰাম, নাগালেণ্ড, মেঘালয়, অৰুণাচল ত্ৰিপুৰা আদি ৰাজ্যৰ যাতায়াতৰ সুচল ব্যৱস্থা নথকা অতি দুৰ্গম অঞ্চলবিলাকত নেত্ৰালয়ৰ চিকিৎসক আৰু কৰ্মীসকলে নিয়মীয়াকৈ শিবিৰ পাতি অন্ধ লোকসকলক একেলগে কৰে, আৰু চকুৰ বিভিন্ন ৰোগ আৰু চকুৰ ল'বলগীয়া যত্ন সম্পৰ্কে অৱগত কৰিবলৈ যত্ন কৰে। এনে শিবিৰবিলাকত ৰোগীৰ চকু পৰীক্ষা কৰা হয় আৰু তেওঁলোকৰ ৰোগ চিনাক্ত কৰি নিৰাময়ৰ ব্যৱস্থা হাতত লোৱা হয়। দাৰিদ্ৰ্য সীমাৰেখাৰ তলত থকা ৰোগীসকলক বেলতলাৰ মুখ্য চিকিৎসালয়লৈ অনা হয় আৰু

গ্লুকমাকে আদি কৰি বহুতো জটিল ৰোগৰ পৰা তেওঁলোকক ৰোগমুক্ত বুলি ঘোষণা কৰা হয়। দূৰ-দূৰণিৰ গ্ৰামাঞ্চলৰ ৰোগীসকলক গুৱাহাটীৰ শ্ৰীশংকৰদেৱ নেত্ৰালয়লৈ অনাৰ পৰা তেওঁলোকৰ

গীতা বৰুৱা

অস্ত্ৰোপচাৰলৈকে সকলো বিনামূলীয়া। ইয়াৰ উপৰি ৰোগীসকলৰ থকা-মেলা, খোৱা-বোৱা, চছমা আদিও বিনামূলীয়া যোগান ধৰা হয়।' অস্ত্ৰোপচাৰ সম্পন্ন হোৱাৰ পাছত তেওঁলোকক নিজ নিজ ঘৰলৈ প্ৰত্যাবৰ্তনৰ ব্যৱস্থাও কৰি দিয়ে এই চকু-স্বাস্থ্য

উন্নয়ন কেন্দ্ৰটোৱে। সন্দেহ, সংশয়, অন্ধবিশ্বাস, কুসংস্কাৰৰ ডাঠ কুঁৱলীয়ে আৱৰি ৰখা অসংখ্য এনে লোক আছে যিসকলৰ ধাৰণা যে চকুত ছানি পৰা ৰোগটো দৰাচলতে ভগৱানৰ এক অভিশাপ, পূৰ্বজন্মৰ কোনো পাপৰ পৰিণতি। এনে বদ্ধমূল ধাৰণাৰ বশৱৰ্তী হৈ এই লোকসকলে কোনো প্ৰকাৰৰ চিকিৎসা গ্ৰহণ কৰিবলৈ আগবাঢ়ি নাহে। অজ্ঞানতাৰ ঘোৰ আন্ধাৰে বোধশক্তি আচ্ছন্ন কৰি ৰখা এইসকল দুৰ্ভগীয়া ব্যক্তিয়ে স্বইচ্ছাই অন্ধকাৰ জগত এখনত দৃষ্টিশক্তিহীন হৈ এক যন্ত্ৰণাকাতৰ, অৱৰুদ্ধ জীৱন-যাপন কৰিবলগীয়া হৈছে। নেত্ৰালয়ৰ এই বাজহুৱা চকু-স্বাস্থ্য উন্নয়ন প্ৰকল্পৰ চিকিৎসক আৰু কৰ্মীসকলে এইসকল অন্ধ লোকৰ ঘৰে ঘৰে গৈ তেওঁলোকক ৰোগ চিনাক্তকৰণ আৰু যথাবিহিত চিকিৎসা ব্যৱস্থাৰ বাবে স্বাস্থ্য শিবিৰলৈ বহু কাকুতি-মিনতি কৰি লৈ আহে, তেওঁলোকৰ মনত পুঞ্জীভূত হৈ থকা ভয়, সন্দেহ, অন্ধবিশ্বাস আদি আঁতৰাবলৈ যথোপযুক্ত চেষ্টা কৰে। এই ক্ষেত্ৰত নেত্ৰালয়ৰ চিকিৎসক আৰু কৰ্মীসকলে যেন

এক ধৈৰ্যৰ পৰীক্ষাত অৱতীৰ্ণ হ'বলগীয়া হয়। দেখা গৈছে এনে পৰীক্ষাত তেওঁলোক সাহস আৰু আত্মবিশ্বাসেৰে উত্তীৰ্ণ হৈছে আৰু বহুতো দৃষ্টিহীন লোকক পোহৰৰ বাটলৈ নি অহাৰ ক্ষেত্ৰত কৃতকাৰ্যতা লাভ কৰিছে। নেত্ৰালয়ৰ এনে নেৰানেপেৰা প্ৰচেষ্টাৰ ফলস্বৰূপে ডিমৰীয়াৰ তিনিখন গাঁও সম্প্ৰতি অন্ধতামুক্ত হিচাপে প্ৰতিপন্ন হৈছে।

শিশুৰ অন্ধতা প্ৰতিৰোধ আৰু দূৰীকৰণৰ ক্ষেত্ৰতো নেত্ৰালয়ৰ চিকিৎসকসকলে অসম সৰ্বশিক্ষা অভিযান নামৰ চৰকাৰী প্ৰতিষ্ঠানটোৰ সহযোগত এক বলিষ্ঠ পদক্ষেপ গ্ৰহণ কৰিছে। এনে পদক্ষেপৰ মাজত আছে শিশুৰ চকুত ছানি পৰা ৰোগৰ অস্ত্ৰোপচাৰ আৰু লেন্স সংস্থাপন। আধুনিক চিকিৎসা পদ্ধতিৰ দ্বাৰা নৱজাতকক ধৰি শিশুৰ কেন্সাৰ ৰোধ কৰিবলৈ নেত্ৰালয়ৰ চিকিৎসকসকলে বহুমূলীয়া অৱদান আগবঢ়াইছে। স্কুলীয়া ল'ৰা-ছোৱালীৰ চকু পৰীক্ষা আৰু চকুৰ স্বাস্থ্য সম্পৰ্কে তেওঁলোকক সচেতন কৰি তুলিবলৈ শ্ৰীশংকৰদেৱ নেত্ৰালয়ে নিয়মীয়া কিছুমান আঁচনি হাতত লৈছে। ২০১৯ চনলৈ সাতিখন স্কুল সামৰি সাতটা শিবিৰ অনুষ্ঠিত হৈছে আৰু ৮৩৮৮ জন স্কুলীয়া ছাত্ৰ-ছাত্ৰীৰ চকুৰ Amblyopia নামৰ ৰোগৰ চিনাক্তকৰণ আৰু চিকিৎসাৰ ব্যৱস্থা কৰা হৈছে।

দৃষ্টিশক্তিহীন লোকক দৃষ্টিদানৰ দ্বাৰা মহৎ উপকাৰ সাধিবলৈ বহু দৰদী হৃদয়ৰ ব্যক্তিয়ে জীৱিতকালত সংকল্পবদ্ধ হয় মৃত্যুৰ পাছত তেওঁৰ চকুযুৰি দান কৰিবলৈ। পৰিতাপৰ কথা যে, এনে এক মানৱীয় ভাৱনাৰ সৈতে সাঙোৰ খাই আছে মানুহৰ চিৰাচৰিত দ্বিধা, সংকোচ, কুসংস্কাৰ, অন্ধবিশ্বাস ধৰ্মীয় ৰীতি-নীতি, ইহকাল-পৰকালৰ চিন্তা। নেত্ৰদানৰ ক্ষেত্ৰত হেতাৰ হৈ থিয় দিয়া এনে বাধা-বিঘিনী দূৰ কৰাৰ বাবে শ্ৰীশংকৰদেৱ নেত্ৰালয়ৰ চিকিৎসক আৰু কৰ্মীসকলে সমগ্ৰ উত্তৰ-পূব ভাৰতৰ জনসাধাৰণৰ মাজত নেত্ৰদান সম্পৰ্কে সজাগতাৰ সৃষ্টি কৰিবলৈ এক কঠিন সংগ্ৰাম কৰিবলগীয়া হয়। তেওঁলোকৰ অসীম চেষ্টাৰ ফলত নেত্ৰালয়ৰ 'আই-বেংক'ত সংগ্ৰহিত আৰু সঞ্চিত হৈছে পৰ্যাপ্ত পৰিমাণৰ কৰ্ণিয়া। দৃষ্টিহীন লোকৰ চকুত এনে কৰ্ণিয়া প্ৰতিস্থাপনৰ ফলত বহু লোকৰ পুনৰুদ্ধাৰ আৰু পুনঃসংস্থাপন সম্ভৱপৰ হৈছে। চকু সুৰক্ষা আৰু অন্ধতা নিবাৰণৰ বাবে শ্ৰীশংকৰদেৱ নেত্ৰালয়ে হাতত লোৱা বিভিন্ন আঁচনি আৰু প্ৰকল্পসমূহ সফলভাৱে ৰূপায়িত কৰাৰ ক্ষেত্ৰত আগবাঢ়ি আহিছে ৰাজ্য আৰু জিলাভিত্তিক বহুতো চৰকাৰী-বেচৰকাৰী প্ৰতিষ্ঠান, সংস্থা, সংগঠন আৰু বহুতো সহৃদয় সমাজকৰ্মী।

চকু চিকিৎসাৰ অভাৱনীয় বিকাশ আৰু বৈপ্লৱিক পৰিৱৰ্তনৰ ক্ষেত্ৰত মাইলৰ খুঁটি হিচাপে পৰিগণিত এই প্ৰতিষ্ঠানটোৱে দাঙি ধৰিছে মানৱ সেৱাৰ এক মহান আদৰ্শ, সামাজিক দায়বদ্ধতা আৰু দৃষ্টান্তমূলক কৰ্মসংস্কৃতিৰ এক অসাধাৰণ চানেকি। মানৱীয় প্ৰমূল্যৰ মহৎ আদৰ্শৰে অনুপ্ৰাণিত যিকোনো প্ৰতিষ্ঠানৰ আঁৰত লুকাই থাকে কিছুমান চৰিত্ৰ। সেই চৰিত্ৰসকলৰ বাবে তেওঁলোকে গঢ়ি তোলা অনুষ্ঠানখন তেওঁলোকৰ Life-blood। ত্যাগৰ ভাৱনাৰে উদ্বুদ্ধ কেইগৰাকীমান উদাৰ মনৰ ব্যক্তিৰ আশাগুধীয়া এক স্বপ্নৰ ফল শ্ৰীশংকৰদেৱ নেত্ৰালয়।■

লেখক সন্দিকৈ ছোৱালী মহাবিদ্যালয়ৰ ইংৰাজী বিভাগৰ প্ৰাক্তন মুৰব্বী অধ্যাপক
ফোন ঃ ৯৪৩০১১৯৪০৫

প্ৰতিৰোধযোগ্য অন্ধত্বমুক্ত গাঁৱৰ লক্ষ্য শংকৰদেৱ নেত্ৰালয়ৰ
দুখীয়া ৰোগীলৈ বিনামূলীয়া চিকিৎসাৰ পদক্ষেপ

প্ৰতিদিন সংবাদ, গুৱাহাটী, ১৭ মে' ঃ বিগত প্ৰায় আঢ়ৈ দশক ধৰি অসম তথা উত্তৰ-পূৰ্বাঞ্চলত নিৰৱচ্ছিন্নভাৱে চকু চিকিৎসা সেৱা আগবঢ়াই অহা শ্ৰীশংকৰদেৱ নেত্ৰালয়ে অসমৰ গাঁওসমূহক প্ৰতিৰোধযোগ্য অন্ধত্বমুক্ত কৰাৰ বাবে বিশেষ পদক্ষেপ গ্ৰহণ কৰিছে। স্বাধীনতাৰ ■ ১২ পৃষ্ঠাত

প্ৰতিৰোধযোগ্য অন্ধত্বমুক্ত গাঁৱৰ লক্ষ্য

■ *পঞ্চম পৃষ্ঠাৰ পৰা* ৭৫ বছৰ উপলক্ষে এই সন্দৰ্ভত 'অন্তিমজন ব্যক্তিৰে সংযোগ' (The last man connectivity) শীৰ্ষক এখন আঁচনি হাতত লৈছে নেত্ৰালয় কৰ্তৃপক্ষই। অন্ধত্ব আৰু ইয়াৰ লগত জড়িত মানৱীয় দুৰ্দশা লাঘৱ আৰু জনগণৰ আশা আৰু আকাংক্ষা পূৰণ কৰাৰ উদ্দেশ্যে এই লোককেন্দ্ৰিক আৰু প্ৰতিৰোধমূলক আঁচনিখন নেত্ৰালয়ৰ সংস্থাপক তথা সঞ্চালক ডাঃ হৰ্ষ ভট্টাচাৰ্যই যুগুত কৰি উলিয়াইছে। ডাঃ ভট্টাচাৰ্যই জানিবলৈ দিয়ামতে এই আঁচনি সফল কৰাৰ বাবে গ্ৰহণ কৰা বিশেষ পদক্ষেপকেইটা হ'ল— গাঁৱৰ অন্তিম ব্যক্তিৰ লগত যোগাযোগ সংস্থাপন, প্ৰাথমিক স্বাস্থ্য সেৱা আৰু প্ৰাথমিক চকু চিকিৎসা সেৱাৰ সমন্বয়, ৰোগ চিনাক্তকৰণ, চকু ৰোগৰ চিকিৎসা, অস্ত্ৰোপচাৰ আৰু অন্ধত্বৰ পৰা মুক্তি। এই সেৱা দৰিদ্ৰ সীমাৰেখাৰ তলত থকা সকলোকে বিনামূলীয়াভাৱে প্ৰদান কৰা হ'ব আৰু অৰ্থনৈতিকভাৱে টনকিয়াল নোহোৱা ব্যক্তিক বেহাই মূল্যত চিকিৎসা প্ৰদান কৰা হ'ব। এই আঁচনিত অন্তৰ্ভুক্ত কৰা জিলাসমূহৰ নাম— কামৰূপ মেট্ৰ', কামৰূপ, মৰিগাঁও, দৰং, নগাঁও, বঙাইগাঁও, গোৱালপাৰা, ওদালগুৰি, বজালী, বৰপেটা, নলবাৰী, শোণিতপুৰ। ইয়াৰে প্ৰত্যেকখন জিলাত কমেও একোটাকৈ নেত্ৰ কেন্দ্ৰ প্ৰতিষ্ঠা কৰা হৈছে। প্ৰতিটো নেত্ৰ কেন্দ্ৰৰ অধীনত ১০০ খন বা ততোধিক গাঁৱক অন্তৰ্ভুক্ত কৰা হৈছে। নেত্ৰ কেন্দ্ৰ হৈছে এটা প্ৰাথমিক চকু চিকিৎসা কেন্দ্ৰ। ইয়াৰ যোগেদি স্বাস্থ্য সেৱাৰ পৰিপূৰ্ণতা, উৎকৃষ্ট আৰু চূড়ান্ত মান বৰ্তাই ৰাখি প্ৰাথমিক চকু চিকিৎসা সেৱা প্ৰদান কৰা হয়। প্ৰাথমিক চকু চিকিৎসাৰ মুখ্য উদ্দেশ্য চকুৰ ৰোগ আৰু অন্ধত্ব প্ৰতিৰোধ। নেত্ৰ কেন্দ্ৰৰ কাৰ্যক্ৰমণিকা বিশ্ব স্বাস্থ্য সংস্থা, ইণ্টাৰনেচনেল এজেন্সি ফৰ দি প্ৰিভেনচন অৱ ব্লাইণ্ডনেছ, ভিজন-২০২০— ৰাইট টু ছাইটৰ নিৰ্দেশ মানি বৈজ্ঞানিকভাৱে তৈয়াৰ কৰা হৈছে। অন্ধত্ব নিবাৰণৰ এই বিশেষ পদ্ধতি ভাৰত চৰকাৰৰ ৰাষ্ট্ৰীয় অন্ধতা নিয়ন্ত্ৰণ আঁচনিৰ দ্বাৰাও স্বীকৃতিপ্ৰাপ্ত। নেত্ৰ কেন্দ্ৰ প্ৰাথমিক চকু চিকিৎসা ব্যৱস্থাৰ কেন্দ্ৰবিন্দু। ইয়াত উপলব্ধ সেৱাসমূহ হ'ল— চকু ৰোগৰ বাছনি (Screening), চকুৰ প্ৰতিসৰণ পৰীক্ষা আৰু বিতচকুৰ যোগান ধৰা, টেলি-অফথালমলজি সেৱা, সামান্য চকুৰ চিকিৎসা, নিয়মিত চকু আৰু জনস্বাস্থ্য সম্বন্ধীয় সজাগতা বৃদ্ধিৰ অনুষ্ঠানৰ আয়োজন কৰা, চকুৰ ৰোগী অস্ত্ৰোপচাৰৰ কাৰণে শ্ৰীশংকৰদেৱ নেত্ৰালয়লৈ প্ৰেৰণ কৰাৰ লগতে অহা-যোৱাৰ ব্যৱস্থা, চিকিৎসা কালত গুৱাহাটীত থকাৰ ব্যৱস্থা, চকুৰ অস্ত্ৰোপচাৰ, ঔষধ ইত্যাদি বিনামূলীয়াভাৱে যোগান ধৰা, অস্ত্ৰোপচাৰৰ পিচত পৰৱৰ্তী পৰীক্ষণ-নিৰীক্ষণ আৰু উপযুক্ত চিকিৎসাৰ ব্যৱস্থা কৰা। এই প্ৰকল্পৰ অন্তৰ্গত প্ৰত্যেক গাঁৱৰ প্ৰতিটো পৰিয়ালৰ সকলো সদস্যৰ নাম পঞ্জীয়নভুক্ত কৰা হয়। বৈজ্ঞানিক পদ্ধতিৰ পৰীক্ষাৰ দ্বাৰা চকুৰ ৰোগী আৰু নিৰোগীক চিনাক্ত কৰি অন্ধ ব্যক্তিসকলৰ নাম পঞ্জীভুক্ত কৰাৰ লগতে পৰ্যায়ক্ৰমে নিৰাময়ৰ ব্যৱস্থা নাইবা অস্ত্ৰোপচাৰৰ ব্যৱস্থা কৰা হয়। বিশেষকৈ প্ৰাথমিক স্বাস্থ্য সেৱাৰ ক্ষেত্ৰত জনসজাগতা বৃদ্ধিৰ কাৰণে তিনিটা বিষয়ৰ ওপৰত এই প্ৰকল্পত গুৰুত্ব আৰোপ কৰা হৈছে। যেনে— (ক) বিশুদ্ধ পানীৰ ব্যৱহাৰ, (খ) সাধাৰণ স্বাস্থ্য বিধান আৰু জঞ্জাল চাফাই, (গ) সাৰ্বিক টীকাকৰণ। ইয়াৰ কাম ইতিমধ্যে পূৰ্ণগতিত চলি আছে। এই পৰিকল্পনাৰ অধীনত ইতিমধ্যে অসমৰ বিভিন্ন জিলাৰ ১,৫৬৫ খন গাঁও অন্তৰ্ভুক্ত কৰা হৈছে আৰু ২০২ খন গাঁও ইতিমধ্যে প্ৰতিৰোধযোগ্য অন্ধত্বৰ পৰা মুক্ত কৰা হৈছে।

Transforming eye care in Northeast India

The Assam Tribune, 21/04/2022

■ Dr Mohit Garg

Two important reasons responsible for higher prevalence of blindness in Assam and Northeast India are inadequate facilities and lack of access to eye care. To fulfil the burgeoning eye care requirement and combat the blindness issue, universal eye care coverage and active public participation are the answers. To address this unmet need and to provide accountable, affordable, accessible and equitable eye care facilities of international standard in Assam and the North-east, Sri Kanchi Sankara Health and Educational Foundation established Sri Sankaradeva Nethralaya (SSDN) in Guwahati in 1994, encompassing the vision and leadership of Dr Harsha Bhattacharjee who is an acclaimed autodidactic and socially oriented eye doctor of the region.

The vision of the foundation is to reshape all dimensions of eye care in terms of investment and organization of services through cross-sectional actions. The development was imperative to deliver professional primary, secondary and tertiary eye care need. The foundation initiated targeted and time-bound actions through building of infrastructure, development of local human resources and technology transfer. Teaching, training, research, empowerment and administration were placed as key movers. The non-profit institution thus established with public, corporate, private and largely by government contribution. The various plans and programmes have been implemented strategically through the clinical, education and research, and community wings of the institution in an integrated, inclusive and comprehensive manner, and within a short span of time the institution became the driver of changes from the era of torch light eye examination to slit lamp bio-microscopic precision ophthalmic care and from manual to femto-second laser assisted cataract surgical care. In the field of investigation and evidence-based clinical care, precision technology related to ocular pathology, molecular biology, immune histochemistry, interferometry, scanning laser ophthalmoscopy, optical coherent tomography, wide field retinal viewing and imaging systems, lasers, orbital surgical navigator, endoscopy device, vitreoretinal surgical system, intraocular therapeutics and intra arterial chemotherapy or certain pediatric eye cancer and many others under care of trained doctors, paramedics and bioengineer are made available based on a system and affordable price for people of the region under one roof. These facilities also attracted medical tourism from other states and neighbouring countries. The current scope of services includes all subspecialty services like emergency and comprehensive eye care, cataract, vitreo retina, oculoplasty, pediatric ophthalmology, cornea, uvea, neuro-ophthalmology, glaucoma and others. The institution is accredited by NABH, NABL, DSIR, BIRAC, DBT and ICMR. Services of the institution have been dedicated to the nation by late Prime Minister of India PV Narasimha Rao. The credit of establishment of the first registered eye bank goes to this institution. The eye bank and cornea surgeon of SSDN introduced various cornea transplantation services and also motivated civil society to take part in cornea donation raising hope of cure to blind people due to corneal opacity. Lakhs of people are getting benefited out of the services. Daily thousand footfalls happen in the Out Patient Department from different states. More than 50% of the patient avails free treatment. Rural patients additionally availed guided transported, food, medicine and other logistics supports free of cost.

Academics, research and training are the other core activities. The institution has so far produced more than 200 ophthalmologists and 500 paramedics of different categories who are now inclusive and skilled workforce working across the country. Hosting of national and international conferences, seminars, workshops are the regular activities of the academic wing for knowledge, skill and technology development. So far SSDN assisted to develop through knowledge and technology transfer across India. The academic and research department has completed 127 research projects till now under national and international grant and published more than 200 original research articles in peer review journals. A number of innovations made by the different researchers have also been registered.

The life of Assam lives in the villages where eye care need is maximum. To reach the unreached, the community wing is incessantly working in the rural areas of Assam and the Northeast since inception through various primary eye care delivery models. The community service was inaugurated by late Governor of Assam Loknath Mishra. Presently, SSDN has developed its own model of inclusive eye care to make sustainably avoidable blindness free villages through vision center approach. SSDN community mission for sight is 'last man connectivity, integration of primary health care and eye care, cure and avoidable blindness free villages'. Under this mission 1500 villages in different districts of Assam have been adopted under 15 vision centers and 218 villages have already made free from avoidable blindness which was formally declared by the Governor of Assam, Jagdish Mukhi.

SSDN is focusing on digital technology like EMR networking between SSDN and all its rural centers for prompt service delivery, virtual training and empowerment of eye care workers in the rural areas. Daily ophthalmic service is already in place. In order to implement the ideology – 'service with knowledge and no one should left behind'. Another focus is to develop technological solution for management of different eye problems using artificial intelligence and deep neural network in collaboration with institution like IIT Guwahati. The role of SSDN in the field of clinical, academic, research and community service and regional development has been recognize through declaration of SSDN as a 'centre of excellence' by Manmohan Singh while he was the Prime Minister of India. The SSDN believes in walking till the last mile post is reached.

Nethralaya's vision document on community eye care service released

The Assam Tribune 14/08/2022

GUWAHATI, Aug 13: Commemorating the 75th year of India's independence and 'Azadi Ka Amrit Mahotsav', Sri Sankaradeva Nethralaya has set a goal in community eye care service. In this context, a function was held at the Raj Bhavan here on Friday, stated a press release issued on Friday.

At the function, Assam Governor Prof Jagdish Mukhi formally released the vision document of Sri Sankaradeva Nethralaya on community eye care service. The goal of the mission is to make people in 1,600 villages free from avoidable blindness through the vision centre approach under the recommendation of the National Programme for Control of Blindness and Vision Impairment, the Government of India, and the World Health Organization (WHO).

Fifteen vision centres in 10 districts of the State have already been established and one is in pipeline. By this time, the Nethralaya has made people of more than 200 villages in different parts of Assam free from avoidable blindness.

The Governor praised the humanitarian effort of Sri Sankaradeva Nethralaya and wished success of the mission, added the release.

MC-3192

SRI SANKARADEVA NETHRALAYA

ECO-2021-0152

SRI SANKARADEVA NETHRALAYA

A CENTER OF EXCELLENCE IN EYE CARE
NABH & NABL ACCREDITED INSTITUTE

Serving the Nation since 1994

Developed & published by
Sri Sankaradeva Nethralaya Institute of Community Ophthalmology

SRI SANKARADEVA NETHRALAYA
Unit of Sri Kanchi Sankara Health and Educational Foundation (Regd. Charitable trust)
Service Organisation & Post Graduate Institute of Ophthalmic Sciences
96, Basistha Road, Guwahati – 781028, Phone: 0361-2233444, Mobile: 80115-28506
Email: ssdn@ssdnmail.org , Website: www.ssnguwahati.org,
https://www.facebook.com/srisankardeva
https://www.instagram.com/srisankaradevanethralayaghy/
https://twitter.com/sri_assam

(Reprinted on 26.06.2023)