2016

Eye Care Situational Analysis – Arunachal Pradesh

Study commissioned by Vision 2020: The Right to Sight - India

PRASHASA Health Consultants Pvt. Ltd.,
Hyderabad

CONTENTS

ACRONYMS/ABBREVIATIONS

ANM	-	Auxiliary Nurse Midwife
APCMUHIS	-	Arunachal Pradesh Chief Minister Universal Health Insurance Scheme
APL	-	Above Poverty Line
ASHA	-	Accredited Social Health Activist
BPL	-	Below Poverty Line
CEO	-	Chief Executive Officer
CHC	-	Community Health Centre
CSC	-	Cataract Surgical Coverage
DBCS	-	District Blindness Control Society
DH	-	District Hospital
DMO	-	District Medical Officer
DR	-	Diabetic Retinopathy
ECCE	-	Extracapsular Cataract Extraction
FFA	-	Fundus Fluoresce in Angiography
HPD	-	High Priority District
ICCE	-	Intra-Capsular Cataract Extraction
INGO	-	International Non-Governmental Organization
IOL	-	Intraocular Lens
LCIF	-	Lions Clubs International Foundation
LFTW	-	Light for the World
MIS	-	Management Information System
NGO	-	Non-Governmental Organisation
NHM	-	National Health Mission
NPCB	-	National Programme for Control of Blindness
OCT	-	Optical Coherence Tomography
OPD	-	Outpatient Department
OT	-	Operation Theatre
PEC	-	Primary Eye Care
PHC	-	Primary Health Centre
PMOA	-	Para Medical Ophthalmic Assistant
PPP	-	Public Private Partnership
RAAB	-	Rapid Assessment of Avoidable Blindness
RBSK	-	Rashtriya Bal Swasthya Karyakram
RKMH	-	Ramakrishna Mission Hospital
RSBY	-	Rashtriya Swasthya Bima Yojana
SICS	-	Small Incision Cataract Surgery
SPO	-	State Programme Officer
SSA	-	Sarva Shiksha Abhiyan

ACKNOWLEDGEMENTS

- Light for the World (LFTW) for funding the Project
- National Programme for Control of Blindness (NPCB), Arunachal Pradesh for supporting and helping with the assessment
- Sightsavers India Country Office for providing the tools for situational analysis
- All those who participated in our discussions and interviews

SUMMARY

The prevalence of blindness among the older population (50+) in Arunachal Pradesh is 2.28%, which is second next to Assam in North Eastern Region of India as given by RAAB survey 2003. Majority of the blindness is due to cataract. INGOs have been supporting eye care partners in the North-east with focus on reaching out to rural and remote areas. However, the percentage of cataract surgeries performed by government is significant in the North-east (46%) compared to contributions by private actors (18%) and NGOs (36%). In this pretext, VISION 2020 INDIA is set to develop District level and State Level Action Plans for Eye Care Services in Arunachal Pradesh through a joint effort of government and non-government key stakeholders. Two districts - Lower Subansiri and Changlang districts were identified for conducting the situational analysis in consultation with State program for control of blindness.

Lower Subansiri and Changlang districts were visited by Mr. Saravanan Saibaba, Consultant; Mr. Phanindra Babu Nukella, CEO, Vision 2020 India and Dr. Taba Khanna, SPO. Following the assessment, a district level stakeholders' consultation was conducted at the district level to share the findings and recommendations from the eye care situational analysis assessment, to reconfirm the findings and to develop action plan to overcome the challenges. In addition, the team also interacted with Commissioner-Health, Joint Secretary-HFW, Director of Health Services, Joint Director-Medical Education, Nodal Officer of Arunachal Pradesh Chief Minister's Universal Health Insurance Scheme, representatives of State Hospital, Naharlagun, Ramakrishna Mission Hospital, Itanagar and Karuna Trust.

Arunachal Pradesh has a population of 1.3 million people (2011 census). Itanagar is the state capital and is divided into 20 districts with 77 percentage of people living in rural areas. The state has one state hospital, 18 district hospitals, 54 CHCs and 147PHCs and 492 sub centres. 16 PHCs are handed over to different NGOs under the public private partnership.

The eye care services in the state is governed and supported by the National Programme for Control of Blindness (NPCB). The eye care services are provided by 14 ophthalmologist covering 6 districts and 36 PMOAs covering 14 districts. 11 facilities covering 8 districts in the state have OT available for eye surgery and basic diagnosis and surgical instruments. The current available infrastructure in terms of building, equipment and human resources are underutilised due to the low uptake of eye care services at the state and districts.

In the year 2014-15(April – March) the state has examined 42,219 patients and operated on 1,511 patients. In the year 2015-16 (April – December) the state has examined 38,209 patients and has operated on 1,122patients. The current workload does not seem reflecting the high prevalence of blindness rate as highlighted in the RAAB study conducted in 2003. Cataract and refraction services are available in the district where ophthalmologist/PMOAs are posted. However, spectacles are not dispensed as it is not allowed in the government sector.

In some districts, the villages do not have access to the district hospital. Public transportation within and inter districts are limited and does not connect all villages.

At the DH/PHC/CHC, diagnosis details are entered in a register (eg. cataract, refractive error, conjunctivitis, etc) but they are not consolidated daily and/or monthly.Acceptance rate for surgery not monitored.

Screening eye camps are not conducted in the district where ophthalmologists are available due to non-availability of funds. Yearly and periodically health camps are conducted by the district administration. However, eye care/eye screening is not part of the health camps. The ASHA workers or other health workers are neither involved to identify patients with eye problem nor to motivate the unconvinced patients to visit the district hospital to undergo surgery. Only one free cataract eye camp[1] is conducted in districts where ophthalmologists are not available. Annual schedule of free cataract eye camp by the state mobile eye unit is not available.

NPCB fund allocation is uniform across all states and no special provision is made for geographically difficult states like Arunachal Pradesh. Currently, the district fund allocation is non-existent as the NPCB funds are pre allocated as per the ROP template. There are also issues in timely release of funds from central to state and further from state to state health society. No planning meetings are conducted for eye care at state/district level with INGOs, NGO Hospitals, and district hospitals. Government is the only service provider for eye care in the district. INGOs do not support and work with public sector probably that govt. cannot accept money from INGOs and other administrative reasons.

A baseline needs assessment like a RAAB study needs to be conducted in all the districts to know the prevalence of blindness, CSC, Barriers, etc. The current priority will be to enhance the primary eye care and increase the uptake of eye care services for refractive error, cataract and low vision. Based on the magnitude of blindness, PMOAs to be made available at all district hospitals, CHCs and PHC which are located far from the district hospitals.

Envisaging the need in the community, full time ophthalmologist need to be appointed and posted at all the district hospitals which has infrastructure and in the districts with high population.

In order to improve the utilisation of available resources (infrastructure and human resources), free cataract eye camps need to be conducted at least twice a year at the district hospitals where ophthalmologist are not available, and outreach eye screening camps needs to be conducted where ophthalmologist are available. Medical officers posted at CHC/PHC need to be educated about the advancement in eye care and imparted with training to probe patients with eye problem and refer them to the next level as appropriate. Vision charts should be made available at all CHC/PHC to aid medical officers for vision examination initially and later at all sub centres. ASHA workers and ANMs working at the sub centres are closer to the community and needs to be provided with PEC training to identify, motivate and refer patients with eye problem.

In view of less number of Ophthalmologists and more number of districts, all the ophthalmologists in the state need to be involved in eye care services at the districts on rotation basis. The state hospital needs to be upgraded with advance diagnosis and treatment equipment to handle emerging eye

[1]surgery conducted at the district hospital/CHC where OT facility is available

diseases like glaucoma, diabetic retinopathy, etc. Non-functional vision centres can be handed over to NGOs under the PPP initiatives.

A detail eye care plan with activities and budget may be sent to INGOs by the government of Arunachal Pradesh and to assign one focal person to interact and mediate between the government and INGOs. VISION 2020 India can assume facilitation role in involving INGOs to work with the public sector.

BACKGROUND

The 8 states of Northeast India are a home to 45.6 million people with unusual high ethnic diversity. Political instability, violent conflicts, geographic isolation among other factors are reasons for low socio-economic development of the North-east in relation to South and Central India. Over 68% of the population of the region lives in the State of Assam. As per government data, Assam (3.05%) has the highest prevalence of blindness, followed by Arunachal Pradesh (2.28%) in India, with prevalence being highest among the older population (50+) primarily due to cataract. The outreach to rural population is insufficient, resulting in low cataract surgical rates all across the North-east.

Light for the World (LFTW) and a few other international NGOs (Mission for Vision, Operation Eyesight Universal, Orbis, CBM) have been supporting eye care partners in the North-east with focus on reaching out to rural and remote areas. A major challenge is still the lack of coordination among key stakeholders in the region, particularly between non-government and government sector. Being different from other regions of India, the percentage of cataract surgeries performed by government is significant in the North-east (46%) compared to contributions by private actors (18%) and NGOs (36%). With the world's oldest National Program for Control of Blindness, government resources are in principle available, but often not adequately applied for, coordinated and monitored. It is in this context that VISION 2020 INDIA is developing State Level Action Plan for Eye Care Services in Arunachal Pradesh as a joint effort of government and non-government key stakeholders.

OBJECTIVES

The overall Objective is

To conduct situation analysis and develop action plan for strengthening eye care services in Arunachal Pradesh

METHODOLOGY

Out of the total 20 districts in Arunachal Pradesh only 14districtshave eye care services within the public & private sector (at least availability of PMOA) in the state and only 7 district has eye care surgical facilities (at least availability of ophthalmologist) in the state. Two districts - Lower Subansiri and Changlang districts were identified by the State programme for control of blindness for conducting the situational analysis. These two districts are also identified as the High Priority District (HPD) by the Department of Health and Family Welfare for Implementation of focused health care interventions under National Health Mission (NHM) in the country.

Lower Subansiri and Changlang district was visited by Mr.Saravanan Saibaba, Consultant; Mr. Phanindra Babu Nukella, CEO, Vision 2020 India and Dr.Taba Khanna, SPO between 24th – 29th November 2015. The team visited the following facilities for assessment.

Lower Subansiri District

- Community Health Centre (CHC), Yazali
- Primary Health Centre (PHC), Yachuli
- District General Hospital, Ziro

Changlang District

- Primary Health Centre (PHC), Kharsang
- Community Health Centre (CHC), Bordumsa
- Community Health Centre (CHC), Miao
- District Hospital, Changlang

Following the visit, a district level stakeholders' consultation was conducted in each of the districts at the district level to share the findings and recommendations from the preliminary situational analysis assessment, reconfirm the findings and to develop action plan to overcome the challenges. Invitation was sent to district administrative leaders, members of the district health team, members of the district health committee, medical superintendents of hospitals (Government and NGOs), heads of health centres, representatives of community structures and NGOs in the district. The meeting was attended by 20 participants in Lower Subansiri district and 26 participants in Changlang district. The agenda of the meeting is given in Annexure -1&2 and the list of participants are given in Annexure – 3&4.

In addition to this the team also interacted with Commissioner-Health, Joint Secretary-HFW, Director of Health Services, Joint Director-Medical Education, Nodal Officer of Arunachal Pradesh Chief Minister's Universal Health Insurance Scheme, representatives of State Hospital, Naharlagun and Ramakrishna Mission Hospital, Itanagar who provide the tertiary level eye care in the state. Representative from Karuna Trust, that runs PHCs under PPP initiatives was also consulted. Refer to Annexure 5.

The data collection for the study was through

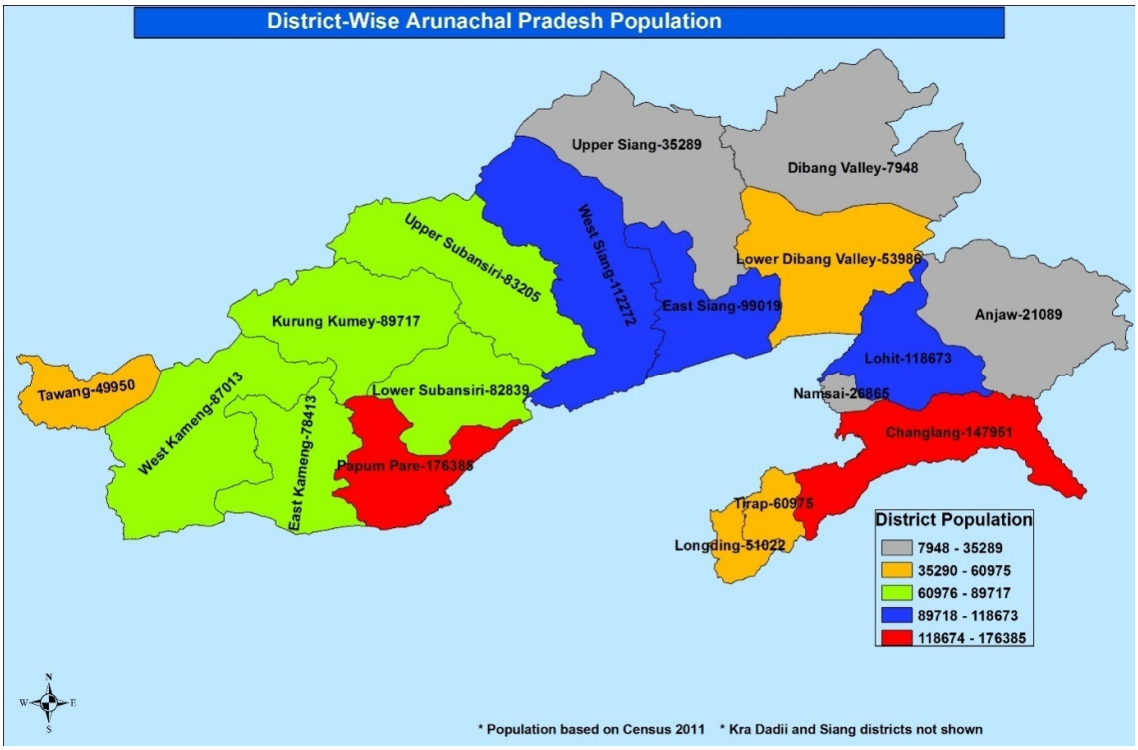
- Desk-based review of documents and data sources
- Collection of secondary data through structured templates
- Interviews with eye health system stakeholders – both government and non-government
- Interviews with NGOs working in health care

In order to have standard reporting across the country, the team used the District Eye Health Assessment Tool (DEHAT) developed by Sightsavers International, India Country office for data collection, analysis and reporting.

FINDINGS AND DISCUSSIONS

STATE PROFILE:

- Arunachal Pradesh is located in North east part of India. It borders the states of Assam and Nagaland to the south, and shares international borders with Bhutan in the west, Burma in the east and China in the north. Itanagar is the state capital and located in the Papum Pare district. It is divided into 20 districts and has a population of 1.3 million people (2011 census) with 77 percentage of people living in rural areas. Most of the area is covered with forest and the population density of the state is 17 inhabitants per square kilometre. The overall literacy percentage in the state is 66.95%.



- In terms of health facilities, the state has one state hospital, 18 district hospitals, 54 CHCs and 147PHCs and 492 sub centres. 16 PHCs are run by different NGOs under the public private partnership. There are about 3761 ASHA workers in the state.

MAGNITUDE OF BLINDNESS[2]:

- As per the NPCB national survey 1986-89, the prevalence in Arunachal Pradesh was 1.23%. The prevalence of blindness had increased to 2.28% as per the North-eastern RAAB survey 2003-04.

LEADERSHIP AND GOVERNANCE:

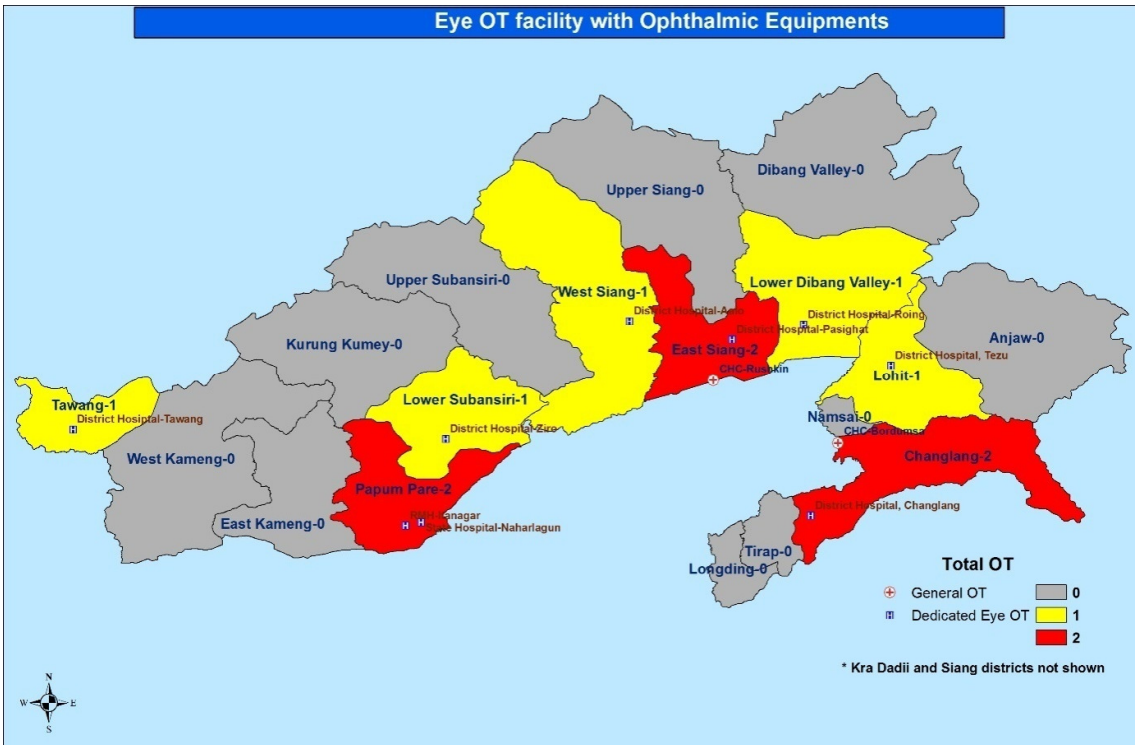
- The eye care services in the state is governed and supported by the National Programme for Control of Blindness (NPCB). The State Programme Officer (SPO) to manages the programme at the state level. At the district level, the Deputy Commissioner who is the overall in charge of the district administration is the Chairman of District Blindness Control Society (DBCS) and the

[2] http://cbhidghs.nic.in/writereaddata/linkimages/10164415348169.pdf

District Medical Officer (DMO) who is the overall in charge of the health care in the district is the Member Secretary, DBCS too. The district health administrative team in the districts are very active and eye care is inclusive of other health care activities in the district.

EYE CARE INFRASTRUCTURE:

- 11 facilities are available for eye surgery covering 8 districts in the state. This includes having a dedicated eye OT or general OT facility for eye surgery and basic surgical equipment. The details are given below in map and in the table.



Districts	Dedicated Eye OT	General OT available for eye surg.	NGO
1. Papum Pare	State Hospital, Naharlagun - Functional		RKMH, Itanagar
2. Lower Subansiri	District Hospital, Ziro - under construction		
3. Changlang	District Hospital, Changlang - Non Functional	CHC, Bordumsa - Non Functional	
4. Tawang	District Hospital, Tawang - Functional		
5. East Siang	District Hospital, Pasighat - Functional	CHC, Ruskin - Functional	
6. West Siang	District Hospital, Aalo - Functional		
7. Lower Dibang Valley	District Hospital, Roing - Functional		
8. Lohit	District Hospital, Tezu - Non Functional		
Total	**8**	**2**	**1**

- The current available infrastructure in terms of building and equipment are underutilised due to the non-availability of ophthalmologist in 3 places and due to low uptake of eye care services in all the districts due to poor demand generated.

- The details of various resources available and its status are grouped as per the facility.

State Hospital, Naharlagun

- The state hospital has basic diagnostic and surgical equipment for cataract including a phacoemulsification machine. The state hospital does not have equipment to diagnosis and treat glaucoma and retina patients. Patients are referred to RKMH, Itanagar or RIO, Guwahati.
- Arunachal Pradesh does not have an RIO or Medical college, the state hospital is the referral and tertiary hospital. However, they do not get any special funds from NPCB as they do not fit under the category of RIO/Medical college. In the last 6 years, no new equipment have been purchased for the state hospital and most of the equipment are old and requires replacement.

District Hospitals

- Out of the 18 district hospitals, 7 districts have dedicated OT for eye care. However, two facilities are not functional due to non-availability of Ophthalmologist.
- All the district hospitals where dedicated eye OT is available is equipped with basic diagnosis and surgical instruments for cataract surgery.
- In the district hospitals visited only one cataract instrument set (ECCE) is available and they are mostly blunt and due to non-availability of vitrectomy machine complex surgeries are not risked. The Ophthalmologist use his personal SICS instrument set for surgery.
- Only cataract and minor surgeries are performed at district hospitals.

Community Health Centres (CHC)

- Two CHC which has general OT are upgraded with ophthalmic equipment and used for eye surgery. Only one facility has an ophthalmologist.
- 13 CHC are posted with PMOAs covering 6 districts and these CHCs have basic diagnosis and refraction equipment available for eye care.
- No ophthalmic equipment is available in other CHCs.

Primary Health Centre (PHC)

- Only 3 PHCs are posted with PMOAs covering 3 districts. These PHCs have basic diagnosis and refraction equipment
- No ophthalmic equipment available in other PHCs.

36 CHC/PHC were identified and sanctioned as vision centre and upgraded with ophthalmic equipment for refraction. Of which, 20 are not functioning due to non-availability of PMOAs

At the CHCs and PHCs, some Medical officers on their own interest have downloaded a vision chart and stuck on the wall to check vision for school children who come for school admission health check-up.

All the DH/CHC/PHC in Arunachal Pradesh have provision for staff quarters and this helps with the basic housing needs of the medical team who work in remote areas.

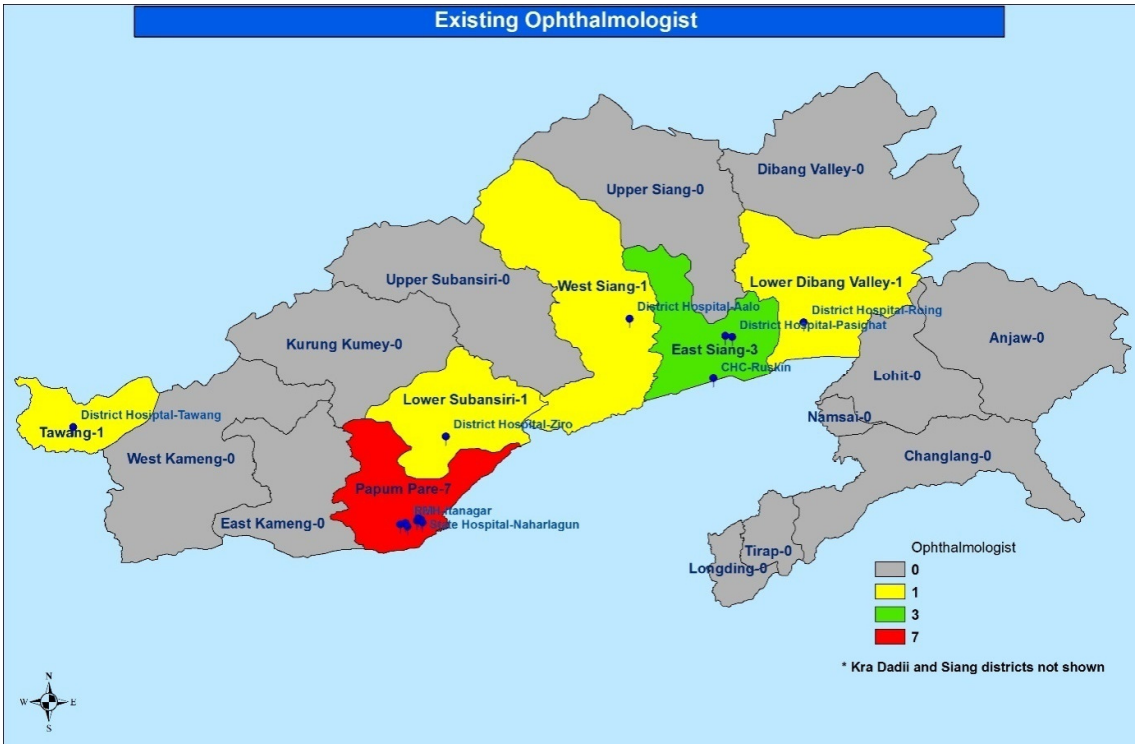
EYE CARE HUMAN RESOURCES:

- The current available human resources are unevenly distributed and most of them are located in Itanagar. Every staff in the government sector has to be transferred once in 3 years, however those in the Itanagar do not want transfers as their spouses also work in Itanagar.

- Even the available human resources are underutilised due to the low uptake of eye care services. The details of various resources available and its status are grouped as per the category

Ophthalmologist

- 7 out of the 14 active ophthalmologists are located in Itanagar and the remaining 7 are placed in 5 districts. The details are given below in the map and table.

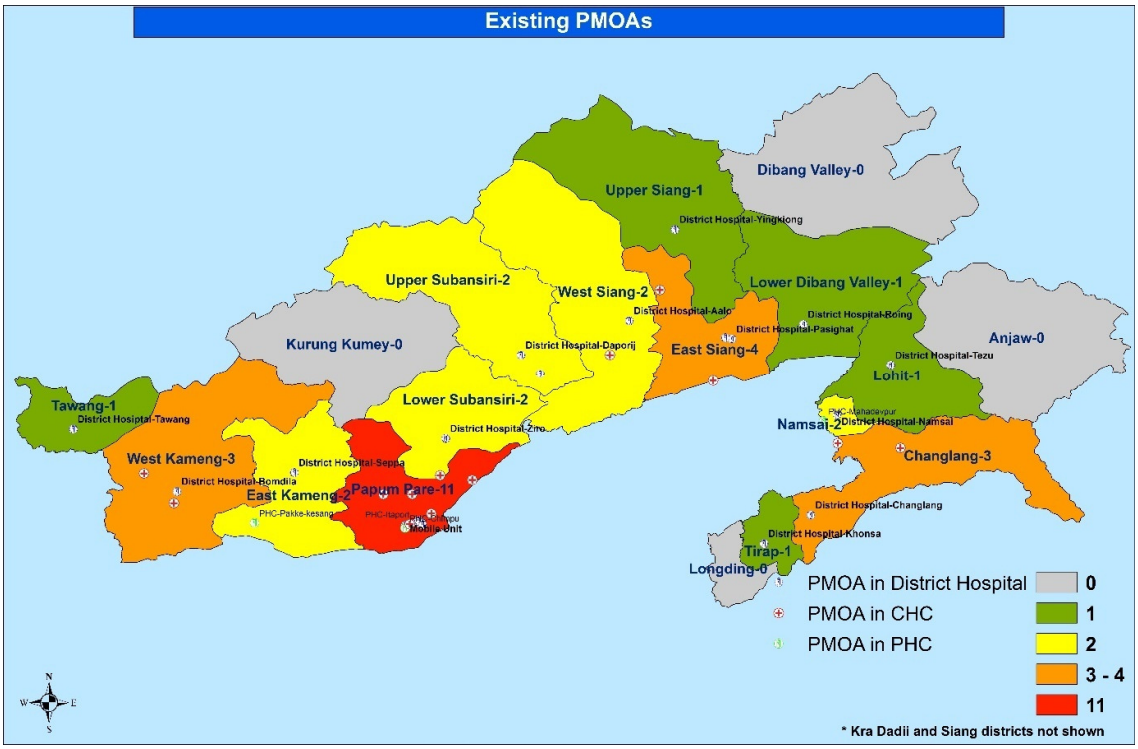


Districts	No. of Ophthalmologist – Govt.	No. of Ophthalmologist – NGOs	Total
1. Papum Pare	State Hospital, Naharlagun – 3 Mobile Unit - 1	RKMH, Itanagar - 3	7
2. Lower Subansiri	District Hospital, Ziro - 1		1
3. Tawang	District Hospital, Tawang - 1		1
4. East Siang	District Hospital, Pasighat – 2 CHC, Ruskin - 1		3
5. West Siang	District Hospital, Aalo - 1		1
6. Lower Dibang Valley	District Hospital, Roing - 1		1
Total Ophthalmologist	**11**	**3**	**14**

- 3 Ophthalmologistsposts are vacant and no Ophthalmologists have applied in spite of regular advertisement.
- Ophthalmologist are not interested to work in remote areas and the pay package is not very attractive.
- The NPCB contractual salary amount is fixed for the whole country. No provision can be made for individual state
- In the districts visited average OPD was 6-7 patients per day and the average surgery performed were 1-2 surgery per month.
- Willingness and capacity are in place to do more surgeries, but very less direct walk in patients seeking eye care.

Paramedical Ophthalmic Assistant (PMOA)

- 36 PMOA posts were sanctioned and are posted in 29 facilities covering 14 districts. Of this 11 are located in Papum Pare district. The details are given below in map and in the table.



Districts	No. of PMOAs – District Hosp.	No. of PMOAs – CHC	No. of PMOAs – PHC	No. of PMOAs – NGOs	Total
1. Papum Pare	State Hospital, Naharlagun – 4 Mobile Unit - 1	CHC, Sagalee – 1 CHC, Kimin – 1 CHC, Doimukh – 2 CHC, Itaport – 1	PHC, Chimpu - 1	RKMH, Itanagar -	11
2. Lower Subansiri	District Hospital, Ziro - 1	CHC, Yazali - 1			2
3. Changlang	District Hospital, Changlang - 1	CHC, Bordumsa – 1 CHC, Miao - 1			3
4. Tawang	District Hospital, Tawang - 1				1

Districts	No. of PMOAs – District Hosp.	No. of PMOAs – CHC	No. of PMOAs – PHC	No. of PMOAs – NGOs	Total
5. East Siang	District Hospital, Pasighat – 2	CHC, Ruskin – 1 CHC, Boleng - 1			4
6. West Siang	District Hospital, Aalo - 1	CHC, Basar - 1			2
7. Lohit	District Hospital, Tezu - 1				1
8. Lower Dibang Valley	District Hospital, Roing - 1				1
9. West Kameng	District Hospital, Bomdila - 1	CHC, Dirang – 1 CHC, Rupa - 1			3
10. East Kameng	District Hospital, Seppa- 1		PHC, Pakke-kesang – 1		2
11. Upper Subansiri	District Hospital, Daporijo- 2				2
12. Tirap	District Hospital, Khonsa- 1				1
13. Upper Siang	District Hospital, Yingkiong- 1				1
14. Namsai	District Hospital, Namsai - 1		PHC, Mahadevpur - 1		2
Total PMOAs	**20**	**13**	**3**		**36**

- The PMOAs posted examines patients with eye problem and patients requiring surgery are referred to next eye care service available.
- Refraction are performed by PMOAs, however prescription of glasses and medicine are done by ophthalmologist/medical officers.
- In the districts visited, average eye OPD seen by an PMOA per day is 6-7 patients
- When the posted PMOA is on maternity leave or on a long leave, leave replacement are not available due to shortage of PMOAs

Data Entry Operator

- Nine data entry operator dedicated for eye care services are available and posted in district hospitals.
- Their main task is to collect data required by NPCB from the DH, CHC & PHC and to upload them on the website.
- In one of the districts visited few support facilities like computer, internet, furniture, etc was not available. The MIS data for NPCB are currently being uploaded from outside Internet café.

ACCESSIBILITY:

- In some districts there are villages which does not have access to the district hospital as there is neither road nor public transport.

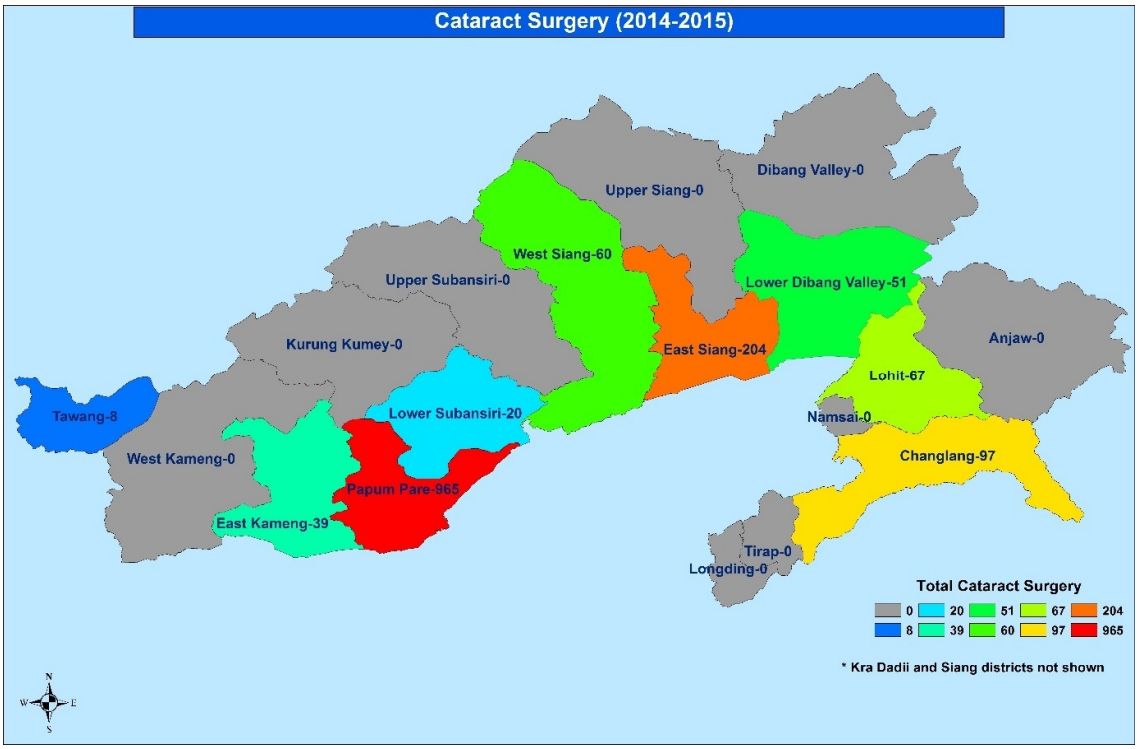
- Public transportation is limited and does not connect all villages.

- Many districts are bordering nearby state Assam or the access road to reach the DH, CHC, PHC are through Assam. Hence in terms of accessibility eye care facilities in Assam have close proximity and preferred by the patients.

SERVICE DELIVERY:

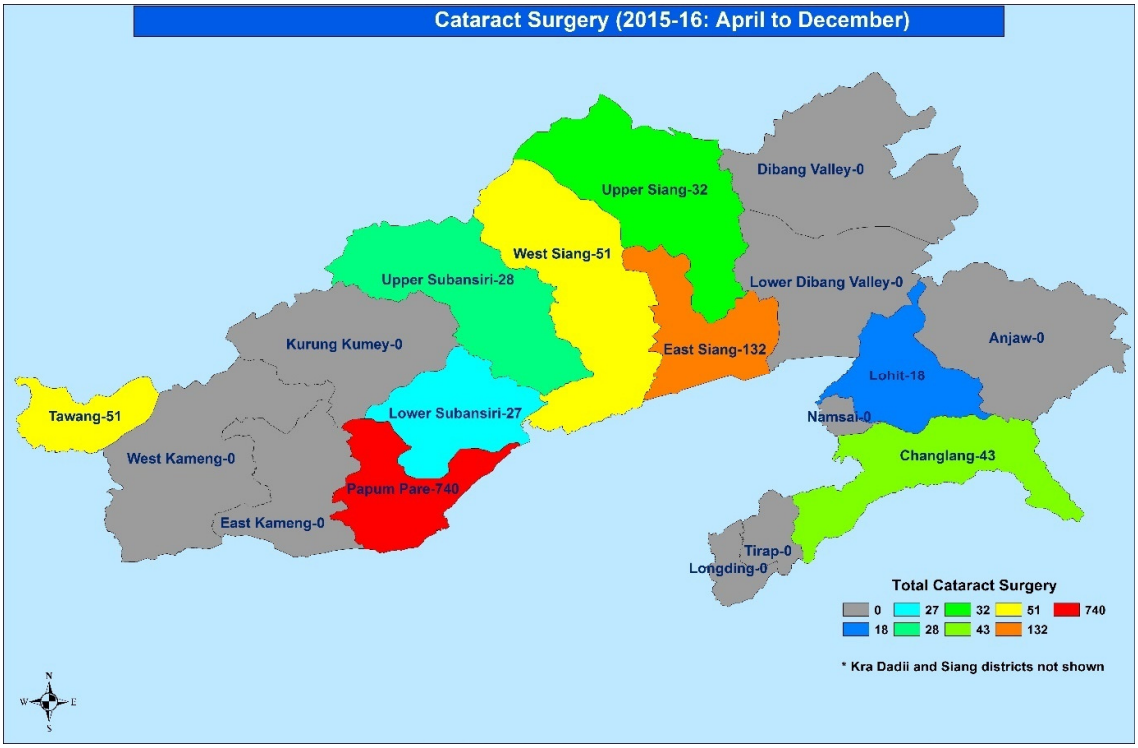
Eye Care performances

- In the year 2014-15 (April – March) the state has examined 42,219patientsand has operated on 1511 patients. Eye surgeries were performed in 9 districts. 3 districts had only one free cataract eye camp conducted by the mobile unit and 11 district did not have any eye surgery. The details are given below



Name of theDistrict	No. of Catops doneBy Govt.	No. of Catops done by NGO	Total no. of Catopsdone	Remarks
1. PapumPare	324	641	965	
2. Lower Subansiri, Ziro	20	00	20	
3. Changlang	97	00	97	From one free cataract eye camp
4. Tawang	8	00	8	
5. E/Siang, Pasighat	204	00	204	
6. West Siang, Aalo	60	00	60	
7. Lohit, Tezu	67	00	67	From one free cataract eye camp
8. L/Dibang Valley, Roing	51	00	51	
9. E/Kameng,Seppa	39	00	39	From one free cataract eye camp
Total	**870**	**641**	**1511**	

- In the year 2015-16 (April – December) the state has examined 38,209 patients and has operated on 1122 patients. Eye surgeries were performed in 9 districts. 4 districts had only one free cataract eye camp conducted by the mobile unit and 11 district did not have any eye surgery. The details are given below



Name of theDistrict	No. of Catops doneBy Govt.	No. of Catops done by NGO	Total no. of Catopsdone	Remarks
1. PapumPare	267	473	740	
2. Lower Subansiri, Ziro	27	00	27	
3. Changlang	43	00	43	From one free cataract eye camp
4. Tawang	51	00	51	
5. E/Siang, Pasighat	132	00	132	
6. West Siang, Aalo	51	00	51	
7. Lohit, Tezu	18	00	18	From one free cataract eye camp
8. Upper Subansiri Daporijo	28	00	28	From one free cataract eye camp
9. Upper Siang, Yingkiong	32	00	32	From one free cataract eye camp
Total	**649**	**473**	**1122**	

- District wise detail performance data based on the availability is shown in Annexure - 6
- In all the district facilities about 70-80% of the out-patients are students who come for pre-school vision screening or for fitness for driving licence certificate

- Screening is conducted once in two months at the districts. Two PMOAs join together during the school screening program based on the location of the school. In the year 2014-15 school screening program was conducted in 13 districts and 18,966 children were screened, 3061children were identified with refractive error. The details are given below

Name of District	No. of School Children Screened	No. of children with refractive errors	No. of school children given free spectacles by NPCB
1.Papumpare	2094	513	67
2.Lower Subansiri, Ziro	2689	586	
3.Changlang	1486	433	
4.Tawang	809	357	
5.E/Siang, Pasighat	626	249	
6.West Siang, Aalo	1031	50	
7.Lohit, Tezu	4778	432	
8.L/Dibang Valley, Roing	210		
9.E/Kameng,Seppa	721	22	
10.W/Kameng, Bomdila	2394	155	
11.Daporijo	187	180	
12.Upper Siang, Yingkiong	1906	75	
13.Tirap, Khonsa	35	9	
Total	**18966**	**3061**	**67**

Low uptake of eye care services

- CHCs, PHCswhere PMOAs are available refer only 1-2 cataract patients per quarter to the district hospital. No mechanism exists to verify whether those referred have approached the hospitals for surgery.
- At other CHCs/PHCs, the medical officers have not come across any cataract patients in the last one year
- RAAB study conducted in 2003 is outdated and may not reflect the actual need in each district as the study was done in Upper Subansiri which did not have any eye care services in 2003
- The current workload does not seem to be reflecting the 2.28% prevalence of blindness rate as mentioned in the 2003 study. Bilateral Blind persons are not very common.
- The following were identified as barriers for low uptake
    - Thin density of population
    - Services not available close to home
    - Some blocks have difficulty in accessing the district hospital.
    - Public transportation is limited and does not cover all villages.
    - Transportation expenses to hospital not covered by insurance or others
    - Patient with eye problem do not visit PHC/CHC but directly visit hospitals in Assam or State Hospital/RKMH, Itanagar
    - Even if they visit CHCs or PHCs, PMOA are not available only in all facilities
    - Even if PMOAs are available, they are only able to diagnose and treat few eye problems and in districts where ophthalmologist are available, they are not able to handle eye diseases beyond cataract.

- Patient do not seek any intervention for eye problems due to old age or fear for surgery

DISEASE PRIORITIES:

Cataract

- Regular Surgery performed only in 6 districts. In 3 districts where ophthalmologist is not available, surgeries are performed once a year through free cataract eye campat the district hospital or CHC based on the OT availability. 11 district does not even have free cataract eye camp facility
- Only Common cataract surgery (SICS) performed at district hospitals. Due to non-availability of advance equipments complex surgeries are not risked and patient are referred to Assam or to state hospital/RKMH in Itanagar
- The state hospital has phacoemulsification machine and about 80% of the cataract surgery are Phaco surgery.

Refractive error

- Refraction services available at district hospitals, CHCs and PHCs where PMOAs are posted
- Spectacle dispensing not allowedin government sector
- Optical shops are not available in many districts. People have to travel to Assam or to Itanagar for an optical shop, minimum of 50 kms
- NPCB fund available only for spectacles for children and those above 40 years (for presbyopia)

Diabetic Retinopathy

- Lab facility available at DH/CHC and kit test can be done in PHC
- There is no provision for identifying Diabetic patients in the DH/CHC/PHC who can be referred for Diabetic Retinopathy
- Awareness about DR among medical staff needs to be improved
- Diagnosis and treatment facility for advance eye care are available only at RKMH, Itanagar

Many patients who visit the DH/CHC/PHC for other health problems might have eye problems such as refractive error, cataract, Glaucoma and diabetic retinopathy. Medical officers posted at these facilities do not probe the patients for any eye problem.

QUALITY OF EYE CARE:

- Post-operative visual outcomes are assessed as per protocol by the surgeon and necessary corrective measures are taken.

- Availability of all IOL powers is an issue in terms of quality as the under correction will require correction with spectacles after surgery. It is not possible to stock all required IOL powers at the district hospital and during camp to carry all the required IOL powers.

- In the past, more ICCE & non IOL surgeries were performed. These patients might complaint of wearing glasses and problem after surgery and demotivate others to undergo eye surgery

MANAGEMENT INFORMATION SYSTEM (MIS):

- At the DH/PHC/CHC, diagnosis details are entered in a register (eg.cataract, refractive error, conjunctivitis, etc) but they are not consolidated daily and monthly. They are also not reported and hence the actual problem of eye diseases reported are not known.
- Monthly reporting does not include data on OPD, Sex, age, diagnosis. Only NPCB reporting requirements are reported at the facility level, district and state level.

- Acceptance Rate for surgery not monitored. Surgery advised, operated and not operated list not maintained at district hospital where ophthalmologist are available

- Patient who are referred not recorded and verified at the centre that referred them.

COMMUNITY MOBILIZATION:

- Annual schedule of camp by the State mobile eye unit is not available. Only Dr.T.Khanna is involved and he will need to plan this activity in addition to his other commitments as an SPO

- Presently, screening eye camps are not conducted in districts where ophthalmologist are available. The districts have inadequate funds and support to organise camps and to mobilize patients to the hospital

- Yearly and periodical health camps are conducted by the district administration. However eye care/eye screening is not part of the health camps

- ASHA workers or other health workers are not involved to identify patients with eye problem and to motivate unconvinced patients to visit the district hospital to undergo surgery.ASHA workers are not trained in Primary eye care and no provision for incentives and reimbursement of travel expenses exist

- RBSK & SSA support for eye care (Childhood Blindness) not utilized. The health camps conducted by RBSK/SSA at the schools does not include PMOA in their team and hence comprehensive eye care is not given importance.

CONSUMABLES AND SUPPLIES:

- Common eye drops are available at all the facilities where PMOAs are posted.

- Medicine requirements are indented to the DMO office annually and if required monthly indent are made based on the need.

- State fund to district hospital not regular and this affects medicine supply, small replacement of equipment.

FINANCE:

NPCB

- NPCB support for recurring and non-recurring expenditure. However, NPCB fund allocation is uniform across all state and is not based on need in Arunachal Pradesh. For example, RAAB study is a high priority of the state but not included in the 2016 survey. Funds are sanctioned for Vision

Centre, however, there is no provision for optical dispensing in the government facilities for 15-40 age group population and mobilization of patients through Multi-purpose district ophthalmic mobile unit is restricted to only a few districts.

- In addition to the NPCB support, 10% matching grant is provided by the state and no additional support for eye care
- There is no allocation of NPCB funds for each District. Earlier a lump sum was provided from NPCB to the state and INR 500,000 per year was given to each District Blindness Control Society (DBCS) for conducting camp and mobilizing patients to the hospital. Currently, the district fund allocation is non-existent as the NPCB funds are pre allocated as per ROP template.
- Even though the NPCB activities come under NHM, there is no additional fund from NHM for eye care in the state.
- It was also observed that the allocation of funds from NPCB were not fully utilised. The main reason is that the funds are transferred to state heath society close to the end of the financial year.

APCMUHIS

- Arunachal Pradesh Chief Minister Universal Health Insurance Scheme (APCMUHIS) is available for eligible persons - All BPL, APL families except regular government employees, all elected members, holders of office of profit, and all registered class I and class II contractors. Insurance limit upto INR 200,000 per Household (proposed increased to 3 Lakh) on floater basis in all networked hospitals in the country. The Scheme will cover treatment procedures requiring hospitalization and day care procedures. Persons covered under Rashtriya Swasthya Bima Yojana (RSBY) and Arogya Nidhi are also benefitted. The insurance does not cover OPD (Outpatient Department) services. However, if any patient is referred through health camps/Government hospital for diagnosis which further may not lead to surgical/medical management are covered i.e. cost of diagnostic tests and medicines are also covered under the scheme.
- 61 private hospitals across the country and 18 general hospitals in the state of Arunachal Pradesh are empanelled hospitals for this scheme. For eye care Sri Sankaradeva Nethralaya, Guwahati is an empanelled hospital.
- For eye care, it covers 45 eye surgeries which include surgeries related to cornea, retina, glaucoma, pediatric, Lasik, ocular investigation such as OCT, FFA, etc. For cataract surgery, Phaco surgery and ocular investigation such as A scan are covered. The reimbursement amount for a phaco surgery is fixed at INR. 25,000 per surgery.
- As on date 2% of the total claim has been to cataract surgery and there had been 195 claims (Rs.50,16,115) and 185 claims (Rs.47,38,300) have been settled relating to eye care services.
- As all the government general and district hospitals in the state are included, it helps in improving the quality of care provided and also hospitals can use the reimbursement to procure advance equipment and strengthen the subspecialty services at the district level.

MANAGERIAL PROCESS:

- No planning meeting for eye care at state/district levelwith INGOs, NGO Hospitals, District hospitals on eye care delivery

STAKE HOLDERS IN EYE CARE:

- Government is the only service provider for eye care in the districts. RKMH in Itanagar is the only NGO hospital which has eye care services. Few NGOs are involved in running PHCs through PPP approach. The details of major state holders are given below

Ramakrishna Mission Hospital, Itanagar

It is a Multi-specialty general hospital and was started in the year 1979. The general hospital is 201 bedded and has general medicine, Obs&Gyanec, Ortho, Dental, ENT and Ophthalmology Department. There are about 40 medical doctors and 400 staff working in the hospital. The eye department was started in the year 1982 and is the only NGO hospital performing eye care activities. The hospital provides free services through its outreach screening program and paid services in the base hospital. In 2014 - 2015 (Apr – Mar) RKMH performed 641 cataract surgeries which is 42% of the total cataract surgeries performed in the state. In 2015 - 2016 (Apr – Dec) RKMH performed 473 cataract surgeries which is 64% of the total cataract surgeries performed in the state. The hospital has advanced equipment such as OCT, retina lasers, etc and trained ophthalmologist to address the problem of cataract, glaucoma, retina, cornea and childhood blindness.

Karuna Trust

Dr. H. Sudarshan founded Karuna Trust (KT) in 1986 to respond to the widespread prevalence of leprosy in the Yelandur Taluk of Karnataka .From leprosy control, Karuna Trust diversified into epilepsy, mental health, tuberculosis and eventually, management of the Primary Health Centres (PHC) in Karnataka and Arunachal Pradesh which is through a public-private partnership initiative. The trust is now running 11 PHCs in 9 districts in Arunachal Pradesh under a partnership with the state government covering a population of 70,000. The trust in collaboration with RKMH have trained 4Graduates as ophthalmic assistants for 3 months and posted in their PHCs. These ophthalmic assistants can perform refraction and also conduct screening camps in and around the PHC and the identified patients are again screened by a team from RKMH and those requiring surgery are asked to visit the nearest district hospital where ophthalmologist are available or to visit RKMH or state hospital.From October – December 2015, 230 patients with cataract has been identified in the 4 districts (Lower Dibang Valley, Tawang, KurungKumey&Longding). At present there is no optical dispensing provision at these PHCs

INGOs

Currently INCOs work only with the NGO hospital and are not in favour of working with public sector due to fear of no accountability. The following INGOs support eye care activities in the state

- Light for the World (LFTW)– Active and support RKMH
- Mission for Vision (MVF) – Active and support RKMH
- Orbis International – Supported childhood blindness project in the past
- Operation Eyesight Universe (OEU) – In discussion with NPCB, Arunachal Pradesh for a possible collaboration
- CBM – Active in North-eastern states

RECOMMENDATIONS

MAGNITUDE OF BLINDNESS:

- RAAB study to be done in all districts of Arunachal Pradesh. This will help to know the prevalence of blindness, causes of blindness, barriers, etc across the state and to identify the priority districts and help in development of a district level program implementation plan.

- State government can write to Ministry of health, GoI, to include Arunachal Pradesh for RAAB study that is ongoing across the country.

- The available ophthalmologist and PMOAs in the state can be involved in conducting the RAAB study through training. If NPCB has no plans, then INGOs like LCIF can be approached for conducting such surveys.

EYE CARE INFRASTRUCTURE:

- All the 10 facilities which has OT & equipment for eye care needs to be functional and strengthened

- The 3 facilities which are not functional due to non-availability of ophthalmologist needs to be appointed with full time ophthalmologist. This will help in providing surgical eye care services in these districts.

  In order to improve the utilisation of available resources (infrastructure and human resources), screening camps needs to be conducted regularly at all the districts and free cataract eye camps need to be conducted at least twice a year at the districts where ophthalmologist are not available.
- The state mobile eye unit needs to prepare an annual calendar for camps and inform the dates and venue to all PHC & CHC in the district well in advance so that patients are aware about the camp date.

- The state hospital needs to be equipped with good operating microscope, phacoemulsification machine, vitrectomy machine, etc. In addition, the state hospital needs to be provided with advance medical equipment to diagnose and treat conditions like glaucoma and diabetic retinopathy.

- All district hospital to have provision for eye OT and basic surgical and diagnostic equipments

EYE CARE HUMAN RESOURCES:

- At least one ophthalmologist needs to be available in district hospitals. Attractive package needs to be worked out for ophthalmologist and the state government can provide an additional top-up to the NPCB contractual salary which is fixed for the entire Nation. The NRHM contractual salary for doctors are very attractive and same can be applied for ophthalmologist.

- PMOAs to be made available at all CHCs and PHC which are located far from the district hospitals. This will help in providing primary eye care. During the long leave of the PMOA at one

facility, the PMOA from the nearest CHC/PHC can visit the other facility once or twice a week so that the facility has continued eye care services

- It will be good if additional ophthalmologists are also involved during free cataract eye camp and take part in the mobile eye unit activities. This will help to reduce the burden of Dr.T.Khanna who will need to plan this activity in addition to his other commitments as an SPO. Additional ophthalmologist in the mobile eye unit will also ensure that the camp schedule is followed as planned.

- About 5-6 ophthalmologist are given administrative responsibility and are not included in the list of active ophthalmologist who does regular eye surgery (eg. Medical superintend in District hospitals, In charge of medical education, etc). They are willing to be part of the surgical team during camps and would like to be informed in advance.

- Excess ophthalmologist and PMOAs at selected location needs to be posted in district hospitals which will require their services more.

- Each ophthalmologist in the state capital can adopt a district which does not have ophthalmologist and visit the district hospital once a month or once in a quarter for providing eye care services.

- The ophthalmologist at the state hospital needs to be provided with sub speciality training in eye care for treating and managing glaucoma, retina and cornea. Similarly, Medical Officers working at PHC and CHC require refresher training on eye care. The training amount of Rs. 2 lakhs allocated by NPCB is too less for training MOs, PMOAs, Ophthalmic Nurses, Eye Donation Counselors, Data Entry Operators and ASHA workers

- PMOA training program needs to be initiated and available in Arunachal Pradesh. The government has sanctioned a Para Medical Institute which can offer this course or RKMH could start a regular ophthalmic assistant course so that adequate resources are available for eye care.

DISEASE PRIORITIES:

- The current priority in the districts will be to enhance the primary eye care and provide services for refractive error, cataract and low vision.

- The NPCB funds allocated for spectacle dispensing can be extended to all age groups or a system to dispense spectacles at government sector needs to be evolved to address the problem of refractive errors. Local NGOs can be motivated to establish optical shop outside or within government facility through PPP. Currently the RBSK program does the screening for school children for eye problems and NPCB can provide the spectacles.

- Medical officers posted at CHC/PHC need to be educated about the advancement in eye care and imparted with training to probe patients with eye problem and refer them to the next level as appropriate. This will help in enhancing the diagnosis of other emerging eye diseases.

- Vision chart to be provided to all CHC/PHC so that the medical officers can use for vision examination and later to all sub centre

MANAGEMENT INFORMATION SYSTEM (MIS):

- MIS required for managing eye care services efficiently needs to be discussed and planned. Information on diagnosis, acceptance rate for surgery, follow-up rate, etc needs to be included

COMMUNITY MOBILIZATION:

- In order to improve the utilisation of available resources (infrastructure and human resources), outreach eye screening camps needs to be conducted at districts were ophthalmologist are available. Identified patients need to be transported to district hospital immediately for surgery. Local NGOs support needs to be solicited in mobilizing patients. Support of Mobile Medical Unit (MMU) can be requested to mobilise patients with eye problem from villages/camps to district hospitals.

- ASHA workers and ANMs working at the sub centres are closer to the community and needs to be provided with PEC training to identify, motivate and refer patients with eye problem. Incentives and reimbursement of travel expenses need to be provided for ASHA workers for referring eye patients for surgery

- The district health camps to include the ophthalmologist or PMOA based on their availability so that eye screening is also included.

- RBSK and SSA should include PMOA as part of their health camp team

- INGOs can adopt districts as appropriate for enhancing community mobilization and ensure timely treatment/surgery.

FINANCE:

- As most of the eye care services are provided by government of Arunachal Pradesh, the state to request NPCB funding to be modified based on the need and not to be under the common headings of the whole country. For example, introducing a line item “patient transportation cost” and increase the amount.

- Allocation of additional funds for eye care from state health care budget and NHM to be facilitated

- As ophthalmologist are not willing to work fulltime, the contractual salary available can be used to top-up salary of existing ophthalmologists who are willing to participate in camps at the district. The district can also hire ophthalmologist from Assam or NGO hospitals and conduct periodic camps till the districts are posted with full time ophthalmologist.

- NGO hospital can screen patients, mobilize and operate them in district hospital. However, the NGOs cannot claim support from NPCB if operated in government facility. This needs to be

modified for Arunachal Pradesh so that it will encourage the NGO hospitals to screen patients and operate at district facility.

MANAGERIAL PROCESS:

- Both at the state and district level exclusive eye care planning meeting needs to be conducted on a quarterly or half yearly basis. The state level planning meeting needs to include other stake holders like INGOs, NGOs, NHM, RSBY, RBSK, SSA and CM insurance scheme who also have provision for eye care services

STAKE HOLDERS IN EYE CARE:

- A detail district eye care plan with activities and budget to be sent to INGOs by the government of Arunachal Pradesh and to assign one focal person to interact and mediate between the government and INGOs. VISION 2020 India can be a facilitator in involving INGOs to work in the public sector.

- The 20 vision centres which are not functional can be handed over to NGOs/INGOs under a separate MOU so that they can run the vision centre under PPP model. Similar approach has been adopted by Karuna trust in Karnataka.

CONCLUSION

In the year 2014-15 (April – March) the state has operated on 1511 patients and 64% of this was done at the state hospital and RKMH, Itanagar. The CHC and PHC where PMOAs are available, refer only 1-2 cataract patients per quarter and at other CHCs and PHCs, the medical officers have not come across any cataract patients in the last one year. The current workload at the district hospitals does not seem to be reflecting the 2.28% prevalence of blindness rate as mentioned in the 2003 study.

The actual need for eye care in the community (prevalence of blindness) to be known through a RAAB study. The study will show the actual need which facilitates understanding the magnitude of the problem, initiating eye care services and mobilising resources to alleviate the prevalence rate.

The next challenge will be increase the productivity at the district hospitals which has ophthalmologist by developing strategies to mobilise patients with cataract to district hospitals for surgery. This can be achieved through active outreach activities to identify and mobilise patients with eye problem and involving ASHA workers, ANMs and other health workers in the community after the Primary Eye Care training.

PMOAs to be made available at all district hospitals, CHCs and in selected PHCs which are located in remote areas. This will help in improving primary eye care at district level.

In districts where ophthalmologists are not available the number of free cataract eye camp needs to be increased to atleast two per year till the appointment of an ophthalmologist. The state mobile eye unit needs to prepare an annual calendar for camps and inform the dates and venue to all PHC & CHC in the district well in advance so that public are aware about the camp site and date. All the ophthalmologist in the state need to be involved in camp on rotation basis.

The state hospital needs to be upgraded with advance diagnosis and treatment equipment to handle emerging eye diseases like glaucoma, diabetic retinopathy, etc.

Non-functional vision centres can be handed over to NGOs/INGOs under the PPP initiatives. This will ensure regular eye care activities at districts. INGOs needs to be partnering with government to eradicate blindness in the state as most of the eye care is done by the government in the state. There is also a need for a PMOA training centre in the state.

DRAFT PLAN OF ACTION

Area of Focus	Description	Root causes	Description	Activity and Resources required	level of influence	Target/change to be aimed
Prevalence of eye diseases	• The RAAB study was conducted 10 years ago in one district (Upper Subansiri) which did not have any eye care services then. • Only 1-2 patients with cataracts are identified per quarter at CHC/PHC • Bilateral Blind person not very common	•RAAB conducted in 2003 in Upper Subansiri indicated high prevalence (2.28%). However, the current workload does not seem reflecting this need in the districts. Hence the need and reasons to be explored	RAAB study for the entire state or selected districts is very essential to understand the need	• The available ophthalmologist and PMOAs in the state can be used for conducting the RAAB study through training • If NPCB has no plans, then INGOs can be approached for conducting such study (**Request sent to NPCB following the team visit and NPCB planning to conduct RAAB in 1 district**)	State &INGOs	Actual need and problem of blindness understood
Non Availability of ophthalmologist in the district hospitals which has infrastructure (OT & equipment)	• In spite of several advertisement, the state is not able to recruit ophthalmologists.	• Ophthalmologists are not interested to work in remote areas and the pay package is not very attractive	The NPCB contractual salary amount is fixed for the whole country. No provision can be made for individual state	• Attractive package needs to be worked out and the state government can support the additional cost • The NRHM contractual salary for doctors are very	State	Availability of ophthalmologist and eye care services in the district including cataract and other minor surgery

Area of Focus	Description	Root causes	Description	Activity and Resources required	level of influence	Target/change to be aimed
				attractive and same can be applied for ophthalmologist •The contractual salary available can be used to top-up salary of existing ophthalmologist who are willing to participate in surgical camps at the district or ophthalmologist can be hired from Assam/NGO hospitals for selective duration (monthly or quarterly visits) till the recruitment happens.		
Under Utilization of available resources - Infrastructure & Equipment	• 2 district hospital with dedicated Eye OT & Operating Equipment and 1 CHC with General OT & Operating Equipment are non-functional	Non availability of Ophthalmologist	same as above	same as above	State	Better utilization of available resources
	•Eye care services are available in 14	When a PMOA is on maternity leave or	• PMOAs to be made available at	• Approval for additional PMOA	State	Better coverage and eye care

Area of Focus	Description	Root causes	Description	Activity and Resources required	level of influence	Target/change to be aimed
	districts through PMOAs and there is no leave replacement	long leave the DH/CHC/PHC does not have eye care services (about 6 months) due to shortage of PMOAs	all district hospitals, CHCs and at PHCs which are located far. During the long leave of the PMOA at one facility, the PMOA from the nearest CHC/PHC can visit the other facility once or twice a week.	posting in the district • Non-functional vision centre can be handed over to NGOs as part of the PPP initiatives		services in the district
Under Utilization of available resources - Human Resources	• The productivity of the ophthalmologist is less than 100 surgeries per year.	• Low uptake of eye care services	RAAB conducted in 2003 in Upper Subansiri indicated high prevalence. However, the current workload does not seem reflecting this need in the districts. Hence the need and reasons to be explored	• RAAB study to be conducted in the state to know the prevalence of blindness, CSC, Barriers, etc • State government can write to Ministry of health to include Arunachal Pradesh for RAAB study	State	Better utilization of the human resources and better allocation of the resources based on the need in the community
	• The PMOAs see only 3-4 patients per day	•Direct walk-in of patients with eye problem very less	• Patients with eye problem generally do not seek intervention on their own. • Needs to be motivated and counselling to be	• Outreach eye screening camps to be conducted • Identified patients need to be transported to District hospital immediately for	District	

Area of Focus	Description	Root causes	Description	Activity and Resources required	level of influence	Target/change to be aimed
			provided	surgery • Local NGOs support to be sought in mobilizing patients		
Spectacle dispensing not possible in government sector	• Even though the PMOAs refract and prescribe spectacles for patients with refractive error, the government system does not have provision for dispensing spectacles for all age groups. • Hence only when the patients purchase and wear spectacles he/she is fully benefited	The government system does not have provision for dispensing spectacles for age groups	NPCB fund available only for spectacles for children and above 40 years (presbyopia)	• The NPCB fund can be extended to all age groups or a system to dispense spectacles at government sector needs to be evolved • Local NGOs can be motivated to establish optical shop outside or within government facility through PPP	State	Refractive error problem addressed at primary level
Annual schedule of outreach camp by the State mobile Eye unit not available	The state mobile eye unit does not have any annual plan. An annual plan will help the people in the district know when an eye camp will be conducted and they	Only Dr.T.Khanna is involved and he will need to plan this activity in addition to his other commitments as an SPO	Dr.T.Khanna has agreed to prepare an annual plan and execute the same	It will be good if additional ophthalmologists are also involved during camp and take part in the mobile eye unit activities. This will help to reduce the	State & SPO	Better coordination of eye camp and enable more patients to attend and benefit from the camp

Area of Focus	Description	Root causes	Description	Activity and Resources required	level of influence	Target/change to be aimed
	can undergo cataract surgery			burden of Dr.T.Khanna and also ensure that the annual schedule is followed		
No provision for catering to patients with other eye diseases (Glaucoma, DR) in the system	• Many patients who visit the DH/CHC/PHC for other health problems might have eye problems such as refractive error, cataract, Glaucoma and diabetic retinopathy. • Medical officers posted need to be educated about the advancement in eye care and imparted with training to probe patients with eye problem and refer them to the next level as appropriate	• No training for Medical officers in emerging eye diseases • No vision chart to assess the vision of patients who complain of eye problem	• All the Medical officers interacted during the visit indicated that they are doing less in eye care diagnosis and they can help in uptake of eye care services at the CHC/PHC level	All Medical officers in the districts working in DH/CHC/PHC to be trained in emerging eye diseases (**Already Initiated at Lower Subansiri district following the team visit**)	State and District	Early detection of patient with eye diseases (Refractive error, cataract, Glaucoma and diabetic retinopathy)
Advanced diagnosis and treatment facility available only at	The state hospital does not have equipment to diagnose and treat	Arunachal Pradesh does not have an RIO or Medical college, the state	In the last 6 years no new equipment have been purchased for the	The state hospital needs to be equipped with good operating	NPCB & State	Advanced diagnosis and treatment facility available at State Hospital

Area of Focus	Description	Root causes	Description	Activity and Resources required	level of influence	Target/change to be aimed
RMH,Itanagar/Assam	glaucoma and retina patients. Patients are referred to RMH, Itanagar or RIO, Guwahati.	hospital is the referral and tertiary hospital. However, they do not get any special funds from NPCB as they do not fit under the category of RIO/Medical college.	state hospital and most of the equipment are old and requires replacement	microscope, phacoemulsification machine, vitrectomy machine, etc. In addition, the state hospital will also needs to be provided with advance medical equipment to diagnose and treat diseases like glaucoma and diabetic retinopathy.		
	The current priority in the districts will be to enhance the primary eye care and provide services for refractive error, cataract and low vision. However diagnosis of other emerging eye diseases need to be enhanced	Infrastructure and trained Human Resources availability	Need to be focussed after primary eye care is established in the district	Availability of trained human resources and equipment	State and District	Primary to tertiary care available at district level
Need to collect additional data and	• At the PHC/CHC the register which	MIS required for eye care services	Instruction from SPO on what data	Training and Template	SPO	Evidence based decision making

Area of Focus	Description	Root causes	Description	Activity and Resources required	level of influence	Target/change to be aimed
analysis available data for better planning of resources	is used to record diagnosis details (e.g.cataract, refractive error, conjunctivitis, etc) are not consolidated day wise, monthwise and Cumulatively	not discussed and planned	to be collected, analysed and sent to whom to be formalised			
	• Monthly reports to DMO office does not include OPD, Sex, age and diagnosis details					
	• Record of details of the patient referred such as where, for what are not available for later verification in order to ensure whether the patients have sought intervention.					
	The data of non-intervention seekers and advised surgery and not operated patient can be given to the					

Area of Focus	Description	Root causes	Description	Activity and Resources required	level of influence	Target/change to be aimed
	ASHA workers who could motivate and counsel the patient to undergo surgery/treatment					
Non-involvement of ASHA workers	ASHA workers who are closer to the community are not provided PEC training and motivated to identify and refer patients with eye problem	• AHSA training does not include PEC module • No incentive for ASHA workers for referring and no reimbursement of travel expenses	The ASHA workers were very motivated and in spite of no compensation, have referred patients with eye problem during the eye camp	• Inclusion PEC module in ASHA training • Provision for incentives and reimbursement of travel expenses	State	Primary eye care established
Creating awareness about eye diseases in the community	• Assuming the district is having high prevalence of blindness based on the 2003 study, the uptake for eye care services are very low. This maybe because of low awareness about eye diseases in the community	• Low uptake of eye care services • Patient have misconception about eye problems (old age noting can be done, etc)	Creating awareness about various eye problems in the community can help in increasing the uptake of the services	• Orientation to Medical officers • Provide vision chart to all PHC/SC as student health certificate include eye examination • PEC training to ANMs and ASHA workers	State	Primary eye care established
PMOAs not included in RBSK camps	RBSK conducts regular health camps for school children. But eye care not included in	PMOAs are not included in the team, hence no eye screening is done during the RBSK	RBSK should include PMOA as part of their health camps	Coordination between RBSK and NPCB/DBCS	State and District	Childhood eye disorders identified and intervened early.

Area of Focus	Description	Root causes	Description	Activity and Resources required	level of influence	Target/change to be aimed
	the camp	health camps				
Inadequate funding for eye care	The NPCB funding is uniform across all state and not based on need in Arunachal Pradesh (RAAB, VC without optical dispensing, No money for mobilizing patient in government sector, etc)	National Policy	Issues are highlighted at the planning meeting. However allocation is still based on the standard template	State to make request through Ministry of Health	State	Useful fund allocation and based on need
	• Only 10% matching grant is provided by the state. No additional support for eye care • No fund from NRHM for eye care	State Policy	Issues need to be discussed at the Health Ministry	Allocation of additional funds for eye care from state health care budget	State	Adequate support available internally to develop eye care infrastructure and to meet other requirements in eye care services
	No allocation of DCBS funds for each District	Earlier NPCB grant used to be a lump sum money and at the state level the money was distributed to various districts with targets. However presently the fund provided by NPCB is pre-	Issues are highlighted at the planning meeting. However budget allocation is pre-determined	State to make request through Ministry of Health	State	District level target can be set with budget for awareness, mobilization, etc for each district

Area of Focus	Description	Root causes	Description	Activity and Resources required	level of influence	Target/change to be aimed
		determined and the state has limitations to modify or change the budget allocation				
	The training amount of Rs. 2 lakhs allocated by NPCB is too less for training MOs, PMOAs, Ophthalmic Nurses, Eye Donation Counselors, Data Entry Operators and ASHA workers	National & State Policy	No training facility available in the state and training have to be in other states which increases the cost of training	Additional support from National and State	National & State	Skill level of human resources improved and quality eye care provided
INGOs lack of comfort to work with public sector	• In Arunachal Pradesh most of the eye care activities are done by Government sector. NGO eye hospital is available only in Itanagar. However, INGOs who support eye care in Arunachal Pradesh visit only the state	• Non availability of Human resources (transfer, leave replacement, vacant post, etc) after the investment in developing infrastructure. •Disbursement of foreign money to the govt. by INGO could be an issue	Request from Government on what is required and the plan needs to be sent to INGOs and assign one focal person to interact and mediate between government	A detail district eye care plan with activities and budget to be sent to INGOs with a request to support the full or the partial plan.	State and Vision 2020	More involvement of INGOs in public sector

Area of Focus	Description	Root causes	Description	Activity and Resources required	level of influence	Target/change to be aimed
	headquarters and do not work with Government.					
No planning meeting with INGO, NGO Hospital, District hospitals on eye care delivery	• Yearly planning meeting at state/District level done for all health department/units including eye care • No separate meeting for eye care at state/district level •INGOs working in the state do not normally coordinate.	• The state or district have not thought about an exclusive meeting as eye care is not a priority among the patient they see • Accessibility and road connectivity is also an issue to conduct annual meetings with representatives from all districts	Accessibility and availability Poor coordination amongst INGOs	Uptake of eye care services and better road connectivity will drive the need to conduct annual meeting for eye care	State and District	Better coordination of eye care activities
Health Camps does not include eye care	Yearly and periodically health camps are conducted by the district administration. However eye care/eye screening is not part of the health camps	Low uptake of eye care services at the DH/CHC/PHC	DMO can include an ophthalmologist or PMOA in the health camp based on their availability in the district	Inclusion of Eye screening along with other health camps	District	Increased uptake of eye care
Coordination between different programs	• NRHM, RSBY, RBSK, SSA and CM insurance scheme have provision for	These agencies do not interact with each other to reduce duplication	Annual planning meeting to include these stakeholders	Regular meeting on eye care	State	Better coordination of eye care activities

Area of Focus	Description	Root causes	Description	Activity and Resources required	level of influence	Target/change to be aimed
	eye care.	of services and fund utilisation.				

ANNEXURE – 1: DISTRICT LEVEL STAKEHOLDERS CONSULTATION-LOWER SUBANSIRI

Date : 25 November 2015
Venue : District Civil Hospital, Ziro
Time : 10:00 – 13:00 hrs

Agenda

Time	Item	Resource Person
09:30 -10:00 hrs	Registration	
10:00 – 10:05 hrs	Welcome	Dr. MoliRiba, DMO, Lower Subansiri
10:05 – 10:15 hrs	VISION 2020: The Right to Sight Initiative Objective Setting	Phanindra Babu Nukella CEO, VISION 2020 India, Delhi
10:15 – 10:30 hrs	Introduction of participants	
10:30 – 11:00 hrs	Summary Findings of interactions with individual stakeholders - SWOT Whether the findings can be generalized to the district?	Mr Saravanan Saibaba Consultant, PRASHASA Hyderabad
11:00 – 11:15 hrs	TEA Break	
11:15 – 12:45 hrs	Group Discussion with the help of Situation analysis tool • Needs • Resources • Current Situation • Barriers • Human Resources • Community mobilization • Infrastructure • Ownership • Opportunities and Probable solutions	Mr Saravanan Saibaba Consultant, PRASHASA Hyderabad
12:45 -13:00 hrs	Comments from District Administration Conclusion remarks Vote of thanks	Dr Taba Khanna State Program Officer –NPCB Govt. of Arunachal Pradesh

ANNEXURE – 2:DISTRICT LEVEL STAKEHOLDERS CONSULTATION-CHANGLANG

Date : 28 November 2015
Venue : District Civil Hospital, Changlang
Time : 10:00 – 13:00 hrs

Agenda

Time	Item	Resource Person
09:30 -10:00 hrs	Registration	
10:00 – 10:15 hrs	Welcome by DMO VISION 2020: The Right to Sight Initiative Objective Setting	Dr. K. Basar Phanindra Babu Nukella CEO, VISION 2020 India, Delhi
10:15 – 10:30 hrs	Introduction of participants	
10:30 – 11:00 hrs	Summary Findings of interactions with individual stakeholders - SWOT Whether the findings can be generalized to the district?	Mr. Saravanan Saibaba Consultant, PRASHASA Hyderabad
11:00 – 11:15 hrs	TEA Break	
11:15 – 12:45 hrs	Group Discussion with the help of Situation analysis tool • Needs • Resources • Current Situation • Barriers • Human Resources • Community mobilization • Infrastructure • Ownership • Opportunities and Probable solutions	Mr. Saravanan Saibaba Consultant, PRASHASA Hyderabad
12:45 -13:00 hrs	Comments from District Administration Conclusion remarks Vote of thanks	 Dr Taba Khanna State Program Officer –NPCB Govt. of Arunachal Pradesh Dr. H. Tangjang

ANNEXURE – 3: PARTICIPANT LIST- DISTRICT LEVEL STAKEHOLDERS CONSULTATION-LOWER SUBANSIRI

VISION 2020 THE RIGHT TO SIGHT INDIA

Registration Sheet

District Level Stakeholders' Meeting – part of Situation Analysis

District : Ziro/ Lower Subansiri

Date : 25.11.2015 (Wednesday)

S. No	Name of Participant	Department/Organization	Title	Contact Number
1	Dr. M. Riba	DMO Health	DMO	9436049291
2	Dr D. Likha	DFWO		9436253358
3	Dr. Kaam Tana	DVBDCO	Director	9436225392
4	Dr Lobsang	Eye Specialist	RKM Hospital Itanagar	9436040569
5	Dr. K. Hasmya	Med Supdt. GHZro		9436228896
6	Dr Angela Bacla	GDMO, CHC Old Ziro		9615101575
7	Habung Yadi	GNM PHC Talo		9615980630
8	Nani Kanya	DEO, DBCS GH Ziro		9774379870
9	Shankar Patw	S.N.		9856711322
10	Ngilyang Tajo	Oph. Asstt. GH Ziro		9856193585
11	Dr. Toba Khana	SPO, NPCB		9436224429
12	Dr. Dasu Grayu	Eye Specialist, GH. Ziro		8575601127
13	Dr. Nani Omya	MO- CHC Yazali		8119526597
14	~~Ram prashad sharma~~	~~Teacher~~		
15	R. B. Chetri	Driver (NPCB)		9774096403
16	Tasso Bicha	N/A IFG		
17	Rakesh kr. Ram	MTS		
18	Saravanan S	Consultant		
19	Ravindra B	V2020 India		
20	Dr. Kime Sunya	Vocca India M.O I/c Raga		

ANNEXURE – 4:PARTICIPANT LIST- DISTRICT LEVEL STAKEHOLDERS CONSULTATION-CHANGLANG

VISION 2020 THE RIGHT TO SIGHT INDIA

Registration Sheet

District Level Stakeholders' Meeting – part of Situation Analysis

District : Changlang

Date : 28-11-2015

S. No	Name of Participant	Department/Organization	Title	Contact Number
1	Smti Nanola Jugli	ASHA (Chimsu) village		9436097543
2	Smti Jangthok Taida-ng	Asha (Khuchap) village		9402222819
3	Ll Likenem Jugli	ASha (Old Jiakki		9402787378
4	Jinjoy Jugli	Asha Lunglong		
5	Smti. Anju Jugli	A/F - (Chimsee)		9402484708
6	Dr. T.K. Mandal	Health & Fw, SMO(Hqrs)		9402092087.
7	Smti H. BANGSIA	Dy. Dir(CSS) chlg		9774183099
8	Dr. M.K. Longchang	SDS (Sdq)		9402420813
9	Dr H Tangjang	Med. Supdt		9436057036
10	D. Maity	DIA		9436057298
11	Dr. K. Basar	Medical	DMO	9402605964
12	Dr. T. Khanne	NPCB, SPO		9436224429
13	Planning	V2020	CEO	
14	Sanyanan	IRASHA	Consultant	
15	Ms Rosica Jomoi	ASHA facilitator		9402239335
16	Mm. Mucha Kongkho	ASHA (Simnom)		9402614461
17	Mos Thungpong Jomoi	Asha Wawoi		
18	Mt Chamwi	ASha Wotlom		
19.	Dr. Jempo Taiju	M.O.		
20.	Dr M. Nyem	PHC i/c Jairampur		9436068812
21.	Smti Sanyan	NASHA		
22.	Smti Damseng Kungkho	ASHA		

23 Smti Phokcha Kanglom (ASHA) New Simulam village
24 Smti Hamsrap Kimya (ASHA) Kangkho village
25. Smti. Rendam Jomoi (Asha) Hatongchu village
26. Smti Minli Kanglom (ASHA) Jongkho village

ANNEXURE – 5: LIST OF PERSONS INTERVIEWED

SL.No.	Name	Designation
State Level		
1	Dr.BolungSiram	Commissioner & Secretary (H&FW)
2	Mr. S. Longfai	Joint Secretary (H&FW)
3	Dr. Moji Jini	Director of Health Services
4	Mr.TanaTakun	Nodal officer, CM Health Insurance
5	Mr. Naban Peter	Monitoring & Evaluation officer
6	Dr.Taba Khanna	SPO, NPCB, Arunachal Pradesh
7	Dr K Darang, HOD, Dept. Of Ophthalmology	State Hospital
8	Dr R Doye	Joint Director, Medical Education
9	Dr.Lobsang Tsetim	Senior Ophthalmologist, RKMH, Itanagar
10	Dr. Sorung	Ophthalmologist, RKMH, Itanagar
11	Mr Anup Sarmah	Karuna Trust, Itanagar
Lower Subansiri District		
1	Dr. MoliRiba	District Medical Officer
District General Hospital, Ziro		
1	Dr. KimeHorming	Medical Superintendent
2	Dr. DusuGrayu	Ophthalmologist
3.	Mr. Ngiliang Tajo	PMOA
4.	Ms. Nani Kanya	Data Entry Operator
CHC, Yazali		
1	Dr. NaniOnya	Medical Officer
2	Ms. Subu Mamung	PMOA
PHC, Yachuli		
1	Dr. Tana That	Medical Officer
Changlang District		
1	Dr. K.Basar	District Medical Officer
District Hospital, Changlang		
1	Dr. HangkhamTangjang	Medical Superintendent
2	Mr. D. Maity	PMOA
CHC, Bordumsa		
1	Dr. Kmong Chang	Medical Officer
2	Dr. Jkatang	Medical Officer
3	Dr. G. Maio	Medical Officer
4	Dr. Mope Loi	Medical Officer

5	Dr. AncoSingeho	Medical Officer
6	Mr. Hage Bida	Data Entry Operator
CHC, Miao		
1	Dr. HensamJongam	Medical Officer
2	Ms. DubomBagra	PMOA
PHC, Kharjang		
1	Dr. S.M. Singh	Medical Officer
2	Dr. Prime	Medical officer

ANNEXURE – 6:QUATERLY PEFORMANCE REPORT OF CATARACT FOR THE 1ST QTR, 2ND QTR & 3RD QTR (2015-16)

S.N.	District	Target	1st Qtr				2nd Qtr				3rd Qtr				**Total**			Total
		3500	**Govt**		**NGO**	**total**	**Govt**		**NGO**	**total**	**Govt**		**NGO**	**total**	**Govt**		**NGO**	
			M	**F**			**M**	**F**			**M**	**F**			**M**	**F**		
1	Tawang		23	14		37	4	6		10	1	3		4	28	23		51
2	W/Kameng, Bomdila									0				0	0	0		0
3	E/Kameng,Seppa									0				0	0	0		0
4	PapumPare		61	36	137	234	42	45	165	252	44	39	171	254	147	120	473	740
5	Kurung Kumey, Koloriang					0				0				0	0	0		0
6	Lower Subansiri, Ziro		12	3		15	1	1		2	6	4		10	19	8		27
7	Upper Subansiri Daporijo					0				0	28			28	28	0		28
8	West Siang, Aalo		11	11		22	7	12		19	9	1		10	27	24		51
9	E/Siang, Pasighat		25	30		55	14	23		37	16	24		40	55	77		132
10	Upper Siang, Yingkiong		32			32				0				0	32	0		32
11	Dibang Valley, Anini					0				0				0	0	0		0
12	L/Dibang Valley, Roing					0				0				0	0	0		0
13	Lohit, Tezu		6	1		7	4	3		7	2	2		4	12	6		18
14	Changlang					0				0	21	22		43	21	22		43
15	Tirap, Khonsa					0				0				0	0	0		0
16	Anjaw, Hayuliang					0				0				0	0	0		0
17	Longding					0				0				0	0	0		0
	Total		**170**	**95**	**137**	**402**	**72**	**90**	**165**	**327**	**127**	**95**	**171**	**393**	**369**	**280**	**473**	**1122**