# PROPOSAL ON PROGRAMME EXPANSION IN SOHS

# **Submitted to:**

Council for Technical Education and Vocational Training (CTEVT) Sanothimi, Bhaktapur

> School of Health Science Bharatpur

### **1. INTRODUCTION**

School of health science is CTEVT constituent school, established at Bharatpur-10 Chitwan, Nepal in 1997. It is approximately 180 KM southwest from Kathmandu (capital of Nepal) by road and is well connected with air transport. The building premises of former Institute of Medicine ANM campus Bharatpur was renovated by Republic of Korea through Korean International Cooperation Agency (KOICA), inaugurated on Tuesday 4th February 1997 (2053/10/12 BS) and dedicated to Nepal Government on 2nd December 1997 (2054/08/17 BS). At the same time KOICA has provided teaching learning material, equipment and other physical facilities. The school started instructional activities from March 1st, 1997 (2054/11/17 BS) with 50 students of PCL in General Medicine. From 1997 to 2005 the school was managed by joint cooperation between CTEVT and Korean NGOs. Now it has School Management Board chaired by Chief District Officer of Chitwan district.

Under the CTEVT umbrella, this is the first school in Nepal to produce certificate level manpower for health sector. Currently the school is offering certificate level course in three distinct health science viz. General Medicine (introduced from 2054/055; 1997/98), Medical Laboratory Technology (introduced from 2060/061; 2003/04) and Pharmacy (introduced from 2061/062; 2004/05).

#### Vision

School of Health Science is recognized as a "Centre of Excellence" in producing competent health professionals in Nepal.

#### Mission

The mission of School of Health Science is to produce competent and confident middle level health workforce required for the promotion and development of quality health services in Nepal.

#### Goals

- 1. Provide regular courses
- 2. Regular supervision, monitoring & Evaluation
- 3. Promote staff development
- 4. Generate income through consultancy and training
- 5. Provide placement and counselling services
- 6. Develop and maintain physical infrastructure
- 7. Provide Community services through medical camp, community diagnosis and Micro Health Project, Health Awareness campaigning, School Health programme
- 8. Provide short-term livelihood training

# 2. CURRENT STATUS

#### 2.1 Academic programmes

Currently school is offering Proficiency Certificate Level courses in three distinct health sciences, viz. General Medicine (from 2054/055; 1997/98), Medical Laboratory Technology (from 2060/61; 2003/04) and Pharmacy (from 2061/062; 2004/05). ANM training for 40 MCHW as sponsored programme was also carried out for one session in the past.

#### 2.2 Outreach and Community Service

Every year school of health science organizes community diagnosis with micro-health projects, health awareness campaigns, medical camps and short-term trainings targeting poor and marginalized rural people residing periphery of Chitwan and Nawalparasi districts.

#### 2.3 Vocational Training Programmes

School of Health Science has no regular vocational programmes till date. As short term programmes it often organize trainings for traditional healers, female representatives of VDC, primary school teachers, youths, mothers group on various health related topics aiming to raise health awareness. From fiscal year 2067/68, as regular programme the school has started livelihood training focusing unemployed youths, disable people and marginalized population.

#### **2.4 Number of graduates**

From establishment to date 1497 number of students have been recruited in diploma programme and 40 in the TSLC programme. More than 95 per cent of students have been passed the course successfully.

### **3. NEED OF NEW PROGRAMME**

Though policy to cover national wide is lacking, SOHS has students from more than 72 districts in diploma level programme. Low proportion of girls and Dalit, less number of students from Mountain belt and Far West Developmental Region are observed by analysing data to recruited students. Exercise to reform quota to increase accessibility to girls and add new diploma level programme is on the process.

SOHS is one of such institutions of Nepal which is even accessible to students from poor, marginalized and backward families. Its chief and affordable fees structure with high quality teaching learning activities has made it attractive for students searching for technical education. Every year it collects huge numbers of application forms for new admission. In such scenario extension of new courses is very fruitful. With provision of providing tools and equipment and helping to maintain high level quequpartnership with Bharatpur Eye Hospital and NNJS Bharatpur, it is easier for SOHS to lunch programme effectively and efficiently.

The reasons behind to launch Ophthalmology in SOHS are as mentioned:

- 1. There is only one institute to produce Ophthalmic technician in Nepal
- 2. There is low number of Ophthalmic technician in Nepal
- 3. Ophthalmic Science is feasible to conduct in SOHS, rather than radiography and physiotherapy
- 4. There is high demand of ophthalmic technician in national and abroad market.
- 5. To produce competent manpower SOHS students need comprehensive practical exposure in hospital setting. SOHS has no such hospital and partnership with eye hospital will solve those problem for practical exposure and instructional staffs deficiencies.

#### **3.1 Need of Ophthalmic Programme**

Needless blindness has been serious public health challenge in Nepal. The current total number of blind in Nepal is estimated to be 1, 70,000 with more than 1, 30,000 cataract blind (according to 1996 statistic, based on the 1981 Nepal blindness survey). At present, Nepal has 22 eye hospitals and more than 50 primary eye care centers covering 62 districts to cater to its growing population of visually impaired and those challenged.

Before 1980, there were only three ophthalmologists outside the national capital Kathmandu and only 16 hospital beds dedicated to eye patients for a population of 14 million in Nepal. There were no other trained human resources in eye care to support this limited number of ophthalmologists. In 1981, a national blindness survey reported 0.84 % of the population o be blind in both eyes. The prevalence of blindness among those aged 45 years and older was estimated at 3.77 %. It was estimated that 80% of this blindness was either curable or preventable. Age related cataract was the major causes of blindness.

Blindness was identified as a major public health problem that needed urgent attention. Existing infrastructure and human resources were far too low and insufficient to combat the huge magnitude of blindness.

Along with the training of the ophthalmologists to cater to the immediate need of eye care services and promote primary eye care, a desperate need was felt for an additional cadre of mid level human resources such as ophthalmic assistants. Thus indigenous training programs were st6arted in July 1981, in joint collaboration between the government of Nepal and WHO.

The training program was continued by Nepal Netra Jyoti Sngh at Himalaya Eye Hospital, Pokhara and Lumbini Rana Ambika Eye hospital, Bhairahawa. The Program has been recognized by the GoN, the council for Technical Education and vocational training (CTEVT) and the Health Professional Council.

#### 3.2 Aims and objectives

The ophthalmic assistant is a professional ophthalmic health worker, who has been given three full year training in ophthalmology and related health sciences. The aim of this training is to produce compassionate mid-level ophthalmic human resources that can play an important role in the eye care delivery system within the hospital and in the community. The objectives are to:

- 1. Provide efficient human resources to support ophthalmologists in providing eye care services at the secondary/tertiary level of the eye care delivery system.
- 2. Provide appropriately trained human resources to deliver primary eye care services independently at primary eye care centers.
- 3. Provide appropriately trained human resource to supervise primary eye care personal at health post level and community levels.
- 4. Provide technical and managerial support at all levels of the health institute: and
- 5. Plan and carry out community eye care programs.

#### **3.3 Brief job description**

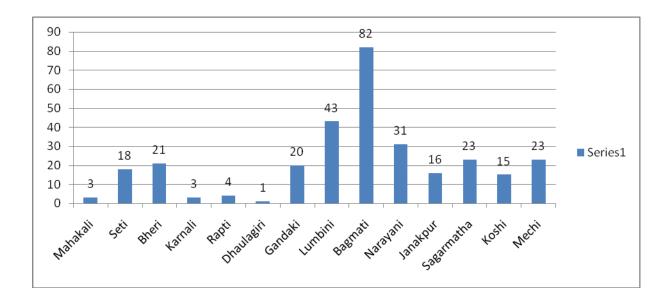
A trained ophthalmic assistant would be able to perform the following jobs at different levels of eye care services throughout the country.

- 1. Diagnose and initiate treatment appropriate management of all common eye problems including refractive errors(blinding, and potentially blinding conditions)
- 2. Recognize and refer to an ophthalmologist those conditions that require more sophisticated care.
- 3. Organize and conduct outreach activities such as screening camps. School health programs etc.
- 4. Import primary eye health education on health promotion and prevention of preventable eye diseases.
- 5. Select and prepare patients who require intra-ocular surgery.
- 6. Assist the ophthalmologists in ophthalmic surgery.
- 7. Carry out postoperative management of the eye patients after surgery.

- 8. Perform eyelid and other specified minor extra –ocular operations.
- 9. Perform practical procedures involved in examination, investigation and treatment of common eye problems.
- 10. Manage and eye clinic along with keeping records and supplied
- 11. Supervise primary eye care personnel
- 12. Perform refraction and prescribe spectacles to patients
- 13. Perform a basic clinical low vision assessment and prescribe necessary interventions
- 14. Ensure preventive maintenance and assured working condition of all types of instruments used in eye care and perform patient counseling and service marketing in eye care.and
- 15. Pertorm patient counseling and service marketing in eye care.

#### **3.4 Distribution of trained ophthalmic assistants**

Ophthalmic assistants are not merely working in eye hospitals located in major cities of the country. They also provide primary eye care and increase awareness in rural eye centres throughout the country. They have covered all zones and 55 of the 75 districts of the country. However the zonal distribution is not rational. 82 per cent of total Ophthalmic assistant are working only in Bagmati



#### **3.5 OA Training Centre and annual production**

At present two eye hospitals under Nepal Netra Jyoti Sangh,Shree Rana Ambika Shah Eye Hospital, Bhairahawa, and Himalayan Eye Hospital, Pokhara, Nepal Eye Hospital Tripureshwor and Tilganga Eye Centre, Kathmandu are conducting the ophthalmic assistant training programme on an average 30 to 40 ophthamic assistant are produced annually by these centers.

#### **3.6 Projection of required human resources**

#### Ophthalmic assistants to meet the objectives of the VISION 2020 Programme.

As per WHO's VISION 2020 guidelines there should be a provision for a vision - centre or a community eye care centre for 50,000 population. But due to the remoteness and topographic nature of the country where high mountains are sparsely populated. This estimation may be appropriate to consider as the upper limit in the context of Nepal. A simple calculation reveals the need for at least 500 ophthalmic assistants to conduct primary eye care centers throughout the country. At present more than 60% ophthalmic assistants are working in hospitals. The ratio might increase in the future since this 9 | P a g e

subspecialty is being added in more hospitals. This indicates that at least 1500 activity working ophthalmic assistants are required to achieve the goal of VISION 2020. There is a need to double the existing capacity by producing 60 to 80 OA on an annual basis.

#### **4. PROJECT DETAIL**

#### 4.1 Name of project

School of Health Science

Ophthalmic programme (A Joint project between SOHS & Bharatpur Eye Hospital)

#### 4.2 Certification and record keeping

Student will be provided character certificate in joint name of School of Health Science and Bharatpur Eye Hospital. SOHS (Examination section) will responsible to keep all detail records of students and graduates.

#### 4.3 HOD and coordinator for Ophthalmology programme

HOD for Ophthalmology programme will be recruited by joint consent from SOHS and Bharatpur Eye Hospital. His/her remuneration will be provided by BEH Bharatpur. HOD will work under guidance of Principal of SOHS and authority of Bharatpur Eye Hospital. Coordinator for Ophthalmology programme will be recruited by joint consent from

SOHS and Bharatpur Eye Hospital. His/her remuneration will be provided by SOHS. Coordinator will work under guidance of Principal of SOHS, HOD and authority of Bharatpur Eye Hospital.

#### 4.4 Teaching faculties for Ophthalmology programme

Faculties for Ophthalmology programme will be recruited by joint consent from SOHS and Bharatpur Eye Hospital. SOHS will accomplish all theoretical and practical courses of first year in SOHS premises. Theoretical and practical parts of subjects of second and third year viz. Ocular Pharmacology and Pathology, Systemic diseases related to eye, Health Management, Basic Health Care ad Health Education, as well Research Methodology and Community Diagnosis are also accomplished by SOHS in its and BEH premises. Other subjects of second and third year including field practical are accomplished by Bharatpur Eye Hospital.

#### 4.5 Administrative and Public relation staffs

Available administrative staffs of SOHS and Bharatpur Eye Hospital will work as administrative staffs of Ophthalmic programme too.

#### 4.6 Infrastructures

Classrooms and laboratories for first year, services of library, examination section, account section, and administration section, auditorium, play grounds and other available facilities of SOHS will be provided through SOHS, while classrooms and laboratories for second and third years, hospitals and Primary Eye Care Centre of NNJS and other facilities of NNJS will be provided by Bharatpur Eye Hospital.

#### 4.7 Fund Management

The ophthalmic programme will be conducted as sponsored programme in SOHS. The expenses and expenditures for first year and administrative cost will be managed by SOHS. Students will use SOHS premises, play grounds, auditorium and examination section, account section, administration section and library of SOHS will provide services. Only second year and third year theoretical and practical portion including field exposure will be managed by Bharatpur Eye Hospital and NNJS Bharatpur.

Initially source of income will be student fee and attempt to bring donor will be going on. A joint account between SOHS and Bharatpur Eye Hospital will be operated in signature of Principal, Medical Director and Account officer of SOHS. Account Officer of SOHS is responsible to keep all account document of joint account.

5.1	5.1 Sitting arrangement									
S.	Faculty	Year	Classroom	Shift	Status	Remarks				
Ν										
0.										
1	General Science	1 <sup>st</sup> (Section A)	Block 13; Room 1	Day	available					
2	(GM, MLT,	1 <sup>st</sup> (Section B)	Block 13; Room 2	Day	available					
3	DPh,	1 <sup>st</sup> (Section C)	Block 13; Room 3	Day	available					
4	Ophthalmology)	1 <sup>st</sup> (Section D)	Block 13; Room 4	Day	available					
5	Pharmacy	2 <sup>nd</sup> year	Block 12; Room 5	Mor	available					
				ning						
6	Pharmacy	3 <sup>rd</sup> year	Block 12; Room 9	Mor	available					
				ning						
7	Ophthalmology	2 <sup>nd</sup> year	Managed by		available	Managed				
			hospital			by				
8	Ophthalmology	3 <sup>rd</sup> year	Managed by		available	hospital				
			hospital							
9	MLT	2 <sup>nd</sup> year	Block 9	Day	available	From				
10		ard	<b>D1</b> 1.0	1		12:00 AM From				
10	MLT	3 <sup>rd</sup> year	Block 9	day	available	From 10:00 AM				
11	General	2 <sup>nd</sup> year	Block 12; Room 11	day	available	Need				
	Medicine	J		<i></i>		partition				

**5. INFRASTRUCTURE PLANNING** 

12	General	2nd year	Block 12; Room 12	day	available	
	Medicine					
13	General	3 <sup>rd</sup> year	Block 12; Room 5	Day	available	From 1:00
	Medicine					PM
14	General	3 <sup>rd</sup> year	Block 12; Room 9	day	available	From 1:00
	Medicine					PM
15	AV room		Block 3		available	
16	AV room		Block 2		available	

**5.2 Furniture (Desk bench) arrangement** Desk bench for 80 students (42 pairs) need to purchase.

S.	Subject	Section	Status of	Qualification	Remuneration	Remarks
No.			teacher	of teacher	per year	
		А	Available			
		В	Available			
1	Anatomy &	С	Available			
	Physiology	D	Need	$\geq$ MBBS	GII for 13	Section D:
			new		months	ophthalmology
			recruit			programme
		А	Available			
		В	Available			
2	Nepali	С	Available			
2	Inepan	D	Need	MA or MEd	GII for 13	
			new	in Nepali	months	
			recruit			
		А	Available			
		В	Available			
3	English	С	Available			
5	English	D	Need	MA or MEd	GII for 13	
			new	in English	months	
			recruit			
		А	Available			
		В	Available			
4	Chamistry	С	Available			
4	Chemistry	D	Need	MSc in	GII for 13	
			new	Chemistry	months	
			recruit			

### **5.3 Planning for Teaching Faculty (First Year)**

		А	Available			
		В	Available			
_	DI '	С	Available			
5	Physics	D	Need	MSc in	GII for	13
			new	Physics	months	
			recruit	-		
		А	Available			
		В	Available			
6	Botany	С	Available			
0	Dotally	D	Need	MSc in	GII for	13
			new	Botany	months	
			recruit			
		А	Available			
		В	Available			
7	Zoology	С	Available			
/		D	Need	MSc in	GII for	13
			new	Zoology	months	
			recruit			
		А	Available			
		В	Available			
8	Math/Stat/Comp	С	Available			
0	Main/Stat/Comp	D	Need	MA or MSc	GII for	13
			new	in Math	months	
			recruit			
		А	Available			
		В	Available			
9	Social study	С	Available			
Í	2001al Study	D	Need	MA in	GII for	13
			new	History	months	
			recruit			

# **5.4 Planning for Teaching Faculty (Ophthalmology IInd Year)** *Managed by Bharatpur Eye Hospital*

S.	Subject	Qualification	Status	designation	Remarks
No.		of teacher			
1	Ocular anatomy & physiology	MBBS	available	Lecturer	
2	Ocular pharmacology & pathology*	B Pharm	available	Asst. Lecturer	Managed by SOHS

3	Systematic disease related to eye*	>MBBS	available	Lecturer	Managed by SOHS
4	Ocular disorders	MD eye	available	Lecturer	
5	Investigative ophthalmology	MD eye	available	Lecture	
6	Ocular surgery	MD surgery	available	Lecturer	
7	Community ophthalmology	MPH	available	Lecturer	

Note: Subjects in asterisk will managed by SOHS

# **5.5 Planning for Teaching Faculty (Ophthalmology IIIrd Year)** Managed by Bharatpur Eye Hospital

S.	Subject	Qualification	Status	designation	Remarks
No.	5	of teacher		C	
1	Health Management, Basic Health care and Health Education*	MPH	available	Lecturer	Managed by SOHS
2	Ocular injuries and Emergencies	MD eye	available	Lecturer	
3	Research Methodology and Community Diagnosis*	MPH	available	Lecturer	Managed by SOHS
4	<ul> <li>a) Clinical Practice (Hospital based) Vision, Refraction, Low Vision, Orthoptic, Ocular Procedures and Investigations</li> <li>b) Clinical practice (Hospital Based) Patient Examination and Diagnosis, Counselling, Ocular anesthesia, assist in surgery (Pre- operative, Post- operative Management), Sterilization</li> <li>c) Clinical Practice (Diagnostic and Screening Camp, Surgical Camp,</li> </ul>				

School Screening)		
District Eye Care		
Centre		

Note: Subjects in asterisk will managed by SOHS 5.6 Planning for practicum in School

S.	Subject	Room	Pr teacher	Lab boy	Support staff	Remarks
No.	First year			-		
1	Anatomy and	Ready	Assign to		Ready	
	physiology		related			
2	Physics	Ready	theory		Ready	
3	Chemistry	Ready	teacher		Ready	
4	Zoology	Ready			Ready	
5	Botany	Ready			Ready	
6	Computer	Ready	Need to		Ready	
	application		hire			
	Second year					
7	Ocular anatomy &	Ready				
	physiology					
8	Ocular	Ready				
	pharmacology &					
	pathology*					
9	Ocular screening	Need to				
	room	manage				

Note: Subjects in asterisk will managed by SOHS

# 6. QUOTA DISTRIBUTION FOR OPHTHALMIC PROGRAMME

S. No.	Quota	Enrolment number	Remarks
1	General	11	
2	Full pay	15	
3	Organization sponsor	10	
4	Staff/staff family	2	Of CTEVT & NNJS
5	Remote Backward Region	1	
6	Dalit	1	
	Total	40	

#### 7. FUND MANAGEMENT

The ophthalmic programme will be conducted as sponsored programme in SOHS. The expenses and expenditures for first year and administrative cost will be managed by SOHS. Students will use SOHS premises, play grounds, auditorium and examination section, account section, administration section and library of SOHS will provide services. Only second year and third year theoretical and practical portion including field exposure will be managed by Bharatpur Eye Hospital and NNJS Bharatpur.

Initially source of income will be student fee and attempt to bring donor will be going on. A joint account between SOHS and Bharatpur Eye Hospital will be operated. Fifty per cent of fund will be used by SOHS, remaining by Bharatpur Eye Hospital.

S.	Programme	Category	No. of	Fee for 3	Total fee for 3	Deposit	Remarks
No.			std	yrs/ std	yrs (NRS)	per	
						student	

10	Ophthalmology	General	15	51530	772950.00	5000/-	
11		Full pay	15	350000	5250000.00	5000/-	
		Organization	10	375000	3750000.00		
12		Sponsor				5000/-	
13					9772950.00		

Students recruited from general completion, staff/family, Remote Backward region and Dalit will changed general fee category.

#### 7.2 Provision for educational loan

Exercise will be done to provide educational loan.

# **ORGANIZATIONAL CHART (Ophthalmic programme)**

Existing organizational chart of SOHS and Bharatpur Eye Hospital will work. Clear roles

and responsibility of SOHS and BEH will solve the need of Organizational Chart.

# Yearly Expenditure of

# School of health Science, Bharatpur, Chitwan.

S.N.	Heading	No	Rate	Duration	Total	Remarks
					Amount	
1	Salary	9	10540.00	14	1328040.00	
2	Computer	4	9000.00	1	360000.00	
3	Diesel	3	10000.00	1	30000.00	
4	Practical	1	300000.00	1	300000.00	
	Equipment					
5	Office material	1	150000.00	1	150000.00	
6	Furniture	1	250000.00	1	250000.00	
7	Repair &	1	200000.00	1	200000.00	

	Maintenance				
8	Library	1	100000.00	1	100000.00
9	Adm.	10	25000.00	12	300000.00
	Supporting Staff				
10	Electricity	12	10000.00	1	120000.00
11	Telephone &	12	2500.00	1	30000.00
	fax				
12	Deprecation	1	300000.00	1	300000.00
	1	1	31,44,040.00		

# Yearly Income of

# School of health Science, Bharatpur, Chitwan.

S.N.	Heading	Substitute	Self	Sponcered	Remarks
		Quota	Donation	Quota	
1	Admission Fee	20000.00	298000.00	348000.00	
2	Computer	2000.00	2000.00	2000.00	
3	Monthly Fee	1000.00	1000.00	1000.00	One Month
4	Certificate	500.00	500.00	500.00	
5	Registration Fee	2000.00	2000.00	2000.00	
6	Professional council	500.00	500.00	500.00	
7	Maintenance Fee	2000.00	2000.00	2000.00	

8	Library Fee	2000.00	2000.00	2000.00	
9	Application Fee	1000.00	1000.00	1000.00	
10	Hostel Fee	0.00	0.00	0.00	
11	Laboratory Fee	17000.00	18000.00	18000.00	
12	Sport Fee	2000.00	2000.00	2000.00	
	Total	52000.00	350000.00	400000.00	
		*20	*10	*10	No of student
		1040000.00	3500000.00	400000.00	
		/2	/2	/2	
Net Income (with out		520000.00	1750000.00	200000.00	=4270000.00
	Deposite)				

# Yearly Expenditure of II & III Year

Bharatpur eye Hospital, Bharatpur, Chitwan.

S.N.	Heading	No	Rate	Duration	Total	Remarks
					Amount	
1	Sallary	12	10540.00	14	1770720.00	
2	Computer	0	0.00	0	0.00	
3	Diseal	0	0.00	0	0.00	
4	Practical	80	1500.00	12	1440000.00	
	Equipment					
5	Office material	1	100000.00	1	100000.00	

6	Furniture	1	250000.00	1	250000.00
7	Repair &	1	100000.00	1	100000.00
	Maintinance				
8	Library	1	150000.00	1	150000.00
9	Adm.	4	2100.00	12	100000.00
	Supporting Staff				
10	Electricity	12	3000.00	1	36000.00
11	Teliphone & fax	12	1000.00	1	12000.00
12	Deprisation	1	100000.00	1	100000.00
	1	4058000.00			

# Yearly Income of

# Bharatpur eye Hospital , Bharatpur, Chitwan.

S.N.	Heading	Substitute	Self	Sponcered	Remarks
		Quota	Donation	Quota	
1	Admition Fee	20000.00	298000.00	348000.00	
2	Computer	2000.00	2000.00	2000.00	
3	Monthly Fee	1000.00	1000.00	1000.00	One Month
4	Certificate	1000.00	1000.00	1000.00	
5	Registration Fee	2000.00	2000.00	2000.00	

6	Professional council	0.00	0.00	0.00	
7	Maintinance Fee	2000.00	2000.00	2000.00	
8	Library Fee	2000.00	2000.00	2000.00	
9	Application Fee	1000.00	1000.00	1000.00	
10	Hostel Fee	0.00	0.00	0.00	
11	Laboratory Fee	17000.00	18000.00	18000.00	
12	Sport Fee	2000.00	2000.00	2000.00	
	Total	52000.00	350000.00	400000.00	
		*20	*10	*10	No of student
		1040000.00	3500000.00	400000.00	
		/2	/2	/2	
	Net Income	520000.00	1750000.00	2000000.00	=4270000.00