

Section 1: Introduction

Nepal Netra Jyoti Sangh: An Overview

Aiming to eliminate avoidable blindness from Nepal, Nepal Netra Jyoti Sangh (NNJS) was established in 1978 by a group of dynamic and enthusiastic individuals, including physicians, social workers, and entrepreneurs. NNJS is a non-profit making, non-governmental, welfare-oriented social organization. It is a leading pioneer organization in eye care sector in Nepal who renders almost 90% of eye care service-delivery in the country. NNJS extends its cooperation towards the application and fulfilment of national programs and policies of Government of Nepal aimed at well-being of eye patients and eye health service seekers.

28 Eye Hospital

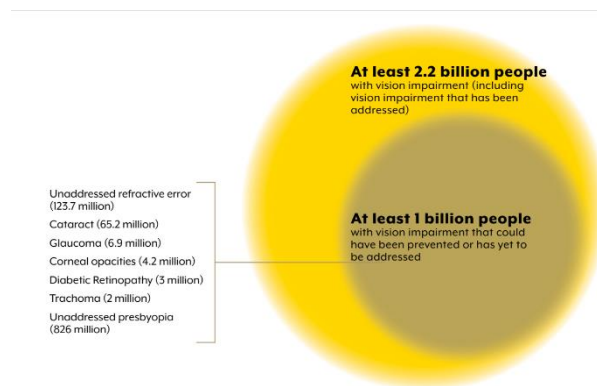
226 Eye Care Centres

44 district branches

Vertical programs

Section 2: Context/Situation Analysis

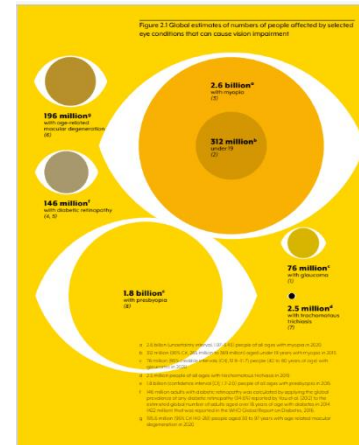
Eye Health: Global Context



blindness that could have been prevented but, unfortunately, was not. While the exact number is unknown, it is estimated that 11.9 million people globally have moderate or severe vision impairment or blindness due to glaucoma, diabetic retinopathy and trachoma that could have been prevented¹.

Globally, at least 2.2 billion people have a vision impairment or blindness, of whom at least 1 billion have a vision impairment that could have been prevented or has yet to be addressed.

Millions of people live with vision impairment or



Eye Health: National Context

Comparing the global burden of blindness, **Nepal has 0.23% of global blindness**, for a country with nearly 30 million, this is a fairly manageable rate². In the past three decades, Nepal has got tremendous progress in eye health. Population census 2022 revealed 2.2% population with disability; out of that, 17.1% are with low vision and 5.4% are blind³. It means there are around 109,718 people (15.3% male and 19.2% female) with low vision. Similarly, 34,648 people (5.1% male and 5.8% female) are blind.

Key Findings of NNJS RAAB Survey 2020

- The main cause of bilateral blindness in Nepal is untreated cataract (65.3%).
- Cataract has been found is still the leading cause of severe VI (83.9%) and moderate VI (66.8%).
- Posterior segment diseases including glaucoma accounted for the second leading causes of blindness (21.1%) in Nepal.
- Corneal opacity other than trachoma is found to be another cause of blindness (5.8%).
- Uncorrected refractive error is the leading cause of mild VI (66.5%) and second leading cause of moderate VI (19.7%).
- Comparatively more women (1.23%) than men (0.87%) were affected with blindness.
- Based on the observed prevalence, an estimated 782,762 people aged 50 and older (406,236 men and 376,595 women) cannot see well in Nepal.
- A total of 40,230 people (23,360 women, 16,811 men) 50 years and above have been estimated to be bilaterally blind due to various causes.
- Prevalence of functional low vision (FLV) among 50 years and above ages is 0.5% - 1.3%.
- The main barriers to uptake cataract surgical services were Affordability, Accessibility, lack of felt need, Fear of surgery, etc.

¹ WHO: World Report on Vision-2019

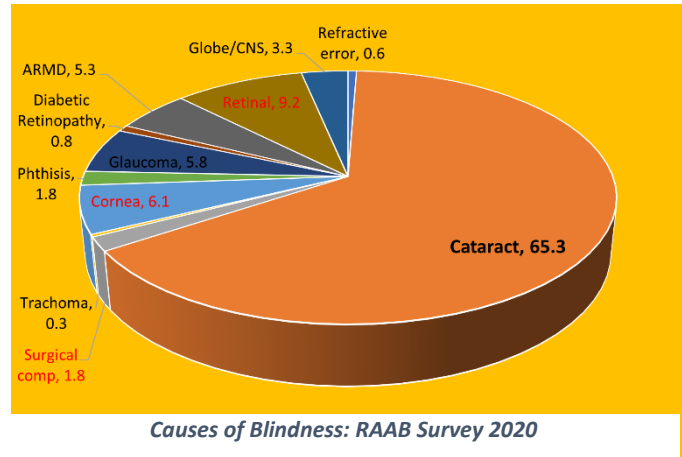
² Seva_Country_Fact_Sheets_Nepal.pdf

³ CBS 2022

Blindness survey carried out by NNJS in 2020 shows reduction of prevalence of blindness as 1.05% among the age 50 years and older. The all-age extrapolation shows that prevalence of blindness as 0.26%. The recent RAAB survey carried out by NNJS also provides the Effective Coverage of Cataract Surgery (e-CSC) data on operable cataract defined at <VA 6/60, post-operative outcome of $\geq 6/12$ as 62.6%. The survey revealed that blindness reduction and improved in cataract surgical coverage and outcome compared to 2010 survey⁴.

This is a massive achievement, considering the first ever nation-wide blindness survey in 1981 showed that 0.84% of the population was blind, 80% of blindness was avoidable, and 92% of people with blindness resided in rural area. Cataract alone accounted for two thirds of Nepal's blindness.

Rapid Assessment of Avoidable Blindness (RAAB) survey carried out in the country in 2010 showed there is blindness rate as 2.5% (among the age 50 years and older) and all age extrapolation was estimated as 0.35%. This was almost 60% reduction in blindness in three decades compare to prevalence rate of 1981⁵.



Despite developments in eye health care, the incidence of blindness and vision impairment has not reduced as expected. The reasons are population growth, ageing, inequitable distribution of resources, and lack of integration between levels of eye health care. The pattern of disease has changed from acute infections to chronic ones. The mid-term review of the VISION-2020 program revealed that eye care services were not integrated with primary health care; nor was the modality of partnership with non-governmental organizations (NGOs) and the private sector well defined. Most of the NGO-run eye care programs were struggling financially, and adequate attention was not given to universal health access. Low enrolment and high dropout rates in the national health insurance scheme have meant poor utilization of the available eye care benefit packages. As a result, patients mostly end up having to pay for cataract operations.

More than 80% of the blindness in Nepal is either preventable or curable, however most people in Nepal don't have access to quality, and affordable eye care. New emerging diseases such as diabetic retinopathy are an increasing trend in urban areas, cataract and refractive error are the dominant disorders in the rural areas of Nepal. This is greatly due to the inaccessibility of rugged terrain that separates 81% of the Nepalese population living rurally⁶.

⁴ RAAB Survey Report, NNJS 2020

⁵ <https://www.iapb.org/blog/nepal-achieves-new-milestone-in-eye-health-blindness-reduction/>

⁶ file:///D:/NNJS-SP/Seva_Country_Fact_Sheets_Nepal.pdf

Policy and Program on Eye Health

The 74th World Health Assembly (WHA) has adopted (as draft-decision) the new global eye health targets on Effective Coverage of Cataract Surgery (e-CSC) and Effective Refractive Error Coverage (e-REC). The targets address the two leading causes of blindness and vision impairment- cataract and refractive error. To address the huge unmet need in eye care, all countries including Nepal have committed to⁷:

- **40 percentage point[1] increase in effective coverage of refractive error by 2030.**
- **30 percentage point increase in effective coverage of cataract surgery by 2030.**

The targets cement the World Health Organization's (WHO) global strategy on vision set out in its 'World Report on Vision' and the World Health Assembly resolution on eye health adopted in 2020⁸.

The United Nations (UN) in 2015 has adopted the 17 **Sustainable Development Goals (SDGs)** and 169 targets to transform the world by the year 2030 through the agenda of sustainable development focusing on strengthening universal peace, human rights, and larger freedom. All member countries including Nepal agreed to this ambitious plan for relieving poverty and reducing global inequality over a span of 15 years starting from 2016 to 2030. All the health programs including, universal eye health or Vision 2020 - the elimination of avoidable blindness by 2020 were expected to thrive under the umbrella of Sustainable Development Goals (SDGs). The three dimensions of sustainable development - economic, social, and environmental - are balanced in this new initiative. The overall effect of this initiative will be beneficial to human beings. All efforts would be directed to review, realign, and integrate the ongoing public health activities to attain SDGs⁹.

The **Constitution of Nepal** adopts health as fundamental rights of the people as it says- every citizen shall have the right to have free basic health services from the State, and no one shall be deprived of emergency health services. Though it doesn't have a separate clause, the Constitution also incorporates eye health under public health. It guarantees access to information and access to health (including eye health) services irrespective of gender, race, physical condition and disability- as it states 'No discrimination shall be made in the application of general laws on grounds of origin, religion, race, caste, tribe, sex, physical condition, disability, condition of health, marital status, pregnancy, economic condition, language or region, ideological conviction or on similar other grounds'¹⁰.

Similarly, **National Health Policy 2019** provides for the development and expansion of eye care services through public-private partnerships in all three tiers of government: federal, provincial, and local; the integration of primary eye care with primary health care; and the coordination of eye care programs by a dedicated eye-unit at the federal ministry of health. Health Policy mainly includes the following:

⁷ <https://www.who.int/news/item/27-05-2021-update-from-the-seventy-fourth-world-health-assembly-27-may-2021>

⁸ https://www.iapb.org/blog/global-eye-health-targets-2030/#_ftn1

⁹ WHO 2016

¹⁰ Constitution of Nepal, 2072

- *The policy aims to develop and expand oral, eye, ENT, and specialized health services to all levels.*
- *To achieve this, the government has planned to integrate primary eye care into the basic government healthcare system.*
- *Eye care services will be further developed and expanded as per the public private partnership policy.*
- *The eye health unit will be established at the Federal Ministry of Health to coordinate, cooperate, and regulate the present eye care program in the country.*

Though eye health has been incorporated into Health Policy in 2019, Nepal Government has developed and approved **National Eye Health Strategy in 2023**. This strategy has been developed in line with the WHO standards and incorporates *the World Health Assembly (WHA)* endorsed Integrated People Centre Eye Care (IPEC) and IAPB sectoral strategy of **2030 In Sight**. This strategy mainly focuses on including eye health into essential health care, developing eye care services in collaboration with federal and provincial government, establishing quality assurance mechanism in eye health, broaden the partnership with private, non-state actors and other development sectors on eye health, include eye health into school health program, focus on elderly, vulnerable, marginalized and disabled people, and increase priority on eye care awareness campaign and programs, etc.¹¹.

In addition, **Public Health Insurance (PHI)** scheme was launched in 2016–17, now covering all 77 districts (expanded to 746 municipalities). The main objective of the scheme is to increase the financial protection of the public by promoting pre-payment and risk pooling in the health sector. Any Nepalese family paying the premium amount of 3,500 NPR per annum set by the Health Insurance Board can get the benefits of the package irrespective of their employment status. The benefits cover outpatient eye care, emergency hospital care, ophthalmic investigation, minor and major surgeries, and ocular medicines. These services can be availed of in public and private hospitals recognized by the Health Insurance Board of Nepal¹².

Despite of these favorable policies, absence of separate eye health policy leads to poor services and minimal coverages in hard-to-reach communities.

Eye Health: Sub-National/Local Context

Mid-term review of vision 2020 reveals that coverage of twice-yearly *Visual Acuity (VAC)* distribution has increased from 65% to over 90% with significant decline in blinding xerophthalmia. While more serious forms of Vitamin A Deficiency (VAD) are seen much less than before, blinding xerophthalmia cases continue to surface periodically particularly in food deficient areas of the mid and far west regions. Milder forms of VAD, more so in older children, have been reported from all over the country. Xerophthalmia still remains the 10th common cause of ocular morbidity in primary care settings and 13th commonest cause of ocular morbidity even in tertiary care centers.

VAD control program regrettably has not evolved into vitamin A nutrition program and continues to rely heavily on pharmacological solution even after nearly two decades of its initiation. A policy shift to increase intake of Vitamin A containing food through different means is urgently needed.

¹¹ Ministry of Health and Population, Nepal

¹² Nepal Government Health Insurance Board

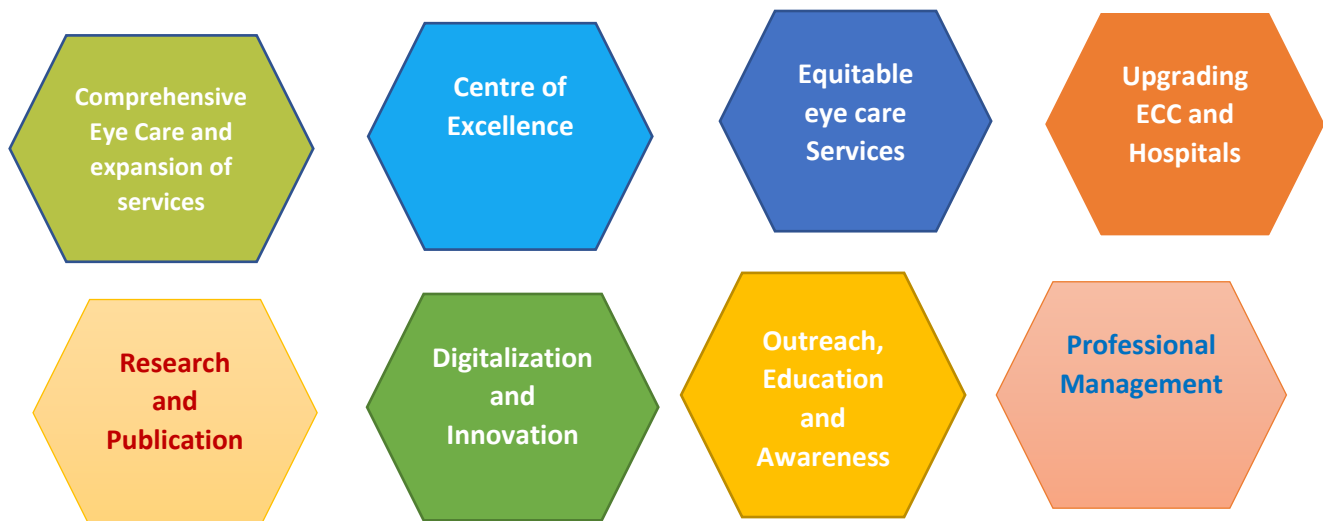
The review committee has recommended to the Ministry of health to review its Vitamin A policy and program with a view to reduce drug dependency to improve vitamin A nutrition and make it an integral part of nutrition and food security policy.

So, at the community level, there is a great potential for training primary health care workers and female community health volunteers to promote eye health through early case detection and referral advice. This can help in the continued control of trachoma, prevention of corneal blindness, and control of eye diseases due to nutritional deficiency.

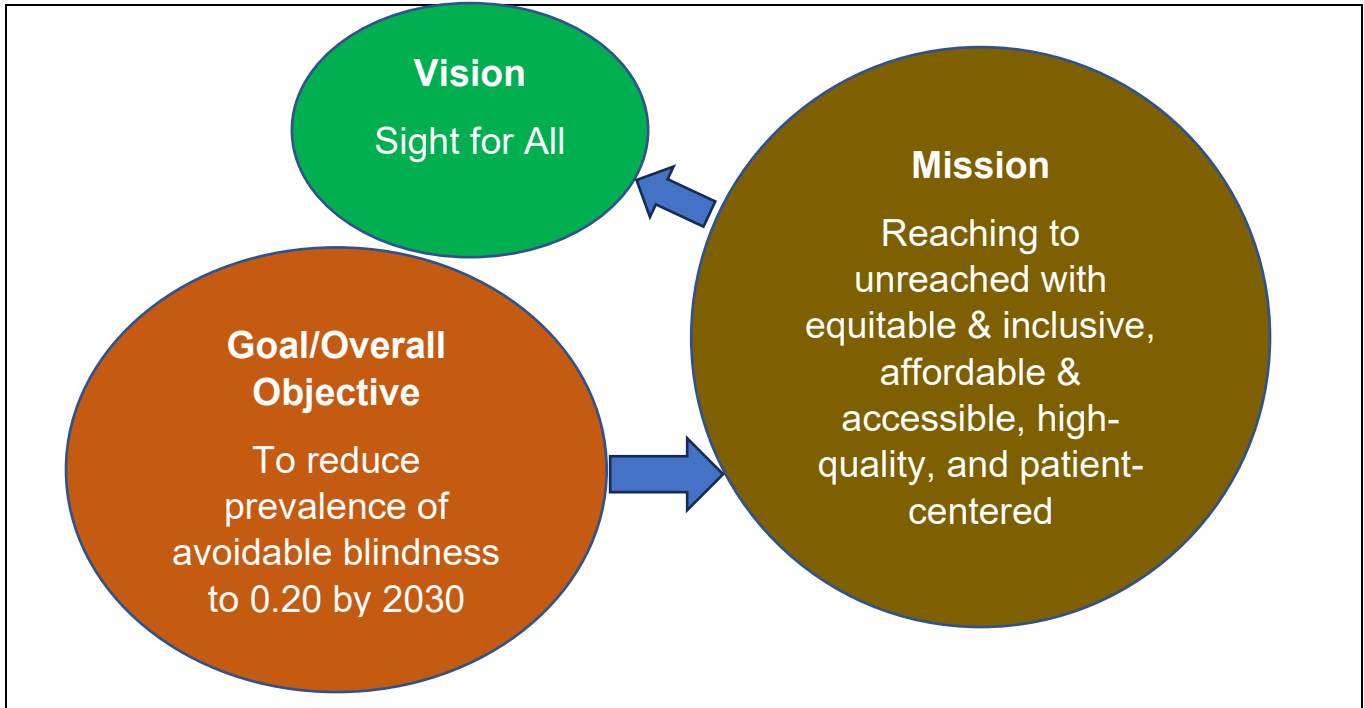
RAAB Survey 2020 reveals that the highest prevalence of blindness (1.75%) in Lumbini Pradesh and lowest in Sudurpaschim Pradesh (0.60%); highest number of bilaterally blind people 50 years and above (11479) in Lumbini Pradesh and lowest in Sudurpaschim Pradesh (1,506) due to various causes; prevalence of refractive error is 15.7% - 25.9% in people aged 50 years and above. The unmet need for refractive error is maximum in Karnali Pradesh (70.1%) and minimum in Bagmati Pradesh (29.3%).

Constitution of Nepal provides the greater responsibility to Province and Local Governments for the planning, management, and delivery of health services. Devolution of health services to sub-national governments is an important step towards improving the delivery of health services and addressing health disparities. However, limited resources, inadequate infrastructures, shortages of skilled health workers and geographical barriers are key challenges the sub-national government faces. Though they have the legislative power to develop the necessary laws and policies in line with federal laws, only a few [province] governments developed the health policies. However, they are collaborating with other service providing institutions including NNJS through limited budget allocation, capacity building and support in equipment and infrastructures.

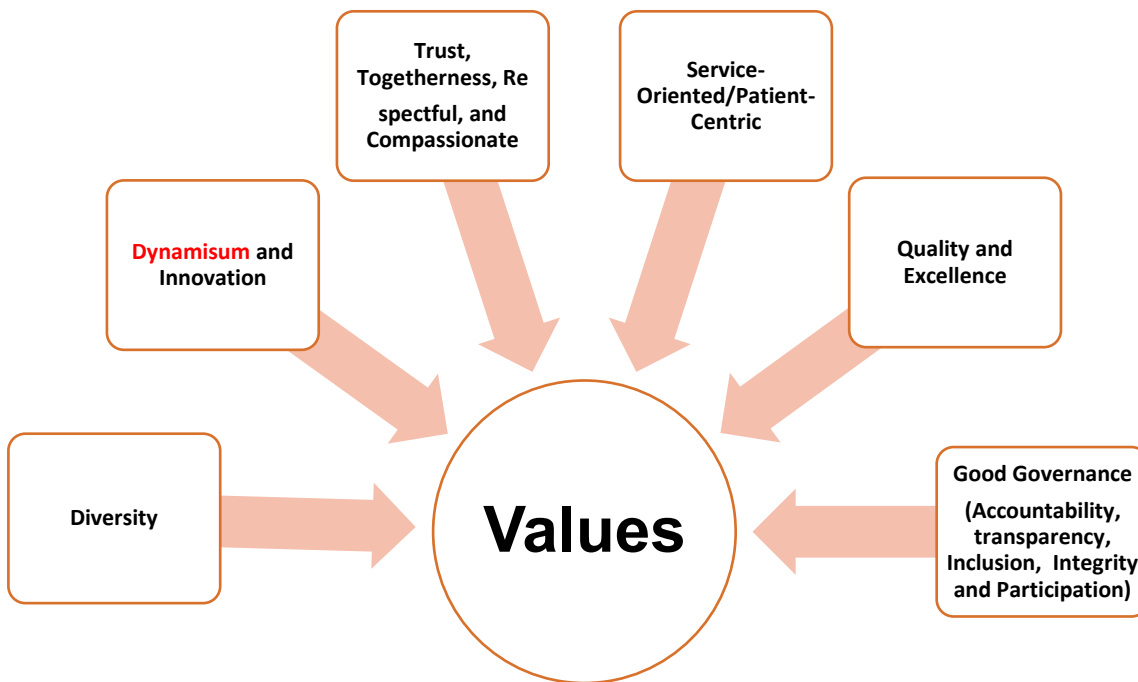
Aspirations and Expected Results (2021-2030)



Section 6: Strategic Framework



What We Stand For (Our Values)



Strategic Objectives

Strategic Objective 1: To upgrade services and provide high-quality and patient-centered integrated services at all levels of eye hospitals and eye-care centers (ECCs).

Strategic Objective 2: To increase new infrastructure and **human resources** along with advanced technology and innovations.

Strategic Objective 3: To expand and increase the coverage of eye care services including ear care service at all local levels. (**Integrate ear care services with eye care services and expand its coverage**)

Strategic Objective 4: To improve Eye and Ear Health-seeking behavior through increasing education and awareness in eye and ear health.

Strategic Objective 5: To promote innovative ideas for connecting livelihood and socio-economic aspects, and environmental-friendly with eye-care services.