



Evaluation Summary

Strengthening inclusive eye health systems in Indonesia

EVIDENCE FROM THE INCLUSIVE SYSTEM FOR EFFECTIVE EYE CARE
(I-SEE) PROJECT IN NTT FINAL EVALUATION (APRIL 2023 – MARCH 2026)

Key results at a glance

Expanding access to eye care:

Education



77,048

people received eye health education.



Referral



37,524

people were referred for eye examinations through project-supported community screening and referral systems.



Treatment



3,083

people were referred for cataract surgery.

Stronger eye health services



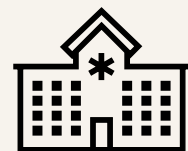
28

doctors received eye health training.



19

nurses received specialised eye health training.



75

primary health centres in the project area had trained Community Eye Nurses.

798 Kabupaten Kupang

235 Kota Kupang

1,296 Kabupaten

Community taking action

More than 2,300 community health volunteers (cadres) had been trained across project areas, supporting awareness raising, early detection and referral.



Advancing disability inclusion

Disability inclusion training and accessibility improvements were introduced across model health facilities, while Organisations of People with Disabilities (OPDs) participated in training, advocacy and service improvement efforts.



Strengthening local systems

Eye health became more embedded within local health systems through stronger coordination, improved data systems and integration into existing government health programs.



Front page & above image: Aksamin is wearing sunglasses to protect her eye post cataract surgery.

East Nusa Tenggara (NTT), Indonesia, continues to experience a significant burden of avoidable blindness and visual impairment, with cataracts among the leading causes of vision loss.

Despite the high need for eye health services, access to care remains limited across much of the province. Specialist services are concentrated in urban centres, with six of NTT's eight ophthalmologists based in Kupang City. This creates significant barriers for people living in rural and remote areas, many of whom face long referral pathways and high travel costs.

Access to eye health services is further constrained by limited awareness of available treatments, low perceived need for care, and fear of surgery.

While Indonesia's national health insurance scheme helps reduce medical costs, transport and accommodation expenses, lost income during treatment, limited family support, and a lack of information about referral pathways often remain significant barriers to accessing services. These challenges are particularly acute for people with disabilities, older people, and those experiencing poverty.

Vision 2020: The Right to Sight recommended one ophthalmologist per 250,000 population. In NTT, with a population of 5.4 million, the ratio is roughly one ophthalmologist per 675,000 population.

Vision 2020: The Right to Sight was a global initiative launched by the World Health Organization and the International Agency for the Prevention of Blindness to eliminate avoidable blindness by 2020.

About the project

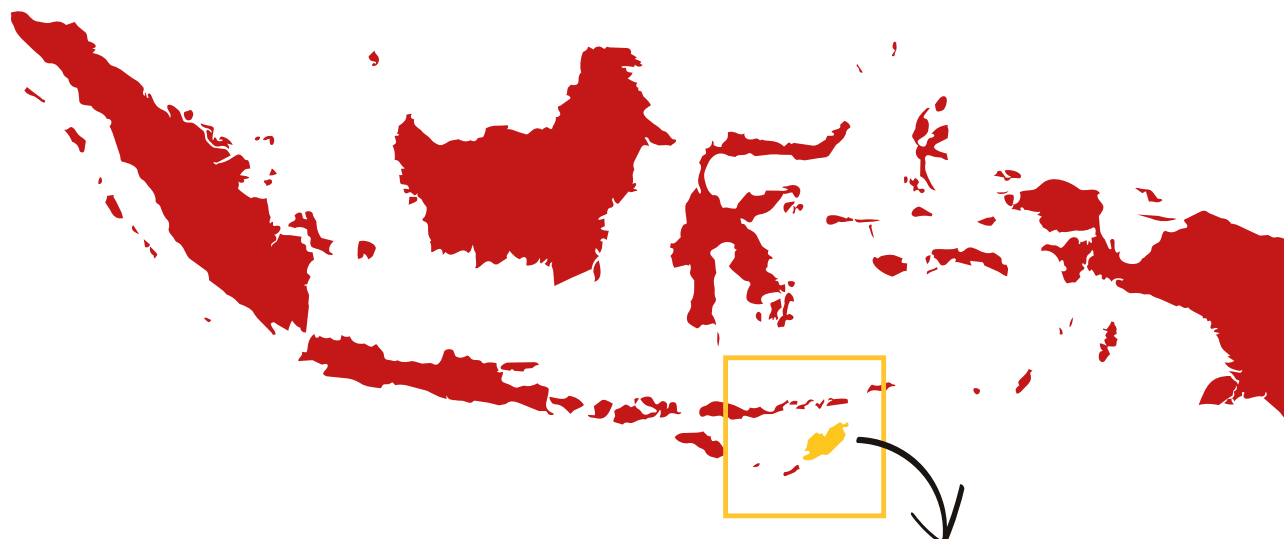
Project name: Inclusive System for Effective Eye Care (I-SEE) NTT - Second phase.

Project period: April 2023 – March 2026.

Location: Kupang City, Kupang Regency and South Central Timor (TTS) Regency in East Nusa Tenggara.

Funder: CBM Australia with support from the Australian Government through the Australian NGO Cooperation Program (ANCP).

Indonesian islands

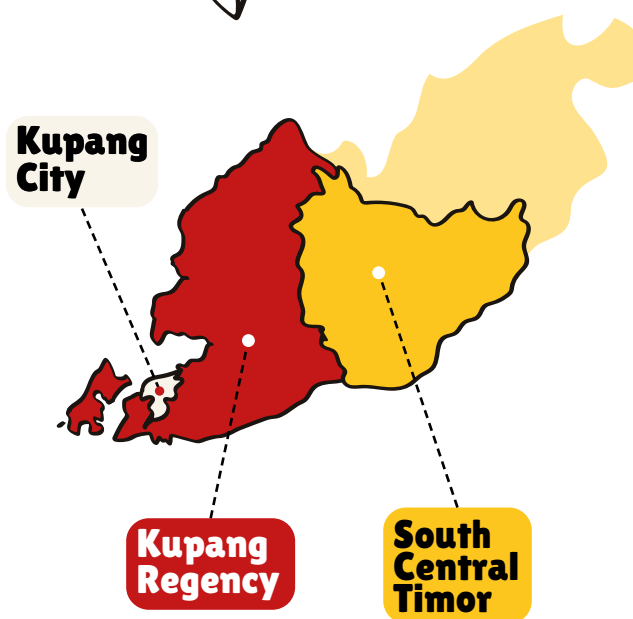


Since 2018, CBM has implemented the Inclusive System for Effective Eye Care (I-SEE) model across Java and eastern Indonesia.

Working alongside communities, health providers, Organisations of People with Disabilities (OPDs) and local governments, the model strengthens eye health systems, improves access to inclusive services and supports sustainable change. By addressing barriers at the community, service delivery and systems levels, I-SEE helps ensure more people can access quality eye care and that improvements can be sustained beyond the life of individual projects.

Project overview

The Inclusive System for Effective Eye Care (I-SEE) NTT Phase II project (April 2023 – March 2026) aimed to strengthen sustainable and replicable eye health systems and improve access to quality, inclusive and comprehensive eye health services in Kupang City, Kupang Regency and South Central Timor (TTS) Regency in NTT. The project focused particularly on people experiencing poverty, older people, people in remote communities, and people with disabilities, who often face the greatest barriers to accessing quality eye care.



Approach

I-SEE adopted a health system strengthening approach that addressed barriers at multiple levels. At the community level, the project trained health cadres to raise awareness, conduct early detection and support referrals. Within the health system, it strengthened the capacity of health workers, improved referral pathways, enhanced eye health data systems, and supported selected health facilities to become models of inclusive eye care. The project also worked with local governments, health authorities and OPDs to advocate for stronger policies, better coordination and increased attention to eye health within broader health planning processes.

Key achievements

Increased awareness and demand for eye health services

Community awareness of eye health increased through community education, eye screening activities, trained community health volunteers (cadres), and the development of Healthy Eye Villages.

More than 77,000 people received eye health education during the project period.

Over **2,300** community health volunteers were trained and played a central role in project implementation, acting as trusted community-based educators and the first point of contact for many people with eye health concerns. They conducted awareness-raising activities, supported early detection and screening, assisted health workers during examinations, and helped guide people through referral pathways to eye care services.

A key factor in this success was the use of trusted community voices. Testimonials from people who had undergone cataract surgery helped address fears and misconceptions about treatment, while religious leaders and churches played an important role in promoting eye health and encouraging eye examinations.

Together, these approaches increased demand for eye health services and strengthened the role of community health volunteers as trusted agents of change within their communities.



77,048

people received
eye health education.

Above image:

Dortia is now able to use her loom again after cataract surgery.

Key lesson:

Effective eye health education depended not only on the information provided, but also on the credibility and trustworthiness of those delivering it.

Insights for future programming:

- In some areas, screening activities focused primarily on older people, limiting opportunities to identify vision impairments among other age groups. Future initiatives could build on this by strengthening outreach to other age groups.
- Maintaining volunteer motivation over time remains important, particularly when trained volunteers became inactive or no longer engaged in local primary health care outreach activities.
- Awareness and screening activities were most effective when accompanied by clearly defined referral pathways and follow-up services, highlighting the importance of ensuring that increased demand can be matched by accessible eye care services.

Inclusive Healthy Eye Villages

The Inclusive Healthy Eye Villages initiative was piloted in two villages in TTS Regency and one village in Kupang Regency to strengthen community ownership of inclusive eye health and encourage local government support.

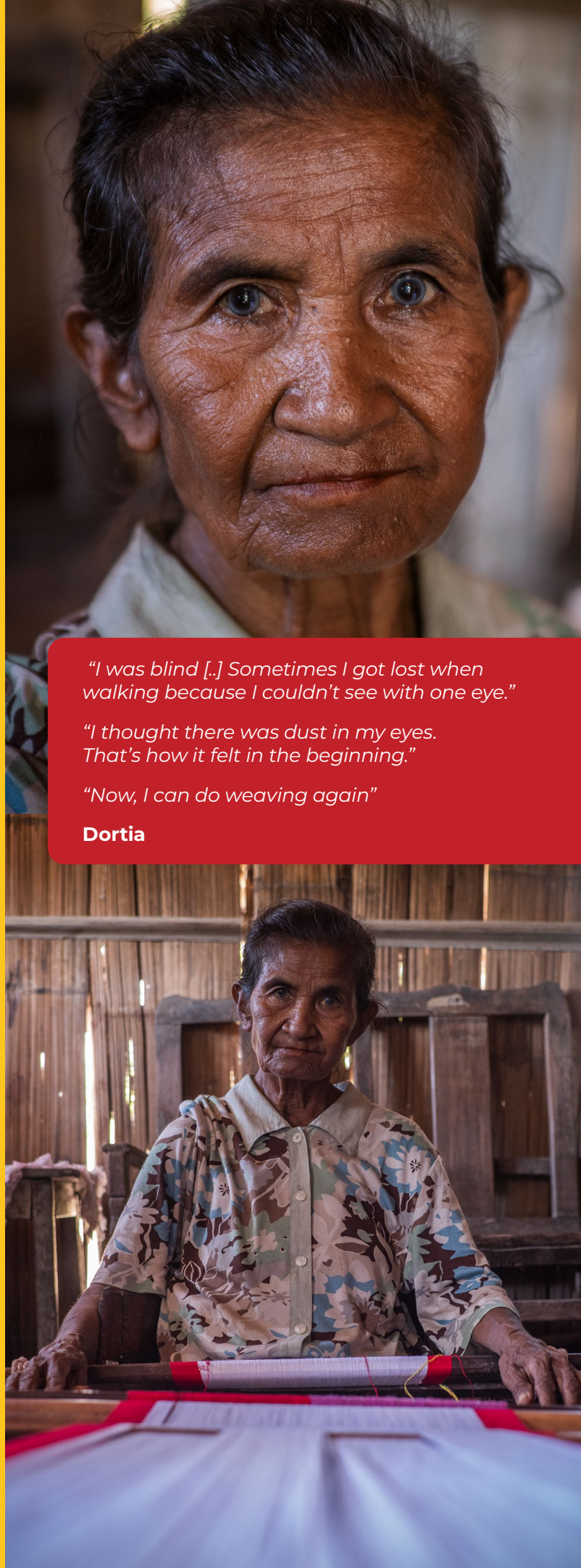
Village leaders demonstrated strong commitment to the initiative, introducing practical measures such as patient transport support, incentives for community health volunteers and the inclusion of people with disabilities in community activities.

These early results suggest that Healthy Eye Villages have strong potential as a sustainable platform for community-based eye health promotion and referral support. Future phases could strengthen and scale the model through clearer implementation guidance and stronger integration into village planning and budgeting processes.

Right images:

Dortia was a cataract surgery patient who could not see for more than two years. Her mother was also blind.

Eye health cadre visited her home and told her about cataract surgery. After a successful surgery she has returned to using her loom.



"I was blind [...] Sometimes I got lost when walking because I couldn't see with one eye."

"I thought there was dust in my eyes. That's how it felt in the beginning."

"Now, I can do weaving again"

Dortia



Renya from Yayasan Tanpa Batas explains that when the project began, many community members had limited knowledge of eye health and often relied on traditional remedies for cataracts.

"People still believed that cataract is curable by using folk medicines."

Renya, Health Worker



37,524

people were referred for eye examinations

3,083

people were referred for cataract surgery.

Through ongoing awareness activities and the support of community eye health volunteers, more people are seeking help for eye conditions.

"People have been a lot more courageous, and independently meet up with doctors, health workers and eye health cadres to inform the doctors when they have eye health problems, as they are no longer afraid,"

Renya, Health Worker

Improved access to eye health services

The project improved access to eye health services by strengthening referral systems, supporting community screening, and building stronger connections between communities and health facilities.

As a result, more people were able to access eye examinations, referrals, eyeglasses and surgery, particularly women, older people and people with disabilities who had previously faced barriers related to cost, distance and limited information.

"I used to think it would be impossible for me to see clearly again because medical treatment was expensive and the city was far away. After receiving this service, my vision has improved, and now I can once again help with household chores and go about my daily activities without depending on others."

Post cataract surgery patient

Over 37,000 people were referred for eye examinations at community health centres (Puskesmas) and more than 3,000 were referred for cataract surgery.

Importantly, the project helped extend services beyond health facilities, with community health volunteers conducting outreach and home visits to reach people who were unable to attend community health centres or other screening activities. This helped ensure that people with disabilities and other people at higher risk of vision impairment were not excluded from early detection and referral services.

Insights for future programming:

- Demand for cataract surgery remains high in Kupang and TTS. Limited availability of ophthalmologists and specialist services outside Kupang City continues to create access challenges for people in remote areas, many of whom still rely on project support to reach surgery services.
- Strengthening collaboration with government and health providers remains important to improve local eye health services and expand equitable access to specialist eye care across the province.



28

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19

nurses received specialised eye health training.



As local health workers strengthen their capacity to identify, refer and support people with eye conditions, more community members are accessing treatment. Reflecting on one cataract surgery patient, health worker Siti recalls:

"After the surgery, she was very happy. She could see papaya. She could see coconut."

Siti, Health Worker

Strengthened capacity of primary health services

A major achievement of Phase II was strengthening the capacity of primary health care providers to identify, manage and refer eye conditions.

Through training, mentoring, equipment upgrades, and improvements to service management and data systems, the project improved the quality of eye screening and referral services at community health centres. Health workers became more confident in diagnosing and managing eye conditions at the primary care level, resulting in more accurate referrals, reduced demand on specialist services, and a more efficient patient journey.

During the project period, 28 doctors and 19 primary health care nurses received training, helping to strengthen local capacity to deliver eye health services.

Learning Spotlight:

Pilot Community Health Centres
The project supported pilot community health centres in Kupang and TTS Regencies to demonstrate more integrated and inclusive models of eye care.

These facilities adopted a more comprehensive approach to service delivery, often referred to as Integrated Primary Care (ILP), with trained staff, improved infrastructure, and greater accessibility for people with disabilities and other vulnerable groups. The pilot centres also established practical approaches and operational standards that can be replicated by other community health centres, helping to strengthen primary eye care across the health system.

While some non-pilot facilities continued to face challenges such as shortages of screening equipment, limited examination space and staffing constraints, the pilot sites demonstrated a practical and replicable model of more inclusive, integrated eye care that could be adapted by other community health centres.

Key lesson:

The importance of strong referral systems. While referral pathways improved, differing interpretations of BPJS (the National Health Insurance) referral guidelines and Universal Health Coverage (UHC) regulations across health facilities, hospitals and government stakeholders highlighted the need for stronger coordination and a shared understanding of referral processes.

Insights for future programming:

- Maintaining the capacity of trained health workers remains important, particularly where staff rotations result in the transfer of personnel with specialised training in eye health and disability inclusion.
- Continued investment in workforce planning, knowledge transfer and professional development can help sustain the benefits of capacity-building initiatives.
- Expanding access to specialist eye care remains an important priority, particularly in areas where shortages and the uneven distribution of ophthalmologists continue to create barriers to care.



Strengthened eye health systems and coordination

The project strengthened eye health systems through stronger stakeholder coordination, improved recording and reporting systems, and evidence-based advocacy.

Stronger coordination and collaboration between health departments, community health centres, hospitals and other service providers, improved referral pathways and strengthened the overall eye health system.

Improved eye health data systems strengthened planning and decision-making, with health facilities and health offices using data to guide service delivery and support budget advocacy. Representatives from health offices and community health centres expressed a commitment to continue and expand the system, demonstrating strong local ownership and its value as an ongoing tool for monitoring, evaluation and planning.

Key lesson:

Integrating eye health education and early vision screening into existing government and community health systems, such as Integrated Primary Health Care (ILP) Posyandu and Indonesia's Cek Kesehatan Gratis (CKG) program, is more sustainable than delivering standalone interventions. It helps position eye health as a routine part of community healthcare, increasing reach, strengthening local ownership and supporting sustainability beyond the life of the project.

Left image:

Following cataract surgery, people like Aksamina are able to carry out everyday activities more independently, from preparing food to managing household responsibilities.

Insights for future programming:

- Continued advocacy and investment will be important to further embed eye health and disability inclusion within local policies, planning processes, service standards and budgets. While local ownership has strengthened, broader local government policy and financing mechanisms for eye health and disability inclusion are still evolving and will be important for sustaining progress over the long term.

Strengthening disability inclusion

The project demonstrated that eye health services can become more inclusive when disability inclusion is intentionally integrated into service delivery. Through partnerships with OPDs, disability inclusion training, accessibility assessments and improvements to service practices, health workers and government officials developed a stronger understanding of how to meet the needs of people with disabilities.

People with disabilities were engaged as trainers, peer counsellors and advocates, moving beyond the role of beneficiaries to become active contributors to project implementation. Several community health centres introduced accessibility improvements and more inclusive approaches to patient care, improving access to eye health services for people with disabilities.

Key lesson:

Meaningful participation of people with disabilities requires more than involvement in project activities. Strong partnerships with OPDs, investment in their capacity, and opportunities for inclusive and participatory decision-making spaces can help ensure disability inclusion is embedded across service delivery and system strengthening efforts.

Insights for future programming:

- Participation by people with disabilities was predominantly among people with physical disabilities. While this demonstrates the project's success in reaching this group, it suggests that people with other disability types may face additional barriers or were not identified through existing outreach and data systems, and more targeted outreach is needed.
- While the project strengthened overall eye health recording and reporting, gaps in disability-disaggregated data and ongoing challenges in monitoring and learning limited understanding of who was being reached, which groups remained underserved, and the barriers they continued to face. These findings present an opportunity for future programmes to strengthen inclusive outreach, data collection and analysis to better understand and respond to the diverse needs of people with different disability types.

Below image:

Ursula, who received cataract treatment, is now able to harvest food and complete other daily activities with ease.



Scaling and Replication Potential

The I-SEE model is highly relevant to the NTT context and has strong potential for replication. Its success stems from a comprehensive approach that combines community mobilisation, strengthened primary health care services, disability inclusion, improved referral systems, data-driven decision-making and multi-stakeholder collaboration.

Several elements show particular promise for scale-up, including the integration of eye health into ILP Posyandu and routine health screening programs, community cadre-led education and referral systems, disability-inclusive service standards, and strengthened eye health recording and reporting systems. The project's engagement with trusted community leaders and faith-based networks also provides a valuable model for behaviour change and community mobilisation in similar settings.

As NTT continues to address the burden of avoidable blindness and visual impairment, the experiences and lessons from I-SEE provide a practical and evidence-based model that can inform future programming across the province and potentially other regions of Indonesia. With continued government ownership, stronger local partnerships and sustained investment in inclusive eye health systems, the foundations established through I-SEE can support lasting improvements in access to quality eye care for all.

Left image:
Ursula

