

SIGHT FOR CHILDREN AND PEOPLE AGED OVER 50 IN THE MEKONG DELTA (VIETNAM)

Project Goal:

To create access for early identification and diagnosis of eye conditions for children and people over 50 in Can Tho City and Ca Mau province of Vietnam's Mekong Delta region.

Project Objectives:

- (1) Establish a tertiary-level Child Eyecare centre that is fully equipped with child-friendly facilities to provide comprehensive, quality paediatric ophthalmology services for the Mekong Delta region.
- (2) Formulate and train a professionally-qualified paediatric team at Can Tho Eye Hospital to examine and treat causes of avoidable blindness in childhood.
- (3) Train staff at the Eye Clinic of Can Tho Children's Hospital to detect eye problems and refer patients to Can Tho Eye Hospital for further treatment when required.
- (4) Train ophthalmologists at Can Tho Eye Hospital to provide higher volume, high quality adult services to support the financial sustainability of paediatric services.
- (5) Establish collaborative mechanism with other eye clinics in the region to implement community-level screenings to identify children requiring referral to Can Tho Eye Hospital.

Project Period:

2016 – 2018

Project Budget:

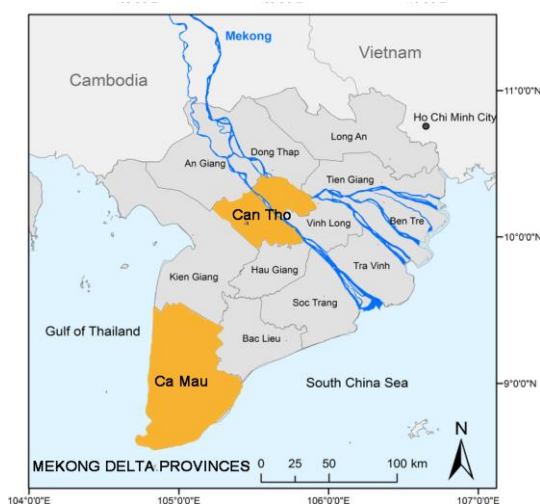
USD1 million over three years:

- 2016: USD 436,429
- 2017: 287,446
- 2018: 276,125

Project Location and Community Details:

The project will benefit communities living in Can Tho and Ca Mau provinces in the Mekong Delta region.

Although the Mekong Delta is not among the regions of Vietnam with the highest rates of poverty, its rural areas are some of the poorest in the country, with natural disasters often affecting local people's livelihoods. Given the delta's large population, this means the absolute number of poor people is relatively high among all regions in Vietnam.



Main Causes of Visual Impairment:

The Rapid Assessment of Avoidable Blindness (RAAB) study showed that the prevalence of blindness in the Mekong Delta region is high among Vietnam's regions. The causes of blindness are cataracts (66.1%), retinal diseases (10.5%), glaucoma (6.4%), refractive errors (2.5%), paediatric eye problems (4%) and corneal scars (4%).

The RAAB survey also revealed the visual impairment rate among adults aged over 50 is 13.2%, with 29.8% caused by uncorrected refractive errors¹. Nearly 400,000 people in the region need cataract surgery and 1.5 million people aged over 50 need refraction services.

Childhood Blindness

Besides the ongoing challenges in blindness prevention due to cataracts, the survey warned that childhood blindness is in desperate need of attention in Vietnam, including the Mekong Delta, with the country having the fourth highest prevalence of childhood blindness in Asia (0.79%).

As in many developing countries, cataracts and congenital anomalies such as strabismus and ptosis are significant causes of childhood blindness. Meanwhile, retinopathy of prematurity (ROP) is emerging as an important, but potentially avoidable cause of blindness.

The prevalence of uncorrected visual impairments due to refractive errors is also high in Vietnam. The percentage of schoolchildren with refractive errors is 10-15% in rural areas and 20-35% in urban areas².

It is thus estimated that 300,000 children in the Mekong Delta region have eye diseases, prompting the need for conditions to be detected as early as possible to initiate timely treatment. In addition, nearly 1 million children in the Mekong Delta have refractive errors that require screening and correction. Those unacceptably high numbers challenge eyecare delivery in the region.

¹ Vietnam National Institute of Ophthalmology, *Rapid Assessment for Avoidable Blindness in 16 provinces of Vietnam, 2008*

² Health Policy and Strategy Institute, *Situation Analysis and Paediatric Eye Care in Vietnam, 2014*

State of Existing Eye Health Infrastructure and Human Resources:

Can Tho Eye Hospital (CTEH) is the largest eyecare facility in the Mekong Delta. In other provinces of the region, eyecare services are provided by the Centre for Social Disease Prevention and Control or eye clinics within provincial general hospitals. The equipment and infrastructure of almost all eyecare providers in the Mekong region, including are inadequate to deliver quality eyecare services.

There is a huge shortage of qualified eyecare professionals in the region. Per current statistics reported by the Vietnam National Institute of Ophthalmology (VNIO), the number of ophthalmologists per million people in the Mekong Delta is 7.6, which is far below the national average of 16.5.

A similar pattern is found with the region's ratio of refractive technicians to population, which at 1.8 per million people is one of the lowest in Vietnam³. With such low capacity in the Mekong Delta, the focus has been on combating cataracts through surgery, while complicated eye care, including for childhood blindness and refractive services, has been almost ignored. Overall, only 5-7% of districts have services for refraction and dispensing spectacles⁴.

Proposed Project:

A Child-Friendly Eyecare Centre (CFEC) will be established at Can Tho Eye Hospital (CTEH). The infrastructure of the paediatric unit at CTEH will be improved to meet the required standards for child-friendly eyecare facilities. Essential equipment to meet the requirements of a tertiary level paediatric eyecare facility also will be procured.

A paediatric team, including ophthalmologists, nurses, optometrists, anaesthesiologists and biomedical technicians, will be formed and trained to provide high-quality surgical services for the management of strabismus, amblyopia, childhood cataracts, glaucoma, eyelid conditions and ROP.

The project will use Orbis's best practices for training, such as fellowships, hospital-based training programmes, Cyber-Sight (telemedicine) and supportive supervision, to accomplish the capacity-building objectives.

The project will also strengthen the quality of adult eye care at CTEH by training ophthalmologists, with emphasis on cataract and retina services to generate financial growth for the development of the paediatric service.

In addition, the eye clinic at Can Tho Children's Hospital (CTCH), where children in the region have been referred to for primary childhood health services, will be enhanced to screen common eye problems in children, including infants at risk of ROP. Ophthalmologists from CTEH will regularly visit CTCH to conduct full ophthalmological assessments. Children with complex eye problems identified at CTCH will be transferred to the CFEC at CTEH for further treatment.

³ *Health Policy and Strategy Institute, Situation Analysis and Paediatric Eye Care in Vietnam, 2014*

⁴ *Health Policy and Strategy Institute, Situation Analysis and Paediatric Eye Care in Vietnam, 2014*

Poverty has long been recognised as a major cause of ill health and as a barrier to accessing healthcare services in the Mekong region, where a high proportion of people are poor. During screening sessions, schoolchildren and people aged over 50 with low socio-economic statuses will be identified and receive financial assistance to travel to CTEH for surgery. If they have refractive errors, they will be prioritised to receive free or subsidised spectacles.

Quality Assurance:

The quality assurance process will be integrated into overall project planning to ensure that all project outputs and services delivered are of acceptable quality.

Regarding paediatric ophthalmology services provided, a quality control team will be formulated at CTEH to conduct quarterly reviews of surgical outcomes, clinical process compliance and client satisfaction following MOH quality requirements.

The supportive supervision system will be reinforced by an expert group, consisting of leading individuals from VNIO and Ho Chi Minh City Eye Hospital, and will visit CTEH on an annual or monthly basis to assess the quality of clinical performance and provide coaching and mentoring assistance. An appointed medical staff member at CTEH will provide counselling services and communication support (via cell phones and landlines) for registering for check-ups and treatment and to notify patients due for follow-up care.

Regarding the refractive services provided by the Vision Centres and/or optical shops, a programme team composed of staff from HKI and the ECF will collaborate with CTEH and Ca Mau COSD to conduct unscheduled checks every year to ensure at least 30% of people identified with refractive errors have purchased and wear glasses six months later (a WHO recommendation) and nearly 90% of glasses provided by the centres meet quality standards.

Project Monitoring:

The project will implement a robust Monitoring and Evaluation (M&E) system, mobilising the existing staff of project partners to track and evaluate results and activity implementation. An M&E Operational Plan will be developed and training will be provided to orient partners on the M&E system. Baseline data will be collected to finalise performance targets and gauge performance over time.

In addition, the following activities will be carried out to measure the project's results and improve its performance:

Project Reviews

Project reviews will be conducted twice a year by the Project Steering Committee to evaluate the performance of the project, constraints encountered and lessons learned. In addition, the project reviews will also be used to inform the partners of evidence-based implementation, while also engaging them in the quality assurance and control process. This will help document the project's ongoing improvements and the best practices learned over the years.

Based on each project review, an annual work plan for the subsequent period will be prepared, including strategic, programmatic and operational adjustments as required.

Joint Monitoring Visits

A joint monitoring visit will take place at the project sites of Can Tho and Ca Mau at least once a year, which will help in determining whether the inputs to the project are being used appropriately. The monitors – including project staff, financial and technical experts from each organisation and an M&E specialist from Orbis – will validate the results reported by project partners and identify gaps or shortcomings in project delivery for corrective action.

The monitoring visits will also record best practices to document lessons learned and incorporate these into future strategies.

Final Evaluation

A final evaluation will be conducted at the end of the project to assess overall levels of success, partner performance, significant achievements versus objectives and the main lessons learned. This evaluation will be conducted independently and the findings will be disseminated nationally and internationally. An operational study will be conducted on refractive error coverage and best practices to support the replication of paediatric eyecare services for other provinces.

Sustainability of Project:

From an institutional sustainability perspective, the project is designed to provide technical support to strengthen existing eye-health services. As most of these are public services, the government will have an automatic stake and fundamental involvement in the project. The project will also use a 'training-of-trainers' approach to help build long-term capacity for staff in the eyecare network, so that institutional sustainability can be secured.

In terms of financial sustainability for the Vision Centres, the project will help partners to develop business plans, including marketing and financial strategies, and apply a co-funding scheme for their operation.

With regards to community sustainability, the project will work to increase demand for and use of refractive and paediatric ophthalmology services. This will not only promote the sustainability of service delivery, but also generate income to help expand the service to more communities.

National Eye Care Plan and Vision:

The control of blindness in children and visual impairments caused by refractive errors are both considered as high priorities within the VISION 2020: The Right to Sight programme and the National Plan for Blindness Prevention (NPBP) 2015-2019.

The proposed project will strengthen ophthalmic and refractive capacities, improve infrastructure and reinforce eyecare networks and referral systems, which will directly contribute to childhood blindness targets set by VISION 2020 and the NPBP.

The project area is a high-priority region in the NPBP and requires collective effort to address complex eyecare challenges. The consortium, consisting of the ECF, HKI and Orbis, builds on complementarities and brings together the added value of each eyecare organisation.

The consortium's partners all have excellent working relationships with service providers, government departments and civil society and work to engage the private sector. The engagement of all those involved in the eye-health system in the Mekong region will develop a



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continuum of care from the community to the hospital, offering a full spectrum of sustainable eyecare services.

This strategy of partnership will strongly contribute to achieving VISION 2020's goals and the country's national plan for eye care.

Financial Monitoring, Reporting and Accountability:

A set of financial management guidelines for the project will be developed in the first year to harmonise financial accounting and internal controls, including cost norms among the consortium members.

Each consortium member will manage its share of financial resources to make sure that they are properly used to achieve the project's objectives. Funds will be transferred from Orbis to the consortium's account per the agreed planning process and depending on the level of unspent funds in the previous timeframe.

Led by Orbis, annual financial reviews will be jointly carried out by the financial staff of the consortium to examine the accuracy of financial reports, the sufficiency of accounting documents and the internal control practices of the consortium members and other project partners. Findings will be shared in the Project Steering Committee meetings and a joint plan for corrective action will be discussed, reduced and implemented to prevent any similar problems in the future.

There will be an office-wide audit on a biennial basis. The auditors will conduct unscheduled audits of the consortium's projects and provide recommendations for improvements if any issues are identified. An external audit will be carried out at the end of the project period by an independent auditor.



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		Year 1		Year 2		Year 3		Total
		H1	H2	H1	H2	H1	H2	
Child Friendly Eyecare Centre is established in Can Tho	Renovate Child Friendly Eyecare Centre at Can Tho Eye Hospital and Eye Clinic of the Children's Hospital		Yes					Yes
	Install essential equipment at Can Tho Eye Hospital and the Eye Clinic at Nhi Dong Hospital		Yes					Yes
A professionally qualified paediatric team at Can Tho Eye Hospital is formulated and trained to be able to examine and treat all common causes of avoidable blindness in childhood	# of doctors trained on paediatric ophthalmology			1	1			2
	# of doctors trained on paediatric cataracts	2						2
	# of doctors trained on strabismus and ptosis			1				1
	# of doctors trained on ROP treatment/surgery		1					1
	# of nurses trained on paediatric nursing		1	1				2
	# of anaesthesia technicians trained on advanced anaesthesia		1					1
	# of biomedical technicians trained on equipment use and maintenance			2				2
	# of hands-on training programmes (HBP) provided by Orbis's International VFs			1		1		2
	# of supportive supervision missions conducted by national experts to improve the quality of clinical/surgical performance				2	2	1	5
Staff at the Eye Clinic of Can Tho Children's Hospital are trained to detect eye problems in those referred from the region for primary healthcare services and transfer patients to Can Tho EH for further treatment if required, including infants at risk of ROP	# of doctors trained on paediatric ophthalmology						1	1
	# of doctors trained on ROP screening					2		2
	# of doctors trained to standardise safe paediatric anaesthesia		1					1
	# of neonatal nurses trained on newborn and ROP patient care		1			2		3

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Ophthalmologists at Can Tho EH are trained to provide higher volume, high-quality adult services as a means of supporting the financial sustainability of paediatric services	# of hands-on training programmes (HBP) provided by Orbis's International VFs to improve the clinical/surgical skills for adult cataracts/glaucoma			1		1		2
	# of doctors trained on advanced retina treatment				1			1
Collaborative mechanism with other eye clinics in the region is established to implement community-level screenings to identify children requiring referral to Can Tho EH for further treatment	# of resource persons in Ca Mau and Can Tho trained through TOT on paediatric eyecare management			20				20
	# of referral guidelines and/or protocols developed to create paediatric referral system among eyecare units in Can Tho and Ca Mau				Yes			Yes
	# of healthcare practitioners (school health staff and commune health workers) trained on paediatric eyecare management			44	87			131
	# of paediatric eye disease screening programmes conducted in the community			1	2	3	3	9



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	2016		2017		2018		Total
	H1	H2	H1	H2	H1	H2	
Child screenings / examinations	1,500	1,740	1,800	3,047	4,260	4,453	16,800
Eye diseases examinations	1,200	1,440	1,500	2,747	3,960	4,153	15,000
ROP screenings	300	300	300	300	300	300	1,800
Child medical and optical treatments	856	1,657	1,945	2,780	3,620	3,842	14,700
Minor surgeries	100	250	300	300	350	400	1,700
Medical treatments	756	907	945	1,730	2,495	2,667	9,500
Optical treatments prescribed / Glasses prescribed		500	700	750	775	775	3,500
Surgeries / Laser treatments performed on children			40	80	150	150	420
Cataract / strabismus / ptosis surgeries			25	65	130	130	350
ROP laser surgeries	-		15	15	20	20	70
TOTAL							31,920