Strategic Evaluation of Dhaka Urban Comprehensive Eye Care Project (DUCECP)

Evaluation Report

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Avicenna Consulting (Pvt) Ltd

Strategic Evaluation of Dhaka Urban Comprehensive Eye Care Project (DUCECP)

Evaluation Report 2014

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Acronyms

BCAS	Bangladesh Centre for Advanced Studies
BCC	Behavioural Change Communication
BCCC	Bangladesh Childhood Cataract Campaign
BCCSAP	Bangladesh Climate Change Strategy and Action Plan
BDT	Bangladeshi Taka
BNSB	Bangladesh National Society for the Blind
CBO	Community Based Organization
DCC	Dhaka City Corporation
DfID	Department for International Development
DMA	Dhaka Metropolitan Area
DMDP	Dhaka Metropolitan Development Plan
DNCC	Dhaka North City Corporation
DPHE	Department of Public Health Engineering
DR	Diabetic Retinopathy
DSCC	Dhaka South City Corporation
DSK	Dushtha Shasthya Kendra
DUCECP	Dhaka Urban Comprehensive Eye Care Project
DUECP	Dhaka Urban Eye Care Project
EEP	Economic Empowerment for the Poorest
ESD	Essential Services Delivery
FGD	Focus Group Discussion
HMIS	Health Management Information System
IAPB	International Agency for the Prevention of Blindness
IEC	Information Education Communication
IIEI&H	Ispahani Islamia Eye Institute and Hospital
INGO	International Non Governmental Organisation
KAP	Knowledge Attitude Practice
LGED	Local Government Engineering Department
LGRD&C	Local Government, Rural Development and Cooperatives
MDG	Millennium Development Goal
MGH	Mahanagar General Hospital
MSS	Manabik Shahajya Sangstha
MTR	Mid Term Review
NAPA	National Adaptation Programmes of Action
NEC	National Eye Care
NGO	Non Governmental Organization
NIO	National Institute of Ophthalmology & Hospital
OCCR	Operating Cost Coverage Ratio

PECs	Poverty Eradication Centres
PHC	Primary Health Care
PIU	Project Implementation Unit
PMC	Project Management Committee
PMU	Project Management Unit
PSP	Patient Screening Programme
RAAB	Rapid Assessment of Avoidable Blindness
RAJUK	Rajdhani Unnayan Kotripakhkha
SiB	Seeing is Believing
SMA	Statistical Metropolitan Area
SSC	Secondary School Certificate
SSHL	Salauddin Specialized Hospital Ltd
SSI	Semi Structured Interviews
SSMCH	Shaheed Suhrawardy Medical College and Hospital
SSMCMH	Sir Salimullah Medical College and Mitford Hospital
SSNP	Social Safety Net Programme
TOR	Terms of Reference
TVET	Technical and Vocational Education and Training
UNCRPD	United Nations Convention on Rights of Persons with Disability
UPHC	Urban Primary Health Care
USD	United States Dollar
VARD	Voluntary Association for Rural Development
VC	Vision Centre
VI	Visually Impaired/Vision Impairment
WASA	Water and Sanitation Authority
WHO	World Health Organisation
WPHCCC	Ward Primary Health Care Coordination Committee

Acknowledgements

This Evaluation was conducted by Dr Haroon Awan and Mr Niaz Ullah Khan of Avicenna Consulting Pvt Ltd.

We wish to acknowledge with deep appreciation the cooperation and support received from the implementing partners, namely, Ad-din Hospital; Ispahani Islamia Eye Institute and Hospital; Mahanagar General Hospital; National Institute of Ophthalmology and Hospital; Shaheed Suhrawardy Medical College and Hospital; and Voluntary Association for Rural Development.

We are extremely grateful to the community members, school teachers and students who shared freely of their time and made valuable suggestions regarding the programme.

To the Sightsavers Bangladesh Country Office team, we express our grateful thanks for all your facilitation, insightful discussions and accompanying us throughout the evaluation.

We extend our gratitude to Sightsavers, International Agency for the Prevention of Blindness and Standard Chartered's 'Seeing is Believing' partnership for having accorded us this invaluable opportunity not only to undertake this evaluation, but also to develop a better understanding of eye health in an urban health setting.

While every attempt was made to verify findings from observations, document reviews and interviews, any omission or commission is duly regretted.

Dr Haroon Awan
Mr Niaz Ullah Khan

Map of Bangladesh

Executive Summary

Description of Programme

In 2005 – 2008, Sightsavers supported an urban eye care project (Dhaka Urban Eye Care Project – DUECP) implemented by three non-government eye organizations, namely Islamia Eye Hospital as the lead hospital coordinating with the Dhaka Bangladesh National Society for the Blind (BNSB) and the Bangladesh Lions Eye Foundation (BLF), Dhaka. The successful completion of this project highlighted the need for testing feasibility of a larger demonstration approach that included other key stakeholders like the government, NGO and private sector services. On completion of the pilot project solely supported by Sightsavers till September 2008, the 'Dhaka Urban Comprehensive Eye Care Project' (DUCECP)' was launched with financial support from Standard Chartered's 'Seeing is Believing' (SiB) Phase IV initiative. The DUCECP was designed more comprehensively in the context of the type of eye health services required. The overall budget of the project was USD 1,657,222 spread over a period of 5 years. In 2013, a no-cost extension was agreed for 15 months up to December 2014. Of this, USD 1 million was provided by Seeing is Believing programme, while USD 657,222 was contributed by Sightsavers.

The project aimed to:

1. Strengthen eye care facilities to cater for the eye care needs of the target population.
2. Increase level of awareness among poor urban communities about eye care and the treatments available.
3. Institute a positive change in the eye health care seeking behaviour of the urban community.
4. Increase access to appropriate eye services for people living in poor urban communities.
5. Create stronger links with community based organisations (CBOs) to enable greater case finding capacity

Its main outputs envisaged included 32,000 cataract surgeries, 111,278 refractions, 105,003 glasses dispensed, 550 treated for low vision, 330,410 eye patients examined, 1826 urban eye screening activities, 12,450 students screened with eye complaints, 2739 people benefitting from training and orientation.

The programme was implemented through three government and four NGO partners.

Evaluation Purpose and Objectives

The purpose of this end-line evaluation was to assess the project achievements against targets to date. The review also aimed to identify the internal and external factors influencing program delivery, capture key lessons learnt, and recommend strategic direction to further strengthen future programme design.

The evaluation aimed to answer questions under each of Sightsavers' 7 key evaluation criteria terms of reference based on OECD criteria of relevance, effectiveness, efficiency, impact, sustainability, coherence/coordination, and scalability/replicability.

The scope was the entire time from the launch of the project in 2008 to the anticipated end of project in 2014. It covered the level of activity and specific results as well as the strategy and intervention logic employed by the partners for achieving the objectives.
The geographic scope of the evaluation included visits to Dhaka and selected project sites and partners.

Brief Description of Methods and Analytical Strategy

A comprehensive document review of the project proposal, progress updates, key performance indicators was carried out and the methodology developed after consultation with Sightsavers Bangladesh Country Office and Sightsavers UK.

In order to conduct the evaluation, we developed a 'schematic diagram of intervention' that had two main 'arcs' of activity (one comprising the 'Supply' side, and the other the 'Demand' side). We further developed an evaluation matrix with indicators. A variety of data collection methods were utilized, which included interviews, focus group discussions and onsite observations. Separate instruments were developed for these. The detailed methodology was presented in an Inception Report, which after various inputs was approved by Sightsavers.

The evaluation team reviewed project reports, made onsite visits to interview partners, conducted focus group discussions and held a consultation workshop for all partners. Data analysis methods included systematization of data collected into relevant TORs and analysis as per TORs.

Summary of Main Findings/Conclusions

The evaluation revealed that the project has either fully met or even exceeded targets. The achievement in low vision treatments exceeds the targets by almost three times. Although the numerical target for vision centres was achieved, there were major challenges in their effectiveness and sustainability.

Relevance – the programme is well aligned with the Global Action Plan for Universal Eye Health 2014-2019, government health plan 2011-2015, MDGs and poverty focus, National Blindness Survey 2000, National Eye Care (NEC) plan, Seeing is Believing, UNCRPD, Vision 2020 – The Right to Sight and partially aligned with the WHO Health Systems framework. However, the institutional and stakeholder analysis that had been done during the preparation of this project was insufficient and such a complex project warranted a much more detailed analysis. This has an important bearing on whether the project can be integrated, taken to scale and its overall sustainability, as the project did not derive synergies from policies and strategies of local government.

Effectiveness – the targets were generally exceeded and there was overall good performance in terms of achievement project outputs. Some of the factors that have contributed towards high uptake of services include a well structured community awareness mechanism (delivered through well established 4 NGO hospitals, 15 field level partners, 75 CBOs); Patient Screening Programmes (PSPs) (treatable cataract referred and expectations for other eye treatments managed); logistic support through free transport; free surgery for the poor; previous experience of NGO partners with Sightsavers in the DUECP project and capacity of clinical partners to deliver high volume surgery.

Although the project was titled as 'comprehensive', it was in essence a cataract and refractive errors initiative. Slum dwellers required continuity of service and were more interested in a comprehensive service set-up that could cater to their other eye care needs as well. The guidelines for establishment of Vision Centres (VCs) were not available during the life of the project and it is only in May 2013 that a VC conceptualisation workshop took place, which was instigated by Sightsavers Programme Development Advisors. However, this left under a year (in the no-cost extension period) to establish four VCs. The proportion of patients referred for cataract surgery out of all patients referred remained steadily over 80% indicating an effective screening and referral service for cataract surgery.

Efficiency – for implementation of the project, appropriate partners were identified at each tier. Clinical partners with a history of high volume surgery served as the supply side of the project. The partnership arrangements of field level NGOs partnering with tertiary clinical partners, and CBOs partnering with field level NGOs were very effective in achieving the results. A Project Management Committee comprising of tertiary level partners provided stewardship, while a Working Group comprising of all implementing partners provided effective project decentralisation. The project efficiency could have been improved if schoolteachers focussed on vision screening and eye health promotion, as in this approach a large number of children with 'any eye problem' were referred to refractionists, while only 30.6% of them needed refraction and spectacles. By changing the school eye health screening procedure, fewer children would need to be referred for assessment by refractionists.

Impact – the project generated demand for eye health services, increased partner capacities in high volume activity, and reduced the magnitude of cataract in the target slum localities by 33,000. It also successfully refracted close to 130,000 slum dwellers and provided over 100,000 people with spectacles. Hospital attendances of outpatients at partner hospitals increased by almost 20% between 2008 and 2011, and this met the project target of 20% increase in access to appropriate eye services for people living in poor urban communities. The project strengthened most health systems building blocks, but was not as successful in aligning the information systems with the government e-health/health information system or that of Local Government, Rural Development and Cooperatives (LGRD&C), and did not adequately explore strategic entry points or options for synergy with other government initiatives. The overall project design could have been improved through pre- and post- KAP studies, pre- and post- RAABs and by aligning the baseline with key logframe and impact indicators.

Sustainability – the community component of the project is likely to continue to some degree because the CBOs are already committed to other initiatives in the slum areas and have internalised eye health awareness into their community awareness activities. The frequency of the PSPs would reduce but are likely to continue intermittently as several NGO partners noted their value addition in increasing the uptake of services. During focus group discussions with communities, they indicated that they were willing to invest in local transport costs provided they were assured of quality and continuity of services i.e. a one-stop service for their eye health needs. With regards to spectacles, the community preferred to obtain these from private optical shops as they had a better range of spectacle frames and this was where family and friends usually went to buy spectacles. The NGO hospitals have provision for social protection of the extreme poor, while government hospitals provide a safety net for those who require surgery. Recent initiatives like the Slum Development Plans by the Dhaka City Corporations (DCC) provide strategic entry points for PSPs at poverty eradication centres to be established through these plans.

Vision Centres –the data shows that only the VCs at Mahanagar General Hospital (MGH) and Ad-din were able to achieve and sustain an operating cost coverage ratio (OCCR) of 1 or more, where an OCCR of 1 means that a revenue amount equal to the operational cost has been generated, or in other words has achieved break-even cost. The performance trends of the VCs showed that generally, hospital based VCs were more sustainable as the patients had continuity of service, access to ophthalmologists and surgical facilities. However, those established through the market-based approach of the project performed significantly below expectations. Overall, the evaluation team found that while all the other components of DUCECP worked in a coordinated manner and achieved high performance for a generally successful project, the VCs were a discordant component to the rest of the project design.

Despite the establishment of a clear operational definition during a consensus workshop in 2013 there appeared to be a lack of awareness or disparate understanding of this amongst the operating partners. There were definitional gaps about VCs in the project design, which is understandable as this was a new experiment in Dhaka City, but the VC approach was not available until after the formal project life. Only two out of the six had any value addition to offer. The no-cost extension period may have been better served if time was spent to first understand the context of the VCs and then develop a business model, rather than try and establish four more VCs. Due to the fact that the VCs effectively took off only during the last project year, the objective was not to get them all to run a profit within 1 year, but to bring them on the right path to become sustainable businesses.

Coordination/Coherence – the project generated synergies between different stakeholders. Project Management Committee (PMC) adopted a joint approach towards addressing project deliverables and ensured that each tier was aware of interaction with respective tiers. PMC and Working Group meetings provided an effective platform to resolve issues and improve project planning and execution. The project demonstrated good complementarity between community mobilisation and PSPs, and between PSPs and clinical services facilitated by logistic arrangements. The project mobilised a network of NGOs and CBOs that contributed significantly to the success factor of PSPs. The project had some contradictions. For instance, the VCs did not have a broadly accepted operational definition and the operational approach was not well defined in the project proposal. The VC design did not involve implementing partners, and although information sharing took place, there was no consultative planning.

Scalability/Replicability –several project components have shown potential for scalability, For instance, the PSPs have been accepted by the slum communities as an effective screening and referral option. Secondly, health staff of high performing field level NGOs and CBOs who collaborated in DUCECP can be trained for improved patient screening. The project as a whole is not at a stage where it can be said to have developed a model or approach for scalability. The gaps identified by the evaluation would need to be addressed and this may require a follow-up phase of the project in which deficiencies can be addressed and approaches and scalability options clearly documented. Dhaka is one of the top ten cities globally that is at high risk to the effects of climate change. Future urban eye health interventions would need to give consideration to building in a component of eye health preparedness in emergencies so that collaborating NGOs, field level partners and CBOs can integrate emergency eye health in their overall organisational programme portfolio, so that in the event of water-logging and flooding, a rapid response mechanism would exist to provide coverage of eye care services to affected slum dwellers.

Overall Ratings for Review Criteria (please see methodology section for details)

	RELEVANCE
	EFFECTIVENESS
	EFFICIENCY/COST EFFECTIVENESS
	IMPACT
	SUSTAINABILITY
	COORDINATION/COHERENCE
	SCALABILITY/REPLICABILITY

Recommendations

1. Undertake a thorough institutional and stakeholder analysis to identify strategic entry and synergy points for urban eye health, and complement this with information on spatial mapping of slum areas, vulnerable communities and service providers
2. Adopt a three tiered approach for effective service delivery, whose components include competent clinical partners, intermediary field-level NGOs and CBOs, as a modality for urban eye health to enhance coverage and uptake of services
3. Ensure a decentralised management structure in large urban eye health projects and locate the project management unit or secretariat in a leading implementing partner to enhance ownership and build capacities for improved project management
4. Deploy a team with the right skill mix and expertise to meet the advocacy needs of large and complex urban eye health projects
5. Use large scale urban eye health projects as a springboard to leverage community, organisational and institutional change through well planned and executed advocacy
6. Enhance engagement with higher levels of local government and jointly design and align eye health strategies with slum development plans of local government
7. Treat Vision Centres as a separate project linking with entrepreneurship models or establishing business oriented ventures with the private sector and NGOs
8. Determine existing coordination mechanisms and options from which synergies can be derived, while conducting institutional mapping of actors and stakeholders in urban health, and aim at targeting multi-level coordination
9. Pursue a follow-up phase to DUCECP to address gaps and deficiencies identified in the evaluation to develop a scalable model for urban eye health
10. Build and strengthen the capacities of civil society and public sector actors (involved in urban health) in eye health preparedness in emergencies

INTRODUCTION AND BACKGROUND

Dhaka is one of the largest mega cities in the world with a sprawling population estimated at 15 million people[1]. It is thought to be the fastest growing city in the world with a projected annual growth rate of 3.2%. It has a very high population density of over 27,000 people per sq Km^2. About 28% of this population is poor. There are about 3.4 million people who live in slums and about 300,000 to 400,000 people migrate to Dhaka annually, most of them are poor.

Compounded by a high proportion of poverty in the urban population of Dhaka, this presents innumerable challenges of access to basic services like water and sanitation, health, housing, education, employment etc.

In 2005 – 2008, Sightsavers supported an urban eye care project (Dhaka Urban Eye Care Project – DUECP), primarily with one of the leading national NGOs, Islamia Eye Hospital. The successful completion of this project highlighted the need for testing feasibility of a larger demonstration approach that included other key stakeholders like the government, NGO and private sector services. Furthermore, the government has sought to address governance challenges in Dhaka by considering a decentralized governance structure in the form of city governments, a new approach was required that could be aligned with a decentralized structure.

On completion of the pilot project solely supported by Sightsavers till September 2008, the 'Dhaka Urban Comprehensive Eye Care Project' (DUCECP)' was launched with financial support from Standard Chartered's 'Seeing is Believing' (SiB) Phase IV initiative. The DUCECP was designed more comprehensively in the context of the type of eye health services required, with inclusion of services for refractive error, pterygium surgeries, dacryocystectomy, and dacryocystorhinostomy associated with cataract. DUCECP was implemented from October 2008 to September 2013, with a 15 months long no-cost extension until December 2014.

The overall aim of the project was to develop integrated and sustainable community oriented eye care services in the slums in Dhaka. The project planned to achieve this through development of human resources, equipping of facilities and investment in systems to encourage accessibility and setting examples of some best practices in quality service delivery with the ultimate aim of eliminating avoidable blindness in Bangladesh by year 2020.

The overall budget of the project was USD 1,657,222 spread over a period of 5 years. In 2013, a no-cost extension was agreed for 15 months up to December 2014. Of this, USD 1 million was provided by Seeing is Believing programme, while USD 657,222 was contributed by Sightsavers. The major share (65.5%) of the Seeing is Believing funding was for cataract surgery and related costs, 13.5% for primary eye care, 4.0% for capacity development training, 2.0% for capital equipment, 3.4% for evaluation, and 10.2% for project secretariat.

[1] https://data.un.org/CountryProfile.aspx?crName=Bangladesh

[2] http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/SOUTHASIAEXT/0,,contentMDK:21393869~pagePK:146736~piPK:146830~theSitePK:223547,00.html

The key results expected of the project were:

1. Strengthened eye care facilities to cater for the eye care needs of the target population.
2. Increased level of awareness among poor urban communities about eye care and the treatments available.
3. A positive change in the eye health care seeking behaviour of the urban community.
4. Increased access to appropriate eye services for people living in poor urban communities.
5. Stronger links with community based organisations (CBOs) to enable greater case finding capacity

The key outputs envisaged in the project included the following, and were to be distributed over the five years:

- 32,000 cataract surgeries
- 111,278 refractions
- 105,003 glasses dispensed
- 550 treated for low vision
- 330,410 eye patients examined
- 1826 urban eye screening activities
- 12,450 students screened with eye complaints
- 2739 people benefitting from training and orientation

The key project implementing partners included the following:

- Ispahani Islamia Eye Institute and Hospital (IIEI&H), Dhaka BNSB and Ad-din Hospital, Salauddin Specialized Hospital Ltd (SSHL) who support project implementation and ensure availability of quality eye health services.
- Mahanagar General Hospital of Dhaka City Corporation and Manabik Shahajya Sangstha (MSS) who have established two vision centres.
- Three public hospitals: National Institute of Ophthalmology & Hospital, Shaheed Suhrawardy Medical College and Hospital, Sir Salimullah Medical College and Mitford Hospital and the National Eye Care of the Government of Bangladesh. These partnerships were established as a direct result of recommendations included in the Mid-Term-Review to support sustainability and increase access to services for target beneficiaries.
- Voluntary Association for Rural Development (VARD), who support three vision centres, and Ad-din Hospital who support one more vision centre. These partnerships were established during the 'no-cost-extension' period.
- The project has also developed a collaboration mechanism with other service providers in Dhaka City to support its community mobilisation initiatives, such as organising the patient screening programme.

A specific baseline was conducted for the project in 2008[3]. Key output indicators developed in the Logframe were revised during the course of the project and the revised figures serve as the targets for reference and review. These targets were then realigned for project partners. Implementation was supported by annual work plans jointly agreed by Sightsavers and implementing partners.

[3] KhandakarLiakatali, Dr ZM Babar, Md Shah Newaz, ChaloKaj Kori – CKK. DUCECP Baseline Survey. February 2009

The purpose of this end-line evaluation was to assess the project achievements against targets to date. The review also aimed to identify the internal and external factors influencing programme delivery, capture key lessons learnt, and recommend strategic direction to further strengthen future programme design.

The evaluation aimed to answer questions under each of Sightsavers' 7 key evaluation criteria terms of reference based on OECD criteria of relevance, effectiveness, efficiency, impact, sustainability, coherence/coordination, and scalability/replicability.

The scope was the entire time from the launch of the project in 2008 to the end of project in 2014. It covered the level of activity and specific results as well as the strategy and intervention logic employed by the partners for achieving the objectives.

The geographic scope of the evaluation included visits to Dhaka and selected project sites and partners.

The report has been structured in the following sections – an introduction and background to the programme; methodology adopted for the evaluation; highlights of results as per evaluation criteria; main recommendations and annexures.

The main audience and stakeholders include Sightsavers Bangladesh Country Office, implementing partners, national eye health committee, Sightsavers departments in UK, the International Agency for the Prevention of Blindness (IAPB), and Standard Chartered.

METHODOLOGY

Overall Approach

During the inception phase, a comprehensive document review of the project proposal, progress updates, and key performance indicators was carried out and the methodology developed after consultation with Sightsavers. The detailed planning of data gathering and field visits was an important part of the inception phase.

In order to conduct the evaluation, we developed a 'schematic of intervention' of the project that helped us understand the various components and how they interact with each other. The schematic was used to further refine the evaluation questions, determine what specific areas the evaluation team planned to review, and also helped in identifying data management requirements. Please see the section on Schematic.

The schematic identified two main 'arcs' of activity (one comprising the 'Supply' side, and the other the 'Demand' side), for which we categorized the different components using an 8-S concept developed for this evaluation. The 8-S included:

Service Centre
This refers to the three main types of service centres – partner hospitals, vision centres and eye camps. These centres provided services that either fell in the 'Supply' side or 'demand' side.

Structure
For each VisionCentre, some refurbishment and minor structural changes were required. This component relates to the physical functionality of the centre.

Staffing
In order to operationalize the various centres, existing staff had to be oriented or trained, while new staff had to be recruited and deployed. This component relates to staffing and capacity development through orientation and training.

Supply
Equipment and supplies were also required to ensure smooth functioning of the centres and to cater to the needs of the new services offered. This component relates to the supplies and equipment of the centre.

Services
The main function of the Service Centres was provision of services. These included screening, eye examination, treatment, refraction, spectacle provision, low vision care, cataract surgery, and referral. The patient screening camps, school screening, and vision centres acted as the main referrals arm to partner hospitals in this project.

Social Mobilization
This refers to the awareness raising component of the project and included social marketing, behaviour change communication (BCC), community mobilization, eye health education, identification of persons with vision impairment, and distribution of Information Education Communication (IEC) material especially at community level.

Synergies

At implementing partner level, it relates more to advocacy and engagement with the local administration and municipal corporation, and collaboration with other service providers in the Dhaka city zones.

Sustainability

This component looks at how embedded the project is in the local and metropolitan structures and overall sustainability trends from a service centre and services perspective.

Our approach to the evaluation therefore reflects these 8 components under the criteria provided by Sightsavers in the TORs.

Evaluation Matrix and Indicators

An evaluation matrix was developed for the evaluation with indicators and is shown in Appendix 1.

Data Collection and Data Analysis Methods

The data gathering took place in field visit sites in Dhaka agreed in consultation with Sightsavers Country Office during the inception phase. A combination of tools and methods were applied in this phase, tailor-made to contexts and stakeholders and selected with an eye to strength of evidence creation. The tools focused on appreciative methods of exploring and include strong elements of learning, qualitative and quantitative data, and comprised (but were not limited to) interviews, focus groups, document review and observation.

The primary data from the communities were collected through Focus Group Discussions (FGD) and Semi Structured Interviews (SSIs). The data was analysed on the basis of emerging trends from the discussions of FGDs and SSIs as well as field observations made by the consultants. These were triangulated with project reports, documents and other secondary sources available like policies, sector strategies, government surveys, etc. Because of time and resource constraints, community surveys were not conducted.

Quantitative data was obtained from project reports, implementing partner and other secondary sources.

Data analysis methods included systematization of data collected into relevant TORs and analysis as per TORs. Quantitative data is presented as graphs, charts and tables as appropriate; qualitative data was analysed thematically and presented as narrative or charts as appropriate. Narrative statements accompany the key findings presented. At the end of each chapter, recommendations emerging from the findings are noted. Key lessons are also noted and presented in a separate section under that heading.

At the end, the team conducted a de-briefing/validation meeting with Sightsavers Country Office team to present preliminary findings and conclusions and receive comments and viewpoints to be considered in the further formulation of the evaluation outcome.

The structure of the report is based on the scope levels presented in the TORs, i.e. Relevance, Effectiveness, Efficiency/Cost-Effectiveness, Impact, Sustainability, Coherence/Coordination, Scalability/Replicability, Conclusions, Learning and Recommendations.

Key Data Sources

The main data sources included project beneficiaries, project deliverers (implementing partners), persons with knowledge of project recipients (local authorities), project documents, project records, databases, etc (Appendix 2).

A list of persons interviewed or those who participated in FGDs is provided in Appendix 3. The interview questions are shown in Appendix 4.

Sampling Methods

The sampling frame for the evaluation adopted a two by two by two sample e.g. 2 hospitals, 2 vision centres, 2 schools, 2 community groups selected randomly in consultation with the Sightsavers Country Office. In the time available for the evaluation, the review team endeavoured to interview a purposive sample of stakeholders including the partner and their field teams, a selection of teachers available on the day of the visit of the team, students provided spectacles, local government officials, local communities etc. The evaluation did not involve a community survey, therefore no household sampling was required.

The work plan for the evaluation is shown in Appendix 5.

Limitations

1. The complex nature of the project meant that there were numerous stakeholders and actors. During the course of the evaluation we realised that there were some stakeholders/actors who would have been very useful to meet but time limitations did not permit this e.g. Chief of Health of LGRD&C, Ministry of Education, Urban Primary Health Care (PHC) unit etc.
2. This project had a large number of community beneficiaries. In the given timeframe, it was not possible to have a more substantial sample of beneficiaries to know their perceptions about the interventions and wider beneficiary impact of the project.
3. The analysis of data was based on project reports and related documentation. Time constraints did not permit a fuller validation of key data, although we did try to triangulate main findings with data sources to the best possible extent.
4. Since another large-scale eye health programme supported by Sightsavers, entitled ‘Vision Bangladesh Phase 2’ was launched immediately after the end of DUCECP with the same NGO partners and in the same localities, it is difficult to determine the contribution and attribution of DUCECP towards certain activities like retention of staff, continuation of services etc

Evaluation Criteria Rating

The following evaluation criteria rating developed by Sightsavers were used in this evaluation.

	Highly Satisfactory	There is strong evidence that the evaluated initiative ***fully meets all or almost all*** aspects of the evaluation criterion under consideration. The findings indicate a highly satisfactory, largely above average achievement/progress/attainment and potentially a reference for effective practice.
	Satisfactory	There is strong evidence that the evaluated initiative ***mostly meets*** the aspects of the evaluation criterion under consideration. The situation is considered satisfactory, but there is room for improvements. Achievement/progress/attainment under this criterion is potentially a reference for effective practice. There is need for a management response to address the issues which are not met.
	Caution	There is strong evidence that the evaluated initiative ***partially meets*** some aspects of the evaluation criterion under consideration. There are issues which need to be addressed and improvements are necessary under this criterion. There is need for a strong and clear management response to address these issues. Evaluation findings are potentially a reference for learning from failure.
	Problematic	There is strong evidence that the evaluated initiative is ***borderline in terms of meeting*** the aspects of the evaluation criterion under review. There are several issues which need to be addressed. Evaluation findings are potentially a reference for learning from failure. There is need for a strong and clear management response to address these issues.
	Serious Deficiencies	There is strong evidence that the evaluated initiative ***does not meet key*** aspects of the evaluation criterion under consideration and is performing poorly. There are serious deficiencies in the evaluated initiative. There is need for a strong and clear management response to address these issues. Evaluation findings are potentially a reference for learning from failure
	Not Sufficient Evidence	There is **not sufficient evidence** to rate the evaluated initiative against the criterion under review. The programme needs to seriously address lack of evidence in their initiative.

Criteria and Questions for Evaluation	Whether the evaluation addressed these questions or not
RELEVANCE	
How aligned is the project to Sightsavers strategic direction as set out in its Strategic Framework (2009 – 2013, and extended 2013 – 2018) and Bangladesh development priorities and policies and VISION 2020?	Done
What specific local, national and international development priorities and policies is it aligned to and how?	Done
How relevant is the project in light of the broader objectives of SiB Phase IV?	Done
EFFECTIVENESS	
To what extent has the project delivered against the planned objectives and outputs and what factors (if any) have contributed/hampered this?	Done
To what extent is trained staff competently performing their duties?	Partly done as we did not meet all staff trained
How effective have hospital partners become in managing high volume cases as a result of this project?	Done
What are the strengths and weaknesses of the project and its approaches?	Done
How effective is the referral chain at different levels?	Done
How effective are the services: mobilisation, clinical, counselling?	Done
Measuring effectiveness with the help of some of the process indicators from the log frame, e.g. did the project achieve indicator for 1.3: At least 5% increase in patients being referred each year? Or 3.1 Increase in number of cataract patients referred to partner hospitals. What % of cataract operated patients gained vision between 6/6 to 6/18?	Done
Has the cataract surgical rate at the partner hospitals changed over the life of the project?	Done
EFFICIENCY/COST EFFECTIVENESS	
To what extent has the project provided a cost-effective approach to delivering services that meet or have the potential to meet the V-2020, National Eye Care Plan as part of government's health sector programme?	Done
How well is the project being implemented?	Done
Have resources been captured in a way that maximizes their use?	Done
At what level is the project most cost-effective as far as reaching vulnerable/marginalised groups such as women, elderly, children, men, communities, urban, slum dwellers or a mixture of these	Partly done as we do not have disaggregated data on beneficiaries

Criteria and Questions for Evaluation	Whether the evaluation addressed these questions or not
IMPACT	
Has the project met the objectives, outputs & indicators from the log frame?	Done
In the context of World Health Organisation six building blocks for Health Systems Strengthening, what are the main changes produced by the programme, positive or negative and what are the key factors behind these changes?	Done
What is the evidence of increased demand for eye health services and preventative eye care measures within the targeted communities, and changes in the lives of beneficiaries as a result?	Partly done as sample beneficiaries were limited and no community survey was done
Has there been a change in the capacity of the partner hospitals and at what level?	Done
What is the perception of all the key stakeholders of the project and its impact? E.g. the beneficiaries, local authorities / government and staff (hospital, vision centre etc).	Done
SUSTAINABILITY	
How likely is it that specific project activities and outputs will continue after the project funding finishes? Who will be responsible for this?	Done
Will the trained staff stay in their roles? What incentive is there for them to stay – depending on the circumstances and discussions with stakeholders	Done, but detailed analysis was not possible as Vision Bangladesh Phase 2 is being implemented by the same NGO partners
Are the VC's financially viable? Do the CBO's and hospitals 'managing' the VC's want to continue supporting them?	Done
What kinds of partnerships (if any) have been built with governmental and international organisations and how will these influence sustainability?	Done
What are the key factors that ensure (or will ensure) sustainability of the programme beyond SiB and Sightsavers support?	Done
COHERENCE/COORDINATION	
To what extent has the intervention systemically created synergies with other institutions, towards achieving the defined objectives and goals over time?	Done
Are there specific mutually reinforcing policies that have been promoted by the project over time to create these synergies?	Done
How have the project activities been coordinated in light of similar or other sectoral interventions/approaches in the region?	Done
To what extent do the project objectives, approaches and design complement and/or contradict each other?	Done

Criteria and Questions for Evaluation	Whether the evaluation addressed these questions or not
SCALABILITY/REPLICATION	
Is any aspect of the programme or its components likely to be scaled or replicated by participating partners, other agencies or government? How likely is this to occur or what conditions need to exist for this to happen? What factors or constraints might inhibit this process?	Done
What evidence has been generated by the project to support scalability efforts by interested parties? How has the project packaged and shared this evidence to date?	Partly done as learning and dissemination has not yet taken place. Evidence has been shared internally and externally in various fora, e.g. various articles in the SIB newsletter, article on DUCECP in Sightsavers insight magazine etc.
In the event of a scale-up, what lessons learnt from the implementation process in this context need to be taken into account?	Done

RESULTS

G

In terms of progress against some key activities, Table 1 below summarizes the key outputs of six years (2008 to 2014) against original targets.

It shows that the project has either fully met or even exceeded targets. The achievement in low vision treatments exceeds the targets by almost three times.

Table 1 - Overall Programme Achievements

	Cataract surgery	Refractions	Glasses dispensed	Treated for low vision	Eye patients examined	Total medical interventions	Students screened	People oriented and trained	Vision Centres set up
Targets	32,000	111,278	105,003	550	330,410	591,691	74,700	2739	6
Total achievement Oct 2008 to Sep 2014	33,107	129,857	102,872	1442	403,994	692,229	74,930	3068	6
% Achievement against Targets	**103.5%**	**116.7%**	**98.0%**	**262.2%**	**122.3%**	**117.0%**	**100.3%**	**112.0%**	**100.0%**

The overall impressions of the evaluation team regarding key components are presented below. These are further discussed in later sections.

Cataract surgery – the overall target was exceeded and indicates that the community mobilisation and awareness were effective resulting in a high uptake of services. However, financial subsidies for cataract surgery also probably contributed to this. A cataract surgical protocol (guidelines) was developed and adopted by implementing partners and a cataract surgical outcome monitoring process was implemented.

Refractions – the refractions were mostly performed at partner hospitals (with a smaller proportion at VCs) on patients referred from patient screening programme and schoolchildren identified with vision impairment. About four-fifths of all children prescribed spectacles received these from the project.

Glasses – the spectacle supply chain was implemented through the partner hospitals and vision centres. However, a quality assurance mechanism was lacking to ensure both quality of refractions and prescriptions of glasses dispensed.

Treated for low vision – the project achieved a three fold increase in treatments over the original targets. However, there was a persistent issue of replacement of inventory of low vision devices in almost all partner hospitals. This indicates broader procurement implications and is discussed under sustainability.

Eye patients examined – this component includes patients examined by partner hospitals but does not include schoolchildren screened. The high number reinforces the effectiveness of community awareness and community mobilization.

Total medical interventions – this includes all medical interventions by the project (cataract surgery, screening camps, schoolchildren screened, refractions and glasses) and demonstrates a high achievement.

Students screened – the data on school screening indicates that of all children screened by schoolteachers, a little over a fourth had eye problems. There was a higher prevalence of refractive errors in schoolchildren compared to regional averages and this is discussed further in the effectiveness and efficiency sections.

People oriented and trained – this component exceeded targets and addressed technical training, soft skills development and orientation sessions. The issue of training, especially refractionists is discussed further under the section on efficiency.

Vision Centres set up – the data shows that two vision centres were established by 2013, and the remaining four were set up in the last year of project during the no-cost extension phase. Although the numerical target was achieved, however there were major challenges in their effectiveness and sustainability. The issue of vision centres is discussed separately.

Conclusions

The evaluation revealed that the project has either fully met or even exceeded targets. The achievement in low vision treatments exceeds the targets by almost three times. Although the numerical target for vision centres was achieved, there were major challenges in their effectiveness and sustainability.

Relevance

The DUCECP project was developed before Sightsavers' organisational strategy was officially launched in 2009. However, the design process straddled two strategy periods of the organisation namely, Sightsavers Strategic Framework 2004-2006 which continued up to 2008, and the new strategic plan 2009-2013. During the former, the precursor project DUECP was implemented and provided learning to develop DUCECP, and therefore we find vestiges of earlier strategies in DUCECP that focussed on eye care, partnership, advocacy etc and was more closely aligned with Vision 2020 – The Right to Sight global initiative. By the time DUCECP was launched, the organisation had not yet fully internalised the programmatic implications of its new strategy for demonstration approaches that could be taken to scale and the use of a health systems framework for eye health projects. This means that while the evaluation was obliged to use a health systems lens, the project was not necessarily designed with a health systems strengthening focus.

The overarching intention of the project was to deliver eye care services to slum dwellers in selected sites in Dhaka city in the context of urban health through a community awareness, screening and service delivery cycle.

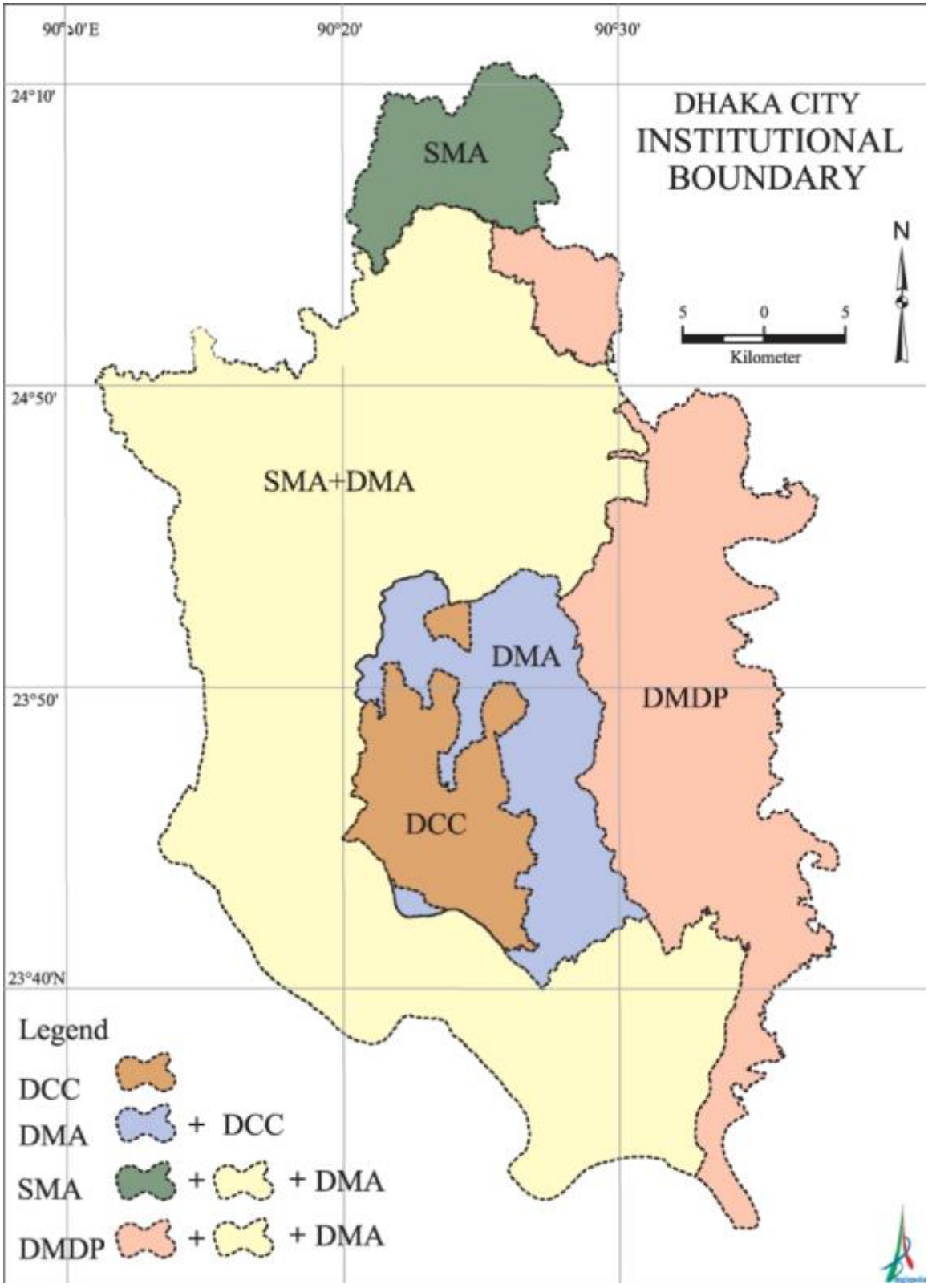
In order to contextualise eye health in urban health care in Dhaka city, the evaluation team deemed it necessary to understand the institutional and organisational context of urban health in the city.

Dhaka City is part of Dhaka district, but the district does not cover all parts of Greater Dhaka, and Greater Dhaka does not include all parts of the district, which includes rural areas.

The Dhaka Metropolitan Development Planning Area (DMDP) was developed by the Capital Development Authority or Rajdhani Unnayan Kotripakhkha (RAJUK) in 1995 for execution over a period of twenty years by 2015. The DMDP includes an area called the Statistical Metropolitan Area (SMA), which is used by the Bangladesh Bureau of Statistics. The SMA further includes an area called Dhaka Metropolitan Area (DMA) (Fig 1) (see Appendix for other maps). The Dhaka City Corporation is located within the DMA. In 2011, DCC was divided into Dhaka South City Corporation (DSCC) and Dhaka North City Corporation (DNCC) by an Act of Parliament. The DMDP, SMA and DMA are divided into Thanas, while the DSCC and DNCC are divided into five Zones each, with each Zone further divided into Wards (see Appendix for other maps). The Dhaka Metropolitan Police covers the whole metropolitan area, as do other government departments like Local Government Engineering Department (LGED), Department of Public Health Engineering (DPHE), Water and Sanitation Authorities (WASAs) etc. However, the organisational boundaries raise issues of ownership, overlapping of responsibilities, challenges in coordination and fragmented governance.

The primary health care services in DSCC and DNCC come under Urban Primary Health Care programme (UPHC) implemented by the city corporations and are governed by the Ministry of Local Government, Rural Development and Cooperatives (LGRD&C). However, the tertiary level services (tertiary hospitals and medical colleges and hospitals) come under the Ministry of Health.

Figure 1 - Dhaka City Institutional Boundaries



Source: Bayes Ahmed. Land cover change prediction of Dhaka City: A Markov Cellular Automata Approach. Accessed on 5th December 2014 http://www.geospatialworld.net/Paper/Application/ArticleView.aspx?aid=1416

The Local Government Division of Ministry of LGRD&C had implemented two projects namely Urban Primary Health Care Project (1998-2005) and Second Urban Primary Health Care Project (2005-2011). Based on the experience of the previous two projects, the Local Government Division is now implementing Urban Primary Health Care Services Delivery Project (July 2012 to June 2017) with the financial support of Asian Development Bank, Swedish International Development Cooperation Agency and the United Nations Population Fund. The project seeks to strengthen primary health care services (based on the national expanded Essential Services Delivery [ESD+] package of the government[4]) through partnership with DSCC, DNCC and various NGOs[5]. The service delivery area of the project has been divided into a number of partnership areas for respective partner NGOs.

The Local Government Division of the Ministry of Local Government, Rural Development, and Cooperatives is the executing agency of the project. A Project Management Unit (PMU) headed by Project Director provides technical, administrative and logistical leadership for project implementation. A National Project Steering Committee chaired by the Secretary, Local Government Division provides guidance to the PMU. Director General of Monitoring, Inspection and Evaluation Wing of the Local Government Division is the Chief Coordinator of the project. The Health Department of the City Corporations and selected municipalities are the implementing agencies in their respective project areas through a Project Implementation Unit (PIU). The PIUs are assisted by Partnership NGOs to deliver primary health care services to the people of the project areas. Each city corporation and municipality has a Partnership Committee chaired by the Mayor. There is a Ward Primary Health Care Coordination Committee (WPHCCC) chaired by the respective local Ward Councillor and co-chaired by the female Ward Councillor and Zonal Health Officer[6].

The evaluation team found that the project was well aligned with national needs of urban poor, and the government health population nutrition sector development plan 2011-2015 whose strategies include (i) standardising services offered by secondary and tertiary hospitals; (ii) strengthening hospital management and human resources, in part through public–private partnerships; and (iii) developing urban primary health care services, in particular through contracted nongovernment organisations in selected cities and municipalities.

However, the team also noted that the institutional and stakeholder analysis that had been done during the preparation of this project was insufficient, especially for urban primary health care, and such a complex project warranted a much more detailed analysis. This has an important bearing on whether the project can be taken to scale and its overall sustainability, as the project did not derive synergies from policies and strategies of local government[7].

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[4] This includes Antenatal Care, Delivery Care (NVD & CS), Postnatal Care, Menstrual Regulation, Post Abortion Care, Family Planning Services, Neonatal Care, Child Health Care, Reproductive Health Care, Adolescent Health Care, Nutrition, Communicable Disease Control, Non-Communicable Diseases Control, Limited Curative Care, Behaviour Change Communication, Diagnostic Service, Violence Against Women and Emergency Transportation Service.

[5] Population Services and Training Center (PSTC), Khulna MuktiSebaSangstha (KMSS), Association for Prevention of Septic Abortion, Bangladesh (BAPSA), NariMaitree, Unity Through Population Services (UTPS), Dhaka Ahsania Mission (DAM), Simantik, ProgotiSamajKallyanProthisthan and PoribarPorikalpana Sangstha (PSKP & PPS), Srizony Bangladesh, Christian Services Society (CSS) and Resource IntregationCenter (RIC).

[6] http://uphcp.gov.bd/Vision_Mission accessed on 7 Dec 2014

[7] An eye care international NGO had implemented a primary eye care project in 10 primary health care centres of LGRD&C in Dhaka. However, the project had not been institutionalized in UPHC programme and when the project funding ended, the PEC activities also ceased

For example, the essential drug list for UPHC includes several eye medications[8] and these could have provided a strategic entry point for orientation of partnership area NGOs on safe use of eye medications and how to strengthen the eye health component of primary health care.

Although the project established a reporting system for the project, it was not able to link up or be aligned with the government e-health strategy[9, 10, 11]. As the project was not well embedded into the health system of the government, it could not align itself with the e-health strategy. This meant that project reporting of eye health indicators, while useful for project monitoring, were not integrated within the e-health system. The effective integration into the e-health reporting system could have provided a basis to the Ministry of Health for incorporating eye health indicators in its health reporting which is currently missing.

Project sites identified in the design coincided well with established slum areas. However, there was insufficient clarity on how the need and locations were established. Recently, the World Bank has mapped slum development areas, and more detailed information is now available by ward/union (Fig 2) (see Appendix for other maps). It would have been helpful to establish criteria to identify slum sites for intervention e.g. population, poverty score, on-going health initiatives, local government target areas, partnership areas of NGOs, location of and proximity to tertiary referral centres, etc.

The evaluation team found that the project was well aligned with the following:

Global Action Plan for Universal Eye Health 2014-2019 – which emphasises reduction of avoidable blindness and enhancing universal eye health coverage

MDGs and poverty focus – directly aligned with MDG1 relating to the poor slum dwellers, and indirectly with women and children

National Blindness Survey 2000 – in which cataract was identified as the leading cause of blindness

National Eye Care (NEC) plan – aligned with its cataract focus, and refractive errors

Seeing is Believing - aligned with the broader objective on reducing avoidable blindness through cataract surgery, and treatment of refractive errors

UNCRPD – aligned with UNCRPD article 25 on health

Vision 2020 – The Right to Sight – in which cataract is one of the priorities for disease control

WHO Health Systems framework – partial alignment through service delivery (initially government partners were not included, but they were brought in later after the Mid Term Review (MTR) and its recommendations). Training and supplies were addressed to some extent, however leadership presented some challenges and is discussed further under impact

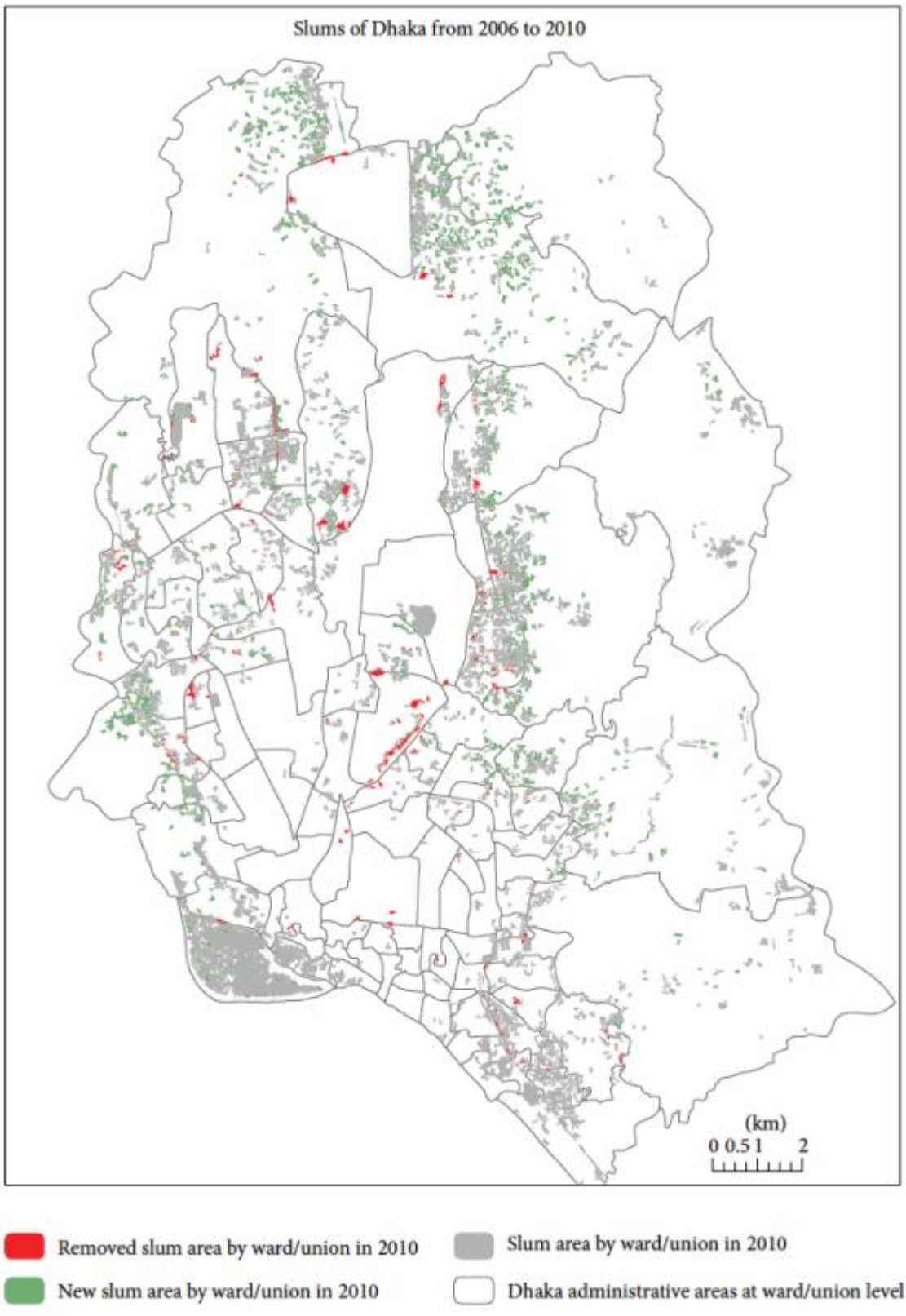
[8] Atropine eye drops, Chloramphenicol eye drops and ointment, Gentamycin eye drops, Homatropine eye drops, Prednisolone eye drops, Tetracycline eye ointment, Tropicamide eye drops - http://uphcp.gov.bd/index accessed on 7 Dec 2014

[9] http://dghs.gov.bd/index.php/en/home/84-english-root/ehealth-eservice/493-bangladesh-ehealth-standards-interoperability-framework accessed on 7 Dec 2014

[10] Health Informatics Standards & Data Structure for Bangladesh (Version 1.0). Ministry of Health and Family Welfare, 2012

[11] District Health Information Software-2. Recommended forms in DHIS-2 for different level organizations in Bangladesh. Management Information System, Directorate General of Health Services, 2014

Figure 2 - Mapping Slums of Dhaka



Source: Oliver Gruebner, Jonathan Sachs, Anika Nockert, Michael Frings, Md. Mobarak Hossain Khan, Tobia Lakes, and Patrick Hostert. Mapping the Slums of Dhaka from 2006 to 2010. Hindawi Publishing Corporation. Dataset Papers in Science. Volume 2014, Article ID 172182, 7 pages. http://dx.doi.org/10.1155/2014/172182

Conclusions

The programme is well aligned with the Global Action Plan for Universal Eye Health 2014-2019, government health plan 2011-2015, MDGs and poverty focus, National Blindness Survey 2000, National Eye Care (NEC) plan, Seeing is Believing, UNCRPD, Vision 2020 – The Right to Sight and partially aligned with the WHO Health Systems framework. However, the institutional and stakeholder analysis that had been done during the preparation of this project was insufficient and such a complex project warranted a much more detailed analysis. This has an important bearing on whether the project can be integrated, taken to scale and its overall sustainability, as the project did not derive synergies from policies and strategies of local government.

Learning

- Dhaka is a complex urban entity with overlapping boundaries. There is a pressing need to understand the functioning and structures of local government and ministry of health. When designing urban eye health interventions, it is vital to document institutional arrangements and undertake a policy analysis and stakeholder mapping. Preparatory time is required to undertake analysis and mapping so that options for synergy and engagement can be identified
- It is helpful to establish criteria to identify slum sites for intervention. Some examples of criteria may include population density, poverty score, on-going health initiatives, local government target areas, partnership areas of NGOs, location of and proximity to tertiary referral centres, etc.

Recommendations

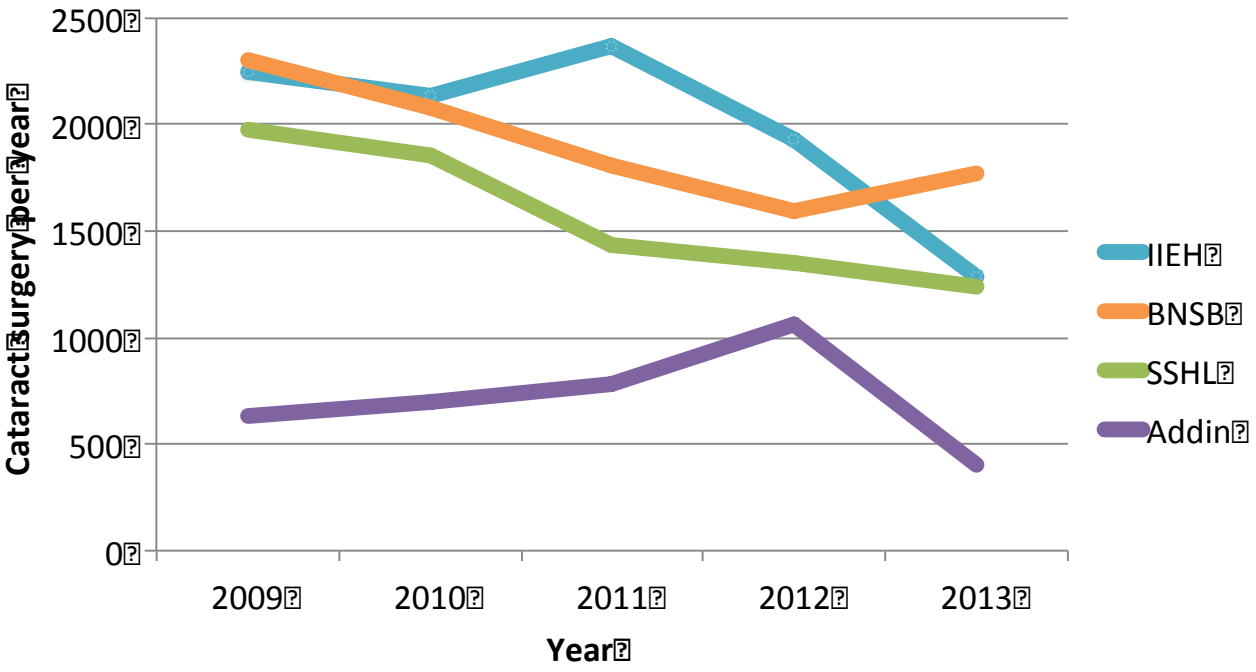
- In design of urban eye health projects, it is imperative to undertake a thorough institutional and stakeholder analysis to identify strategic entry and synergy points for urban eye health, and to complement this with information on spatial mapping of slum areas, vulnerable communities and service providers so that interventions can reach the excluded groups, be more effective and sustainable

Effectiveness

As indicated earlier under Results, the targets were generally exceeded and there was overall good performance in terms of achievement of project outputs.

In terms of cataract surgery of patients identified and referred from patient screening camps (PSPs), Ad-din hospital demonstrated an almost doubling of its cataract surgical rate between 2009 and 2012. However, the four partners show a declining trend (although the 2013 data is only up to September 2013) (Fig 3). This may be because part of the cataract backlog amongst target communities has been addressed by the project. This is supported by the fact that even though PSPs demonstrated a four-fold increase in patients from a baseline in 2008 to 2012 (see impact section), the patients requiring cataract surgery show a declining trend.

Figure 3 - Cataract surgical performance

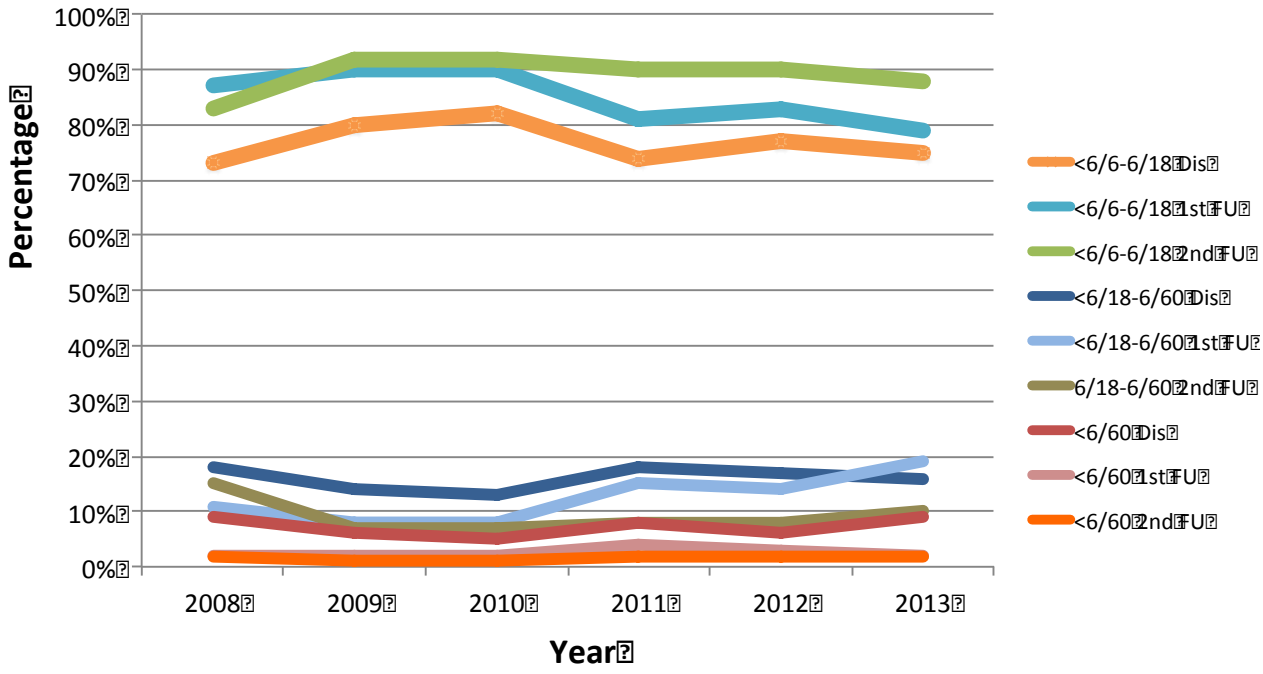


Some of the factors that have contributed towards high uptake of services include a well structured community awareness mechanism (delivered through well established NGO hospitals (4), field level partners (15), CBOs (75)); PSPs (treatable cataract referred and expectations for other eye treatments managed); logistic support through free transport; free surgery for the poor; previous experience of NGO partners with Sightsavers in the DUECP project and capacity of clinical partners to deliver high volume surgery.

The project also invested in capacity building of partners through training e.g. technical training for refractionists, microsurgery training of ophthalmologists, ophthalmic nursing, and teachers for the school eye health component. Other training included soft skills development in eye care management, advocacy, social mobilisation etc. Details may be found in Appendix 6. While it is difficult to establish the effectiveness of each training activity, a few examples can be reviewed.

The surgical skills training of ophthalmologists for microsurgery resulted in a good visual outcome rate of 'presenting vision' in patients operated for cataract surgery[12] (Fig 4). On discharge, the visual outcome was about 73% for those with vision <6/6 to 6/18 (good outcome), while by the second follow-up, the outcome had improved to 88% which is close to the WHO recommended target of >85%. In the borderline visual outcome category (<6/18-6/60), about 18% achieved that outcome at discharge that improved to 10% or less by the second follow-up, which is well within the WHO range of <15%. In the poor outcome category, there were about 6% of patients who fell in that group at discharge, and this reduced to about 2% by the second follow-up, which is also well within the WHO target of <5%.

Figure 4 - Post-operative cataract surgical outcome



Key: Dis – Discharge; FU – Follow-up

Refractionists were trained for at least one year at Islamia Eye Hospital. They reviewed over 17,000 school children screened by schoolteachers as having eye problems and performed refraction on over 5,500 children. About 80% of the children who were refracted received spectacles. However, it was not clear from the records as to what proportion of these children were wearing the spectacles after three months. Also, it was not possible to ascertain the quality of refractions performed by the refractionists owing to the lack of a quality assurance mechanism e.g. periodic and random sample review by an ophthalmologist or optometrist of children refracted. This is discussed further under efficiency.

[12] The outcome can be assessed with full spectacle correction ('best visual acuity') or with presenting vision. Good outcome is defined as 6/6 – 6/18 (available and best correction grades = >85% and >90%) respectively), borderline outcome as <6/18 – 6/60 (available and best correction =<15% and <5% respectively), and poor outcome as <6/60 (available and best correction =<5% for each type) - Vision 2020. The Right to Sight. Global Initiative for elimination ofavoidable blindness: action plan2006–2011. World Health Organization, Geneva,2007.

School teachers were an important resource for the screening of school children. About 1,700 teachers screened about 75,000 children of which about 20,000 were identified as having an eye problem and were referred to the refractionist for further assessment. This indicates that about 28% of school children screened had an eye problem. There was no quality assurance mechanism to ascertain the quality of screening. This is also discussed further under efficiency.

It is unclear how targets were set for the participating hospitals as the trends were between 2,000-2,500 cataract surgeries per year, except for Ad-din whose target was close to 1,000.

The project demonstrated several commendable areas of strength. For instance, there was high demand for eye care services that was generated by the CBOs through a very active and effective community mobilisation and awareness programme. The NGO partners responded fully by meeting the supply side of cataract surgery. Clinical partners provided trained and competent staff for surgery, whose capacities were further developed through the project. The project incorporated a social protection mechanism for the poor to undergo surgery. The project adopted a multi-tiered strategy – clinical partners provided high volume high quality surgery; NGO partners provided the service and coordination link with CBOs; and CBOs who mobilised demand generation through a massive community awareness campaign – which helped reduce programmatic risk. As per the MTR recommendations, government partners were brought on board and act as the safety net for the slum dwellers for services beyond the project life. And last but not least, the project engaged local government who is the custodian of urban primary health care as a project partner.

However, some programmatic weaknesses were also noted. Although the project title includes the term ‘comprehensive’, the project was in essence a cataract and refractive errors initiative. Slum dwellers required continuity of service and were more interested in a comprehensive service set-up that could cater to their other eye care needs as well. The curriculum of training of teachers for school eye health was not aligned with Ministry for Education needs. The guidelines for establishment of Vision Centres (VCs) were not available during the life of the project and it is only in May 2013 that a VC conceptualisation workshop took place, which was instigated by Sightsavers Programme Development Advisors. However, this left under a year (in the no-cost extension period) to establish four VCs, despite a review report of the earlier two VCs that cautioned against the operational model. The approach to and design of the VCs was not developed in consultation with implementation partners. This is discussed further under a separate section on Vision Centres. The data and information management did not reinforce health information systems of the government. While advocacy was conceived as a project component, the mechanism to deliver this did not prove as effective as originally envisaged. This is discussed further under efficiency.

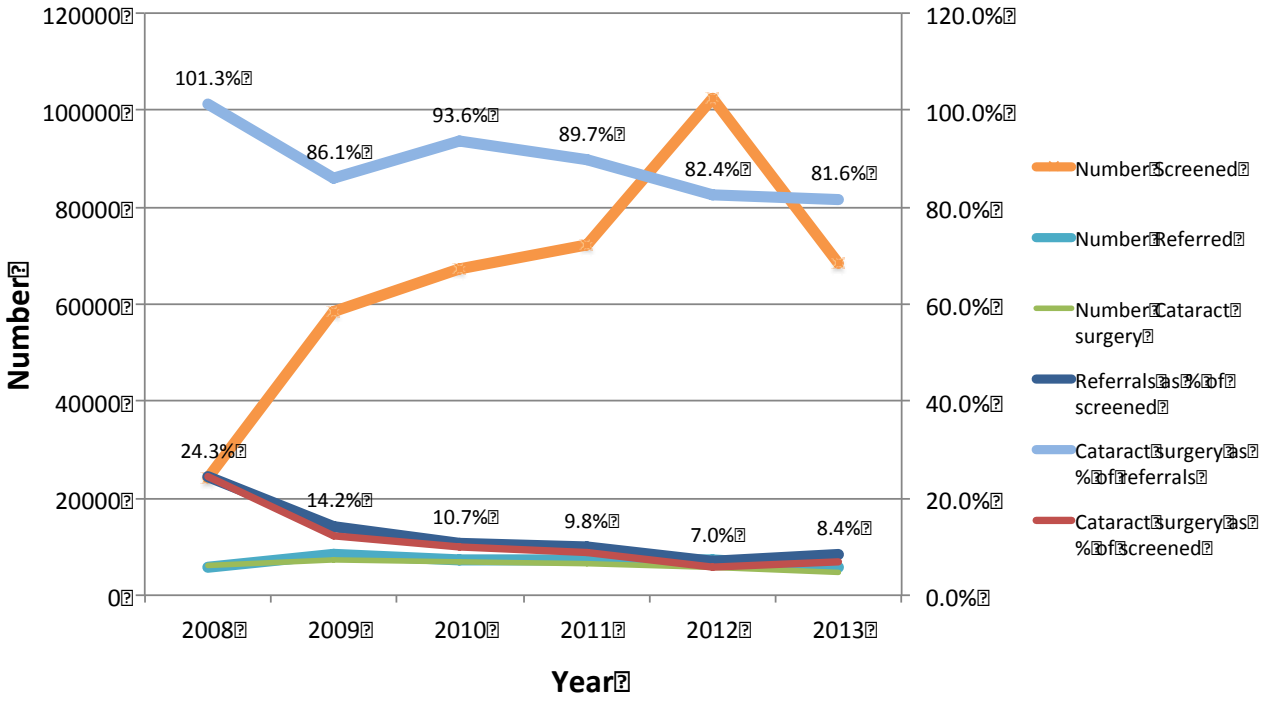
Analysis of screening and referrals from the PSPs has shown some interesting trends. There was a four-fold increase in slum dwellers screened at PSPs from 24,157 in 2008 to 102,587 in 2012 suggesting a very effective community mobilisation and awareness component.

The premise that the project would result in an annual increase of about 5% of patients being referred from PSPs to partner hospitals was not validated by the results. The data shows that referrals as a percentage of those screened declined from the earlier high rates and ranged between 7%-10% in the last four years of the project suggesting that while

there may be rushes of patients in the initial phases of the project, the referral rate tends to stabilise at 7%-10% once the project establishes itself[13] (Fig 5).

Another interesting observation is that the proportion of patients referred for cataract surgery out of all patients referred remained steadily over 80% indicating an effective screening and referral service for cataract surgery. The proportion of patients referred for cataract surgery out of all patients screened also ranged between 6%-10%, which corroborates well with international estimates for a cataract-harvesting rate from screening camps[14].

Figure 5 - Status of screening and referrals



[13] Rajesh Nayak R, Ajay Kamath R, Madhurima Nayak A, Gurudutt Kamath M, Manjunath Kamath M, Susan D'Souza. Role of Outreach Camps in Reducing the Burden of Cataracts in South India.Online J Health Allied Scs. 2014;13(1):5. Available at URL: http://www.ojhas.org/issue49/2014-1-5.html

[14] Rajesh Nayak R, Ajay Kamath R, Madhurima Nayak A, Gurudutt Kamath M, Manjunath Kamath M, Susan D'Souza. Role of Outreach Camps in Reducing the Burden of Cataracts in South India.Online J Health Allied Scs. 2014;13(1):5. Available at URL: http://www.ojhas.org/issue49/2014-1-5.html

Conclusions

The targets were generally exceeded and there was overall good performance in terms of achievement of project outputs. Some of the factors that have contributed towards high uptake of services include a well structured community awareness mechanism (delivered through well established NGO hospitals (4), field level partners (15), CBOs (75)); PSPs (treatable cataract referred and expectations for other eye treatments managed); logistic support through free transport; free surgery for the poor; previous experience of NGO partners with Sightsavers in the DUECP project and capacity of clinical partners to deliver high volume surgery.

Although the project was titled as 'comprehensive', it was in essence a cataract and refractive errors initiative. Slum dwellers required continuity of service and were more interested in a comprehensive service set-up that could cater to their other eye care needs as well. The guidelines for establishment of Vision Centres (VCs) were not available during the life of the project and it is only in May 2013 that a VC conceptualisation workshop took place, which was instigated by Sightsavers Programme Development Advisors. However, this left under a year (in the no-cost extension period) to establish four VCs. The proportion of patients referred for cataract surgery out of all patients referred remained steadily over 80% indicating an effective screening and referral service for cataract surgery.

Learning

- In urban eye health projects, it is important to understand slum dynamics as most slum dwellers are daily wage earners. For this group of people, time lost in going to two or three service centres means loss of earnings. Slum dwellers seek continuity and quality of service and minimal time lost and cost incurred
- While estimating targets during the project design phase, they should not only be set for the purpose of the project, but also take into consideration the capacity of the partner to sustain those levels after the project ends
- For projects that include a component on school screening for refractive errors, a quality assurance mechanism that includes periodic and random sample review by an ophthalmologist or optometrist of children refracted should be built into project design

Recommendations

- The three tiered approach adopted by the project proved to be an effective modality for urban eye health to enhance coverage and uptake of services, whose components include competent clinical partners with capacities for high volume surgery and provision of comprehensive eye care services, intermediary field-level NGO partners with expertise to collaborate and coordinate with CBOs, and a network of CBOs already working in the project area with expertise for community mobilisation and awareness raising. This approach should be replicated and adapted in other urban eye care projects as an example of good practice

Efficiency/Cost-Effectiveness

In 2005-2008, Sightsavers implemented the DUECP project in which over 14,000 cataract surgeries were done. Both projects employed similar approaches of clinical partners and PSPs. Sightsavers also implemented a project called 'Vision Bangladesh' in Sylhet division with BRAC, a large international NGO, in which over 100,000 cataract surgeries were performed and over a million people examined for eye problems in 2011-2013. This project was in a rural setting. These projects served as precursors to the DUCECP project. An analysis of unit costs of these projects is shown in Table2 below. The data was collated and analysed with the assistance of Sightsavers Bangladesh Country Office.

Table 2 - Comparison of overall unit costs

Project	Total cataract surgeries done	Total patients examined	Total project expenditure in USD	Unit cost per cataract surgery in USD	Unit cost per patient examined in USD
DUECP	16,952	75,522	603,622	35.61	7.99
Vision Bangladesh	109,960	1,010,815	3,600,000*	32.73	3.56
DUCECP	33,107	403,994	1,595,132	32.11**	3.95***

* Original budget in Pounds Sterling – converted to USD at current rates
** Excludes costs of research, vision centres and refraction
*** Includes all expenditures

The data shows that DUCECP was more cost-effective than the earlier DUECP and provided greater coverage of services. Interestingly, when DUCECP was compared to Vision Bangladesh in terms of cataract surgical services and patients examined, the unit costs were similar suggesting a cost-effective approach even in an urban setting. Overall, the project achieved 96.25% utilisation of budget (Appendix 7).

For implementation of the project, appropriate partners were identified at each tier. Clinical partners with a history of high volume surgery served as the supply side of the project. Ad-Din Hospital was an exception that literally went from zero (as they were not doing any eye care before this project) to about 1,000 cataract surgeries per annum. The project succeeded in mobilising an NGO partner that previously focussed on mother and child health to integrate eye care in their service portfolio. The partnership arrangements of field level NGOs partnering with tertiary clinical partners, and CBOs partnering with field level NGOs was very effective in achieving the results.

A Project Management Unit or Secretariat was established at Islamia Eye Hospital with its own staff. This secretariat proved very useful in ensuring timely action, follow-up and micro-level planning with a multitude of stakeholders. Further, a Project Management Committee (PMC) comprising of tertiary level partners was set-up at the outset and provided the stewardship for the project. The PMC met quarterly and ensured that any issues emerging were resolved. In addition, a Working Group was established that comprised of all implementing partners (tertiary NGOs, government partners, field level NGOs and CBOs). This group met every six months and ensured that reporting, activity

and work plans, and monitoring were implemented in a coordinated and timely manner. The management structure was suited to the complexity of the project and provided a high degree of project decentralisation.

The project implementation arrangements have two options. Firstly, it may be delivered by utilising only eye care partners to conduct screening camps, detect and refer cataract patients, and provide surgical services. Secondly, some components like surgery and clinical care may be handed over to clinical partners, while other components like screening and referral may be outsourced to other parties whose expertise lay in community mobilisation and raising awareness. The project design opted for the second option that maximised the use of local resources. Furthermore, since the CBOs are based in the communities, it is envisaged that they would continue to create awareness and promote health-seeking behaviour of the communities they work with.

The use of PSPs (and their link with clinical services) was found to be an effective approach in reaching the vulnerable as it was combined with community mobilisation and awareness raising activities. This helped in raising the confidence level of communities for the CBOs working there.

The CBOs adopted various techniques for community mobilisation and raising awareness including distribution of leaflets, miking[15], street plays and dramas, banners and use of various activist groups within the community. The CBOs were able to link this with their on-going mobilisation strategies for other activities. This not only reinforced the mobilisation process but also developed the capacities of the CBOs in eye health awareness. Furthermore, the project reprinted IEC material that had already been developed during the DUECP project and therefore saved on development costs.

There were four areas where programme efficiency could have been improved.

Firstly, schoolteachers were trained on primary eye care that includes identification of basic eye ailments and vision screening of children, while they would have benefitted more by emphasising training on vision screening and eye health promotion. The data indicates that schoolteachers screened close to 75,000 students and referred about 20,000 children for further assessment. The referral criteria was 'any eye problem' rather than vision screening, even though the teachers conducted vision screening. This meant that a large number of children would have to be examined and assessed by the refractionists.

Secondly, the refractionists ended up examining about 18,000 children (as some of the children from the 20,000+ were not available on the day of the visit). Of these, about 5,500 received prescriptions for spectacles. This means that about 30.6% of schoolchildren screened required spectacles. Furthermore, the rate of visually disabling refractive errors (requiring spectacles) of schoolchildren was about 7% (5,500 out of 75,000 screened). This is almost double the average rate in South Asia, which ranges between 3%-4% depending on the age group screened[16]. This suggests that there may have been inadvertent over-prescription by the refractionists[17]. By improving vision screening[18] of

[15] Miking is an accepted form of disseminating information in Bangladesh and involves the use of a microphone or megaphone by an individual either walking along the streets or riding a rickshaw.

[16] John Theotonius Costa. Prevalence of refractive errors in children age 11 to 15 years old and uptake of prescribed spectacles, in Joypurhat district, Bangladesh, 2009. Dissertation submitted in part-fulfillment of MSc in Community Eye Health, London School of Hygiene and Tropical Medicine

[17] During the course of the visit to one of the VCs, one of the evaluators requested the refractionist to perform a routine refraction. The evaluator (an ophthalmologist by training and having trained refractionists and optometrists himself) observed that the visual

schoolchildren by teachers, the number of children referred to refractionists can be reduced by about three-fifths thereby allowing refractionists to assess and refract fewer children. This would result in time and cost savings. International guidelines are available for school eye health and these should be referred to when designing future urban eye health programme strategies[19].

Thirdly, the project had conceived the setting-up of an Advisory Committee whose main responsibility was to be advocacy. The Advisory Committee proved to be less effective than anticipated as, firstly, there were too many people on it, and secondly, there was no supporting advocacy strategy and plan. Implementing partners interviewed indicated that the advocacy proved challenging because there was no dedicated advocacy and communications team. At several PSPs, local politicians were invited at the events, and while this raised the profile of the event, the project was unable to leverage the advocacy potential. The evaluation team noted that overall, the project missed an invaluable opportunity for advocacy.

Fourthly, the VCs proved a challenging experience for the project. This is discussed under a separate section on Vision Centres.

acuity was determined accurately. However, the refractionist did not appear comfortable with using a retinoscope and discussion revealed her reliance on the autorefractor. In the final prescription given to the evaluator, the distance correction had been missed and the near correction (presbyopic correction) was twice that routinely used by the evaluator. While it is unfair to make a judgment of all refractionists based on one experience, the competency of refractionists for refraction of children (who require more advanced knowledge and skills) remains questionable.

[18] Clare Gilbert. Running an efficient school programme: refractive error component. Child Eye Health course, IAPB General Assembly 2012

[19] Guidelines for School Eye Health for the Eastern Mediterranean Region (EMR) (2009):Eastern Mediterranean Regional Office of the International Agency for the Prevention of Blindness (EMR-IAPB), in collaboration with World Health Organization Regional Office for the Eastern Mediterranean Regional Office (WHO-EMRO) and the Prevention of Blindness Union (PBU). Supported by IMPACT-EMR

Conclusions

For implementation of the project, appropriate partners were identified at each tier. Clinical partners with a history of high volume surgery served as the supply side of the project. The partnership arrangements of field level NGOs partnering with tertiary clinical partners, and CBOs partnering with field level NGOs were very effective in achieving the results. A Project Management Committee comprising of tertiary level partners provided stewardship, while a Working Group comprising of all implementing partners provided effective project decentralisation.

The project efficiency could have been improved if schoolteachers focussed on vision screening and eye health promotion, as in this approach a large number of children with 'any eye problem' were referred to refractionists, while only 30.6% of them needed refraction and spectacles. By changing the school eye health screening procedure, fewer children would need to be referred for assessment by refractionists.

Learning

- School eye health is an important entry point for urban eye health. However, the role of teachers in vision screening needs to be clearly defined and appropriate curriculum and training provided with standardised guidelines. Furthermore, in order to efficiently manage a school eye health programme, the age groups for screening need to be clarified. The needs of refraction in children require advanced knowledge and skills, competencies found in ophthalmologists or optometrists, and deploying refractionists for this purpose should be avoided. In a country like Bangladesh, where optometry training has only just taken root in the non-government sector, finding well trained optometrists for school eye health may be a challenge. School eye health should be linked with ministry of education programmes for school health
- A more efficient and effective advocacy approach could have been to deploy a small advocacy team with expertise in communications and marketing, identify the top three advocacy objectives, conduct a stakeholder analysis, develop a supporting advocacy strategy and implement a plan to address these

Recommendations

- A decentralised management structure in such a large project is essential for planning, execution, monitoring and coordination, while locating the project management unit or secretariat in a leading implementing partner greatly improves ownership and builds capacities for improved project management
- The advocacy needs of large and complex projects require a professional approach, and therefore a team with the right skill mix and expertise should be deployed for this purpose to develop the supporting advocacy strategy and execute it according to a well conceived plan

Impact

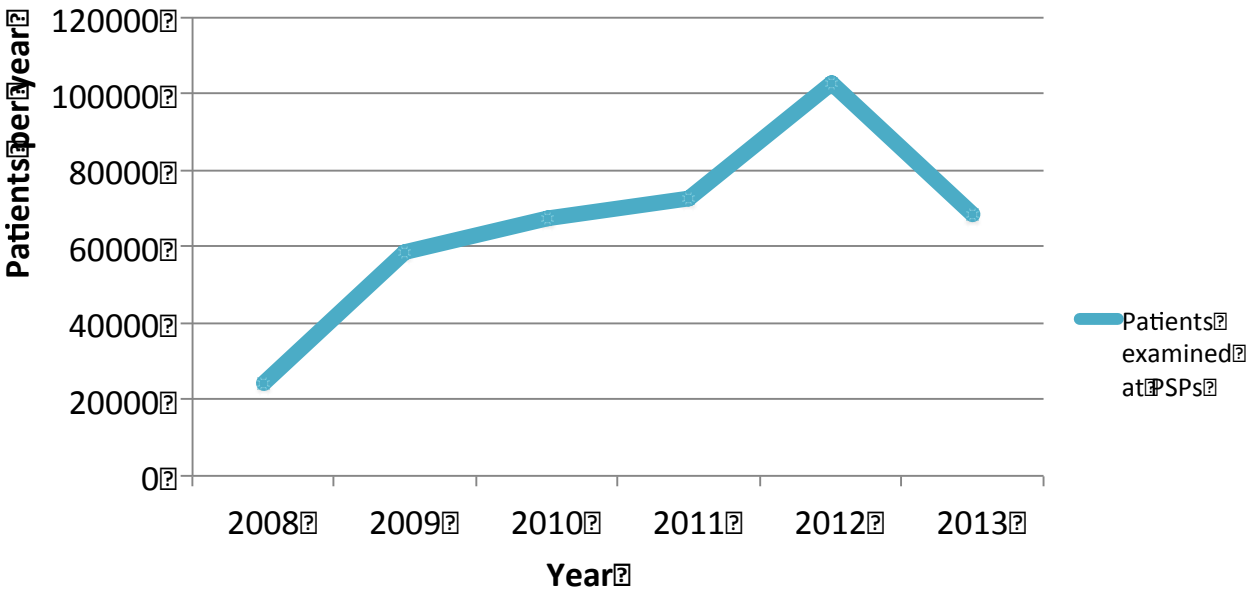
G

The project has met its main objectives as below:

- It has generated demand for eye health services and this is evident from the increase in patients attending the PSPs which shows a dramatic four-fold increase (Fig 6)
- The project has increased partner capacities in high volume activity, which is evident from the sustained high volume high quality surgical output by clinical partners and high patient uptake of PSPs through community mobilisation and awareness by CBOs and NGOs
- It has reduced the magnitude of cataract blindness in the target slum localities by 33,000
- The project has successfully refracted close to 130,000 slum dwellers and provided over 100,000 people with spectacles

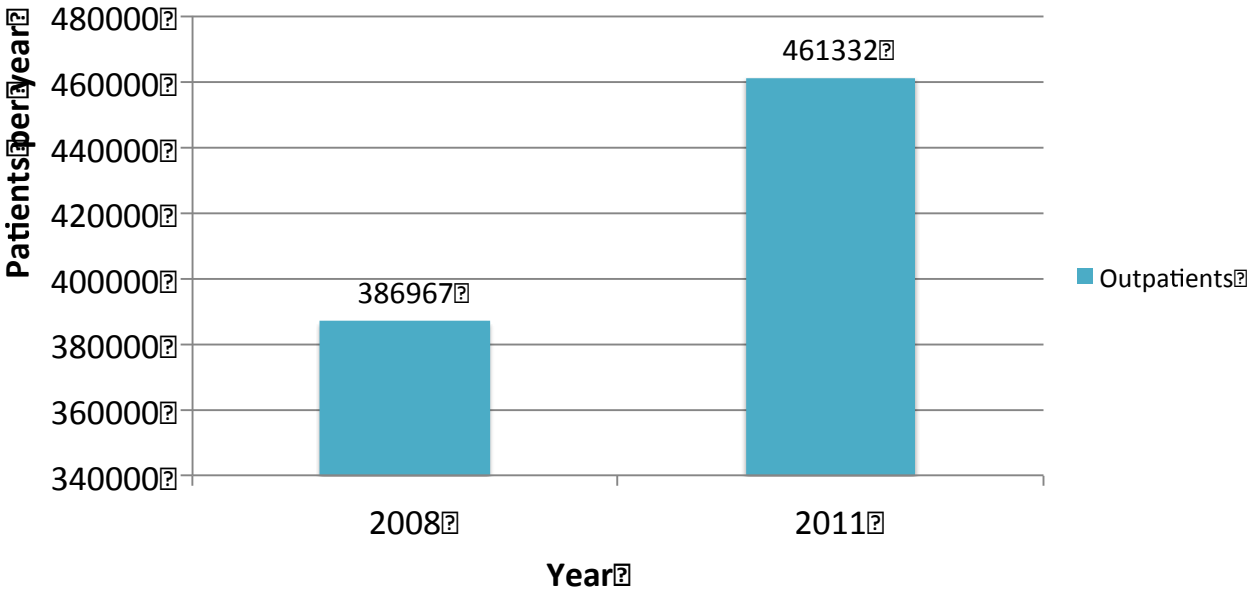
The output-wise achievement is presented earlier in the results section.

Figure 6 - Uptake of services at PSPs



Hospital attendances of outpatients at partner hospitals increased by almost 20% between 2008 and 2011, and this met the project target of 20% increase in access to appropriate eye services for people living in poor urban communities (Fig 7). There was a 10.1% increase in outpatients at IIEI&H, 26.3% at BNSB, 154.7% at SSHL and significant increase at Ad-Din from zero eye patients in 2008 to 7,274 patients in 2011. The data in Fig12 was only available for 2008 and 2011. At MGH, they used to see about 5-7 eye patients per day before the project, but now they are receiving 40-50 eye patients per day and diagnose and refer about 20-30 patients with cataract per month.

Figure 7 - Uptake of outpatient services at partner hospitals



With regards to health systems strengthening, the following key impacts were noted/observed:

Service Delivery

This was strengthened by establishing a community identification and screening process. Clinical services were strengthened at partner hospitals, and diagnostic capabilities were enhanced e.g. MGH began to refer cataract patients to SSMC&H, while MSS referred initially to IIEI&H during the project, and now after the project to VARD.

Medical Products and Technology

Bulk purchases of intraocular lenses (IOLs) for cataract surgery were done and supplied to hospitals, while refraction units/VCs became operational and spectacles were provided for those with refractive errors. The supply of low vision devices was greatly limited by their availability as these have to be procured from abroad. The procurement process for LVDs relates to a broader low vision programme context and was beyond the scope of this project or evaluation.

Health Workforce

Training of existing partner staff as refractionists improved their retention and increased coverage of refractive error services, while training of non-clinical staff like schoolteachers and those in CBOs strengthened screening and uptake of services.

Health Information
The project information management system was quite comprehensive but remained project oriented and did not align with the government e-health/health information system[20] or that of LGRD&C.

Health Financing
The project provided social protection for the poor, and partnership with government hospitals was a safety net for those who could not afford the service. For other patients, who were poor but could afford to pay 'something', the NGO partners offered to negotiate a flexible user fee for different paying categories. MGH introduced cost recovery and this is being tested in the refraction unit/optical shop.

Leadership and Governance
The strategic entry points in the context of urban health care were not adequately explored nor were synergies derived from various government policies and initiatives.

As part of the project, a cataract surgery protocol was developed. This was reviewed and endorsed by NEC and has now been adopted as national guidelines for cataract surgery.

The project greatly enhanced brand recognition and organisational profile of NGO partners, Sightsavers and the Seeing is Believing programme. As one stakeholder remarked, *'it was eye care eye care everywhere'.*

There was a definite increase in partner capacities as is evident by the uptake at PSPs and high volume surgery, while NGO clinical partners were facilitated to work with field level and CBO partners, which established networks and a positive working relationship.

The perception of key stakeholders were collected through interviews, focus group discussions and a stakeholders workshop held in Dhaka. The findings are summarised below:

- NGO partners – they developed their capacities for high volume surgery; improved their technical know-how through following the cataract surgical protocols; developed new found knowledge about community mobilisation and awareness; and now had a better understanding about UPHC and the structure of LGRD&C
- Government partners – they were previously underutilised; the project increased uptake of services (e.g. MGH, SSMC&H); motivated their staff about the services they were providing who now want to expand the scope of these services (e.g. at MGH they are very keen to introduce cataract surgery; while SSMC&H wants to start postgraduate training in ophthalmology)
- Local authorities – the Director MGH noted that eye care services had been initiated at his hospital and were providing a very useful service to the poor slums around their hospital; he advocated to the LGRD&C and convinced them to provide cost for optical services in the form of spectacles
- Beneficiaries – were greatly appreciative that the services were closer to the communities; the project had enhanced their knowledge about safety nets and affordable services available at NGO hospitals; school children at formal and non-formal schools were screened; cataract blindness was reduced in slum communities;

[20] Health Bulletin 2014. Management Information System, Directorate General of Health Services. Ministry of Health and Family Welfare, Government of the People's Republic of Bangladesh

the project enhanced the knowledge of NGOs, CBOs and LGRD&C about the magnitude of visual impairment in slum communities that they were not aware of previously; screening services were brought closer to communities, which saved user and provider time and cost

One of the NGO partners (IIEI&H), who housed the secretariat for the project, adopted the practice of recruiting professional managers for the project secretariat and internalised this for their own institution. Previously, clinical staff held most of the management positions. Since being involved with this project, the hospital has changed this practice and has professionalised its management structure.

The project has also helped identify possible future strategic entry points, and structures and functioning at various levels especially LGRG&C. Vision Bangladesh Phase 2 was developed on the learning and experience of Vision Bangladesh and DUCECP.

However, there were a couple of areas where project design could have been improved. For instance, there was no measure of community awareness. A pre-KAP (knowledge, attitude and practice) and post-KAP survey would have helped to determine the changes induced by the project.

The project goal was a reduction in prevalence of blindness, but the indicator used by the project was the number of cataract surgeries. It would have been more appropriate to undertake a pre-project RAAB (rapid assessment of avoidable blindness) and post-project RAAB survey to quantify reduction in prevalence of blindness and visual impairment, and also assess the cataract surgical coverage rate.

The baseline survey was more poverty focussed and while useful, was not related directly to the indicators used in the logframe, which meant that endline impact was difficult to assess.

Conclusions

The project generated demand for eye health services, increased partner capacities in high volume activity, and reduced the magnitude of cataract blindness in the target slum localities by 33,000. It also successfully refracted close to 130,000 slum dwellers and provided over 100,000 people with spectacles. Hospital attendances of outpatients at partner hospitals increased by almost 20% between 2008 and 2011, and this met the project target of 20% increase in access to appropriate eye services for people living in poor urban communities.

The project strengthened most health systems building blocks, but fell short of aligning the information systems with the government e-health/health information system or that of LGRD&C, and did not adequately explore strategic entry points or options for synergy with other government initiatives.

The overall project design could have been improved through pre- and post- KAP studies, pre- and post- RAABs and by aligning the baseline with key logframe and impact indicators.

Learning

- The project design for urban eye health can be greatly improved by incorporating a baseline that is linked to project indicators, pre- and post- KAP, pre- and post- RAABs or even RAAB+DR. It is essential that a preparatory period leading up to project proposal development is included in the planning stage (or provision made for this in the first few months of the approved project) and at the end of the project stage. This may include a 3 months lead up time in proposal development for institutional and stakeholder analysis and mapping, baseline, KAP, RAAB, and refining the logframe, and a similar 3 months at the end for post studies before the evaluation.

Recommendations

- Large scale urban health projects should not only focus on the service delivery quotient, but also use it as a springboard to leverage community, organisational and institutional change through well planned and executed advocacy

Sustainability

The evaluation team found it challenging to gauge the overall sustainability of the project as a whole, partly because a new Vision Bangladesh Phase 2 project was launched almost seamlessly at the end of DUCECP that made it difficult to assess post-project viability, partly because several components of the project demonstrate sustainability trends, and partly because one component (VCs) has presented programmatic challenges. The issue of VCs is discussed in the next section.

Vision Bangladesh Phase 2 is an initiative in Dhaka City launched by BRAC in late 2013 and will run until end 2015. It involves partnership with NEC and 8 NGO hospitals (4 of whom were part of DUCECP and 4 others). The community mobilisation in this project is being undertaken by BRAC itself. The social protection and safety net is being provided by Vision Bangladesh Phase 2 and by NGO partners to some extent in the short term. It is unclear at this stage whether BRAC would continue with or expand the scope of this initiative after 2015.

The community component of the project is likely to continue to some degree because the CBOs are already committed to other initiatives in the slum areas and have internalised eye health awareness into their community awareness activities. The frequency of the PSPs would reduce but are likely to continue intermittently as several NGO partners noted their value addition in increasing the uptake of services and expressed their interest to continue with these on periodic basis.

The logistic arrangements of free transport of patients for surgery would be a challenge and are unlikely to continue without additional funding. However, during focus group discussions with communities, they indicated that they were already paying BDT 20 – 100 for transport when they or any family member went for a health visit to a hospital or private practitioner. If slum dwellers were assured of quality and continuity of service, they were willing to invest in local transport costs. However, they were not willing to spend separately to visit a VC and then additional funds to go to a hospital. They indicated their preference for a one-stop service facility.

At the hospital level, the project has established a reasonable level of sustainability. Firstly, there is a safety net for the poor at the government partner hospitals. Secondly, the NGO partners provide three options for payment for services – regular rate for those who can afford to pay; a subsidised and negotiable rate according to the paying capacity of the individual; and a totally free service for the extreme poor. This was reiterated by all the NGO partners.

The Mahanagar General Hospital (MGH) (under LGRD&C) has established a first precedence of provision of spectacles at cost. The evaluation team learnt that the spectacles were procured by LGRD&C through the office of Chief of Health at BDT 170 per pair and it was mandatory for MGH to sell this at the same price. Therefore, even though the refraction/optical unit at MGH would not generate a profit, it would meet the cost of spectacles. The price of BDT 170 is probably the cheapest available in Dhaka city.

In focus group discussions with the sample communities, it was learnt that even the poorest slum dwellers were not looking for free spectacles but were willing to pay about BDT 400-600 for a decent pair of spectacles and preferred to go to a private optical shop. This was further confirmed from the statistics at the optical unit at MGH, which dispensed

spectacles to 20% or less of all patients they prescribed spectacles despite their very low cost. Furthermore, the communities at FGDs and beneficiaries met at the hospitals indicated their willingness to pay BDT 1000-2000 for cataract surgery. This suggests that the project had generated 'willingness to pay' to some extent among slum dwellers although there may be other causal factors such as reduction in poverty levels (and therefore increase in disposable income). The communities also noted that there were those among them who were extreme poor and they needed free service.

A 'willingness to pay' may not only have been due to the project. Various statistics indicate that in 2005 about 37.4%-40% of the population of Dhaka City lived in slums, and this was constituted by about 28% categorised as poor (upper poverty line) and about 12% as extreme poor [21] (lower poverty line). However, the recent Household Income and Expenditure Survey 2010 has shown that overall poverty in urban areas has decreased and the upper poverty line has reduced to 21.3% and the low poverty line to 7.7%[22]. This is further supported by zila level poverty estimates, which for Dhaka in 2010 were 15.7% upper poverty line and 4.9% lower poverty line[23]. This corroborates well with the focus group discussion findings where we found that even the lower socio-economic groups had a willingness to pay for services. The top three criteria accorded by communities for health services are short distance, reasonable expenditure and good quality of treatment[24].

The staff who were trained as part of DUCECP were individuals who were already in the employ of the NGOs or government hospitals. They already have employment and are retained by the partners.

The partnership with MGH is a strategic investment, but is dependent on future technical support. They have expressed a keen interest to start cataract surgical services. They have allocated space for the eye clinic, have a separate operation theatre for eye surgery and have even procured some equipment. However, they lack a trained eye surgeon and trained supporting nursing staff. If technical assistance is not provided to strengthen their surgical capacity, the gains made in DUCECP may dissipate in the future.

The Dhaka City Corporations have initiated a new phase of their Slum Development Plans in which 'Poverty Eradication Centres' (PECs) would be established at static points in various slum clusters. The PECs would provide registration services for slum dwellers to access a variety of services including micro-credit. The Deputy Secretary of LGRD&C has indicated through the Director of MGH an interest to establish eye health screening services at the PECs. The Director of MGH suggested utilising this opportunity to enhance engagement at higher levels of local government with the Deputy Secretary and use the PECs as a strategic entry point for integrating PSPs. The essential drug list of LGRD&C already contains some eye medications and a strategic link to this has already been alluded to under the relevance section.

[21] Gustavo Angeles, Peter Lance, Janine Barden-O'Fallon, Nazrul Islam,AQM Mahbub and Nurul Islam Nazem. The 2005 census and mapping of slums in Bangladesh: design, selectresults and application. International Journal of Health Geographics 2009, 8:32. doi:10.1186/1476-072X-8-32

[22] Report of the Household Income and Expenditure Survey 2010. Bangladesh Bureau of Statistics, Statistics Division, Ministry of Planning

[23] Zila level povmap estimates, 2010. Bangladesh Bureau of Statistics, The World Bank and World Food Programme

[24] Report of the Household Income and Expenditure Survey 2010. Bangladesh Bureau of Statistics, Statistics Division, Ministry of Planning

The Household Income and Expenditure Survey 2010[25] used disability indicators for the first time. These are based on the World Bank classification into some difficulty, severe difficulty and fully unable. The survey found that difficulty in eyesight was the most common disability both in rural and urban areas. In urban areas for eyesight related disability, the prevalence of some difficulty was 5.15%, severe difficulty 0.37% and fully unable 0.04%. This evidence provides a strong leverage point to engage with local government and NGOs and advocate for eye health in health and development initiatives. One could further argue that eyesight disability is a non-communicable disease, which if not addressed, would continue to be a contributory factor to a reduced pace of poverty alleviation and persistence of non - inclusive growth.

The project has been quite successful in establishing partnerships with other NGOs e.g. INTERVIDA (now called EDUCO) for school eye health; with Marie Stopes for organising PSPs counselling and PSPs; and with the DfID funded Shiree project (economic empowerment of the poorest) for patient referral (this project is discussed further under coordination).

The government provides at least 32 Social Safety Net Programmes (SSNPs)[26]. About 5.99% of households in Dhaka division were recipients of SSNPs. Health officials interviewed suggested an analysis of the various SSNPs to determine if there are any potential options for those in the lower poverty line with eye care needs.

[25] Report of the Household Income and Expenditure Survey 2010. Bangladesh Bureau of Statistics, Statistics Division, Ministry of Planning

[26] Report of the Household Income and Expenditure Survey 2010. Bangladesh Bureau of Statistics, Statistics Division, Ministry of Planning

Conclusions

The community component of the project is likely to continue to some degree because the CBOs are already committed to other initiatives in the slum areas and have internalised eye health awareness into their community awareness activities. The frequency of the PSPs would reduce but are likely to continue intermittently as several NGO partners noted their value addition in increasing the uptake of services. During focus group discussions with communities, they indicated that they were willing to invest in local transport costs provided they were assured of quality and continuity of services i.e. a one-stop service for their eye health needs. With regards to spectacles, the community preferred to obtain these from private optical shops.

The NGO hospitals have provision for social protection of the extreme poor, while government hospitals provide a safety net for those who require surgery.

Recent initiatives like the Slum Development Plans by the Dhaka City Corporations provide strategic entry points for PSPs at poverty eradication centres to be established through these plans.

Learning

- Urban health projects are complex in nature as oftentimes urban slum settings do not have a planned health infrastructure, and are therefore exposed to a multitude of stakeholders and changing cityscapes. Furthermore, the institutional and organisational boundaries complicate the intervention strategies and partnerships. Urban eye health interventions in slum areas should be planned in a programme mode on a long term basis (e.g. 10 years) rather than as campaign projects, as the earlier part of the programme lays the foundation and provides the insight for a more refined and tactical strategy, while it is in the latter part of the programme that sustainable changes are likely to take place. The current project has mobilised support and acceptance for eye health, but not yet led to institutional change. A follow-up second phase would be required to galvanise institutional trends towards sustainability.
- For future interventions in urban eye health, programme staff with a background or expertise in urban development should be recruited to improve the effectiveness of networking, linkages development, strategic positioning of eye health in urban development initiatives and maximising synergies with other urban health and development actors

Recommendations

- The gains made in this project should be used to enhance engagement with higher levels of local government and jointly design and align eye health strategies with slum development plans of local government. This would require appropriate allocation of resources

Vision Centres

The project design rightly recognised refractive errors as one of the common eye problems that needed to be addressed and conceived the role of PSPs and school screening to identify persons with vision impairment, and set-up an intermediary facility called Vision Centre (VC) that would be located between the PSPs and tertiary level partner hospitals. The idea was that the VC would be closer to the communities, and therefore more accessible, and would not only provide refractive error services at affordable cost, but also act as a screening and referral centre for other eye problems like cataract etc.

The VCs that were established were staffed by a refractionist and in some cases with an optical dispenser too. The VCs were equipped to perform refraction (retinoscope, trial lens set, autorefractor, lensmeter), examination of the eye (slit-lamp) and dispense spectacles (showcase of sample spectacle frames) and optical dispensing unit (used by the optical dispenser to grind lenses and fit spectacles).

The project proposed to establish 6 VCs. However, by the end of the project in 2013, only 2 VCs had been established. Three partners opted out either because they did not find a partner to run this service, or they themselves declined.

An external assessment was done of the two VCs established[27]. The review made the following key observation (other details are available in the report):

"The Project Management Committee (PMC), Project Secretariat, Sightsavers, and partner NGOs (if needed, IAPB) should come to a consensus on conceptualisation of Vision Centre followed by identification of the strategy and mode of operation regarding vision centre. Before considering the set-up of any additional VCs, it is important to a) conceptualise VC model; and b) understand business plan including market research to investigate possible utilisation of VC and cost recovery mechanism"

Following this, a consultation meeting was held in Calcutta to develop a VC model/approach [28] . The meeting developed a conceptual frame; defined minimum standards, staffing and equipment needs; and developed a standard operating procedure. This approach was then disseminated to implementing partners and in the last three quarters of the no-cost extension year, four VCs were established.

During the course of the evaluation, we visited three VCs, interviewed all implementing partners, tried to gauge community perspectives and reviewed the performance data of all VCs. Partners were interviewed individually and together in a combined workshop, while focus group discussions were used to obtain beneficiary perspectives.

The six VCs were established as follows:

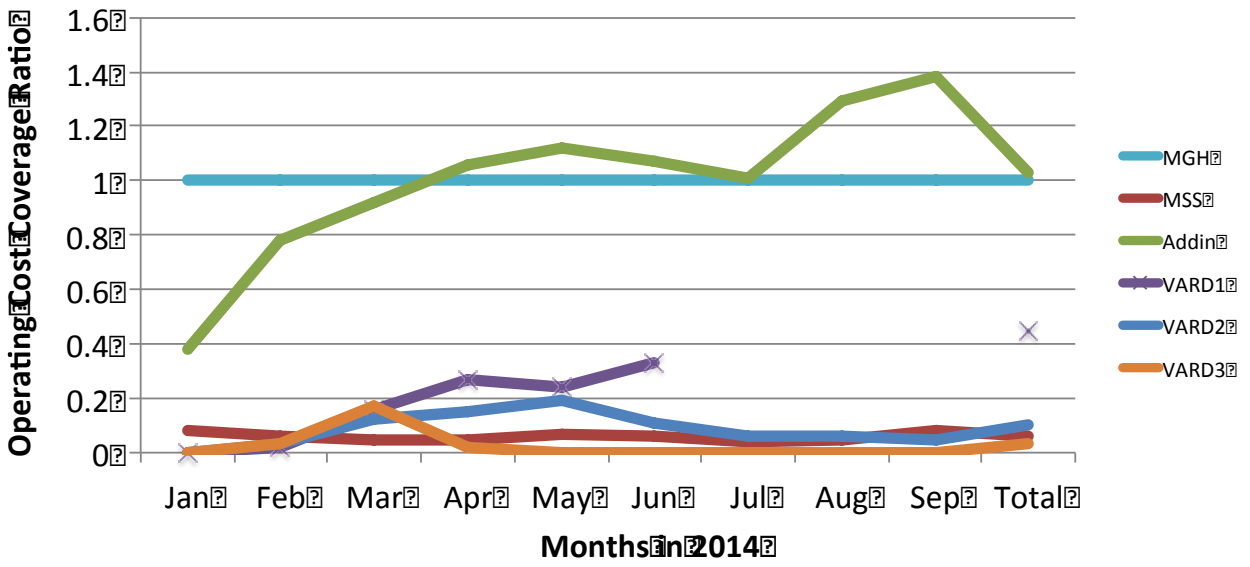
- Mahanagar General Hospital (MGH) – one
- Manabik Shahajya Sangstha (MSS) – one
- Ad-Din Hospital – one
- Voluntary Association for Rural Development (VARD) - three

[27] Nazme Sabina. Assessment of Vision Sub-Centres established under Dhaka Urban Comprehensive Eye Care Project, 2013

[28] Vision Centre Model. Sightsavers, May 2013

The performance of the VCs in the period January-September 2014 is shown in Fig 8. We have used the 'operating cost coverage ratio' (OCCR) (total revenue to total operational cost). The data for July-September for VARD1 was unclear and therefore excluded, but the total figure represents the nine months.

Figure 8 - Vision Centres and Operating Cost Coverage Ratio



Key – VARD1 – Adabar; VARD2 – Uddan; VARD3 - Kalyanpur

The data shows that only the VCs at MGH and Ad-din were able to achieve and sustain an OCCR of 1 or more. An OCCR of 1 means that a revenue amount equal to the operational cost has been generated. It should be noted that the operational models of these centres were not uniform which may have been a major factor in their performance.

At MGH, we see a straight line because all spectacles are sold at cost as per local government regulations. There are no additional operational costs as existing staff have been deployed and utilities etc are already covered by the hospital.

Ad-din demonstrates a successful trend and is now generating a profit.

VARD1 is still short of reaching at least 50% break-even costs with an OCCR of 0.45.

VARD2, VARD3 and MSS have negligible performance and have an extremely low OCCR of 0.01 or less. They have all the signs of a poorly performing service, which would be difficult to sustain under current arrangements.

The performance trends above show that generally, hospital based VCs tend to be more sustainable as the patients have continuity of service, have access to ophthalmologists and surgical facilities. However, those established through the market-based approach of the project performed significantly below expectations.

The evaluation team found several points of interest, which are categorised as 7 Ps.

Perception

During the interviews and consultation workshop, one leading partner stated “we did not ask the most important question when setting up VCs – do we really need a VC?” Some of the reasons included the following – tertiary eye hospitals were within 15-30 minutes reach of most communities and provided comprehensive services; there has been a mushroom growth of private eye clinics in the last 10 years and patients prefer to go to qualified ophthalmologists; the private optical shops are scattered all over the city and generally well known to the public, and they also are willing to negotiate prices according to the demand. There was consensus among partners in their reluctance to proceed with the current project model of VCs.

Person

This is probably the most important factor – who is the customer being targeted? The customer for the VC had not been clearly defined. If it is those in the lower poverty line, then the VC or optical shop cannot sustain itself. If it is those in the upper poverty line, there is a certain range of products and prices that they will respond to, but the overall income may not be enough to meet all operational costs. If it is lower middle class and above, the product and price range may be beyond the range of lower income groups, unless that category is also catered for, but recognising that the main customer base is a higher affording category.

Profile

Many of the private optical shops have ophthalmologists who examine patients with eye problems and therefore attract a continuous stream of customers. If they require surgery, the ophthalmologist gives them a date for their surgical facility. A large number of these ophthalmologists work in larger hospitals during the daytime and become known to patients who attend the eye clinics e.g. at government and NGO hospitals. People were not keen to go to a VC that had an unknown refractionist. VCs were set-up without fully understanding the market environment.

Product and Pricing

The private optical shops have usually been in the market for a long time and have established customer loyalty. Furthermore, they understand the customer needs and provide a range of spectacles that match fashion trends at affordable prices. The vendors have sourced their products at the most cost-effective rate that gives them a decent profit. They have also established outsourcing facilities in case they require optical dispensing services.

Place

The location is one of the most critical factors for an optical facility. At least some sort of market survey is required to determine access, competitors, where do the customers usually like to shop and what might attract customers. One of the VCs was located within 5 minutes walking distance of a slum community, but the community preferred to pay BDT 20 and go to an eye hospital that also had refraction and optical services. This underutilised VC was in the same vicinity of 4 other private optical shops.

Practices

Traditionally, optical services have always been in the private sector. People therefore tend to purchase spectacles from private optical shops. Furthermore, the sales pitch of the vendor seeks to turn every customer into a buyer and not only responds to customer appeal but also provides additional useful information and choices for the customer. The

‘shop’ should have the appeal of the customers and the locality. For example, customers from low income areas may be used to the open-stall like stores, while a closed shop with glass, blinds, air-conditioning may be out of place and act as a psychological barrier and suggest ‘expensive’ rather than affordability.

Private Sector

One of the key questions partners asked was – what value addition does the VC have? The VCs we visited were simply functioning as refraction units and there was nothing that really set them apart as something special. The second key question was – why set up another VC when there are already several other optical outlets in the same area serving that locality? Would it not make more sense to partner with an existing private vendor, who is known in the area, and strengthen their capacities (further training, equipment, range of supplies and products, quality of service) so that they are able to expand their business but at the same time also provide a safety net for those with low paying capacity. The business will have no learning curve, which a new VC would require, it is already self-sustaining and profitable, and the owner has a personal stake and reputation to preserve.

There were definitional gaps about VCs in the project design, which is understandable as this was a new experiment in Dhaka City, but the VC approach was not available until after the formal project life. Only two out of the six had any value addition to offer. The no-cost extension period may have been better served if time was spent to first understand and then develop a business model, rather than try and establish four more VCs.

The evaluation team found two main contradictions – firstly, VCs require an entrepreneurial approach and not an NGO charity approach, and it was the latter that was being followed. Secondly, and partly because of the first point, no business incubation process had been pursued, which would go from ‘idea’ to ‘pilot’ through to ‘roll-out’ with the necessary business training and capacity development. Business roll-out was done without adequate preparation.

It is unlikely that VCs in their current modality will add any real value, except for MGH whose costs are covered by local government and Ad-Din who has adopted a business approach. It may be more preferable to develop thinking around urban eye health as separate from a VC concept.

Technical Note for Sightsavers

Refractionists – The project design has placed great emphasis on the use of refractionists for refraction of school children, to run VCs and low vision services. It is understandable that there are challenges in finding appropriately skilled optometrists, and therefore the reliance on refractionists. The demands of the three activities above are more than what refractionists with one year of training can competently deliver. Islamia Eye Hospital has taken a major initiative to start this training to help meet the gap in the country and they need to be commended for their efforts. There is need for discussion between Sightsavers, other interested INGOs and Islamia to consider establishing a school of optometry, upgrading the course to optometry level of 4 years training, during which a more comprehensive module on low vision can be incorporated. Even if there are no posts for this cadre at present in the government set-up, there is a pressing need to first build a critical mass of well trained professionals. They have an additional advantage that they can venture into the private sector. Persistence with training of refractionists will only serve as a stop-gap arrangement, but not something upon which sub-sector, optometric or national eye health plan needs can be rested.

Optical Dispensing – The optical dispenser is a new cadre that was inducted into the VC together with a refractionist. Good refraction and optical dispensing are two complimentary halves of a larger whole package of refractive error services. A correct refraction prescription is just as important as dispensing a correct pair of spectacles. It was noted that the optical dispensers visited at the VCs had basic knowledge and skills of optical dispensing, but were using outmoded methods of dispensing like chipping a lens with a pair of pliers and then grinding and bevelling the lens before fitting. Lens centration was not being practiced routinely. Islamia Eye Hospital has once again made a major contribution in establishing short term training for optical dispensers, which does not exist in most South Asian countries. There is scope for discussion between Sightsavers, interested INGOs, Islamia and an organisation for technical and vocational education to consider upgrading the 4 months course to a six months Basic Trade course (class VIII or equivalent) or a one year Certificate course (Secondary School Certificate (SSC) or equivalent) that can be certified by e.g. National Skills Development Council[29], Directorate of Technical Education[30], Bangladesh Technical Education Board[31] or in collaboration with a recognised polytechnic institute. This may require additional development of knowledge and skills of the master trainer and technology support for the optical dispensing training unit, but will then ensure that firstly, the training of optical dispensers is an accredited course, and secondly there is a career pathway in the technical and vocational education and training (TVET) sector.

Until about twenty years ago, optical dispensing equipment was costly, and therefore there was a reliance on manual lens edging. However, good quality and affordable optical dispensing equipment is now available from China. It would be advisable to consider certified training of optical dispensers and ensure provision of automated edging equipment in design of future projects that include optical services.

[29] http://nsdc.gov.bd/

[30] http://www.moedu.gov.bd/

[31] http://www.bteb.gov.bd/

Conclusions

The data shows that only the VCs at MGH and Ad-Din were able to achieve and sustain an operating cost coverage ratio (OCCR) of 1 or more, where an OCCR of 1 means that a revenue amount equal to the operational cost has been generated, or in other words has achieved break-even cost. The performance trends of the VCs showed that generally, hospital based VCs were more sustainable as the patients had continuity of service, access to ophthalmologists and surgical facilities. However, those established through the market-based approach of the project performed significantly below expectations.

Overall, the evaluation team found that while all the other components of DUCECP worked in a coordinated manner and achieved high performance for a generally successful project, the VCs were a discordant component to the rest of the project design. There were definitional gaps about VCs in the project design, which is understandable as this was a new experiment in Dhaka City, but the VC approach was not available until after the formal project life. Only two out of the six had any value addition to offer. The no-cost extension period may have been better served if time was spent to first understand and then develop a business model, rather than try and establish four more VCs.

Learning

- While the intent to establish VCs was well rationalised, the implementation modality remained a challenge. This is a concept that is new to the organisation and also to the implementing partners. An approach that may have worked elsewhere and possibly in semi-urban or rural settings, found itself in uncharted territory in a densely populated city like Dhaka abundantly endowed with specialist eye care services. One learns as much from programme successes as one does from programmatic challenges. The learning from the VC experiment in DUCECP should feed into meta-analyses of other urban eye care projects in the region that have incorporated a VC component and distil from this policy recommendations and improvements for programme design. VCs are like a bridge between socially inclined non-government services at one end and business oriented services at the other with a community that traverses to either end at will.
- There is great merit in holding an organisational level consultation with a global leader in optometric and optical entrepreneurship models e.g. Brien Holden Vision Institute to develop an approach for VCs or their equivalent consistent with current global thinking and perhaps even explore outsourcing options

Recommendations

- VCs should be treated as a separate project, for instance one linking entrepreneurship models with training of optometrists or establishing business oriented vision centres in partnership with the private sector and non-government organisations that have the capacity and inclination for private enterprise

Coordination/Coherence

The evaluation team found that the project had generated synergies between different stakeholders. The PMC played a vital role in creating these synergies. DUCECP had a complex partnership arrangement as each partner was an independent entity. PMC adopted a joint approach towards addressing project deliverables and ensured that each tier was aware of interaction with respective tiers. PMC and Working Group meetings provided an effective platform to resolve issues and improve project planning and execution.

An initial engagement with local government has been established through the partnership with MGH. However, this relationship needs to be nurtured further as alluded to in the section on sustainability.

The project demonstrates several points of synergy. For example, the NGO partners have a mandate to promote cataract surgery and extend coverage of eye care services to all segments of society; the government is committed to increasing the coverage of essential services including health in slum communities; while CBOs are engaged with and mobilise their respective client communities towards health seeking behaviour.

The project mobilised a network of NGOs and CBOs that contributed significantly to the success factor of PSPs. A complete list of collaborating NGO partners is given in Appendix8.

In South Asia, the urban population is growing rapidly and this presents increasing complexities especially for delivery of basic services. Similar kind of urban eye care projects have been implemented in other parts of South Asia and the concept of VC was tested while being mindful of the fact that the local context may differ. Furthermore, similar approaches to school screening were adopted as are being practised in the region. In addition, the project adopted social protection approaches of cost reimbursement to partners. There is need for a regional consultative workshop to determine emerging trends in urban eye health and how synergies can be driven at the regional level.

The project demonstrated good complementarity between community mobilisation and PSPs, and between PSPs and clinical services facilitated by logistic arrangements.

One particular collaborative partnership that stands out was with Shiree.

Since April 2009, the Bangladesh-based non-governmental organisation Dushtha Shasthya Kendra (DSK) implemented a project named "Moving from extreme poverty through economic empowerment (capacity building, voice and rights) of extreme poor households". The project was supported by Shiree / Economic Empowerment for the Poorest (EEP) Programme and funded by UKaid from the Department for International Development (DFID) and the Government of Bangladesh. The main goal of the project was to provide livelihood-enhancing opportunities, with the aim of lifting at least 25,000 slum dwellers in Dhaka city out of extreme poverty by 2015.

As part of the EEP project, DSK-Shiree conducted research into its programme areas and beneficiaries, focusing on acute and chronic illnesses and their implications on the overall

livelihoods of extreme poor slum dwellers in Dhaka city[32]. Their study found that the commonest health problems encountered in slum communities included joint pain or back pain, peptic ulcer disorder, dysentery, diarrhoea, fever, cough, typhoid, scabies and other skin diseases, heart disease and hypertension, tuberculosis, ringworm, jaundice, tumours and cancers, pregnancy related complications, asthma, hydroceles, eye problems, dental complications, and injuries caused by road accidents.

Eye problems accounted for about 2% (1.9%) of all illnesses found in the study population of slum dwellers. The study also found that a large number of slum dwellers lived within a leather processing zone and complained of 'burning eyes' (most likely due to the toxic effects of Sodium Sulphite Na_2SO_3, Ammonium Chloride NH_4Cl, and Sodium Sulphate Na_2SO_4 used during deliming and bating processes).

This data (2% with eye problems) provides a useful indicator that NGOs have begun to recognise eye problems in slum dwellers in the absence of any formal clinical survey. The percentage is likely an underestimate as no systematic eye health and disease survey was done.

This collaborative partnership should be nurtured further so that the profile of eye health is raised in slum development initiatives.

Consideration may need to be given to improving access to information for urban slum communities by developing websites and use of helplines e.g. information about nearest eye care facility for surgery, PSPs etc.

However, some contradictions were also noted. For example, the project did not provide comprehensive eye care services as alluded to earlier. The VCs did not have any operational definition and the operational approach was not well defined in the project proposal. The VC design did not involve implementing partners – information sharing took place but there was no consultative planning. Furthermore, there was no competency framework and criteria for effective functionality of VCs. An approach to VCs was developed after the project and then shared with implementing partners.

[32] Health status and its implications for the livelihoods of slum dwellers in Dhaka city.Extreme Poverty Research Group (EPRG), 2012

Conclusions

The project generated synergies between different stakeholders. PMC adopted a joint approach towards addressing project deliverables and ensured that each tier was aware of interaction with respective tiers. PMC and Working Group meetings provided an effective platform to resolve issues and improve project planning and execution. The project demonstrated good complementarity between community mobilisation and PSPs, and between PSPs and clinical services facilitated by logistic arrangements. The project mobilised a network of NGOs and CBOs that contributed significantly to the success factor of PSPs.

The project had some contradictions. For instance, the VCs did not have any operational definition and the operational approach was not well defined in the project proposal. The VC design did not involve implementing partners, and although information sharing took place, there was no consultative planning.

Learning

- There are numerous actors engaged in slum development related projects and programmes in Dhaka City. It would be prudent to identify a few select organisations to partner with in order to fast-track inroads to urban health and leverage organisational and institutional change supportive of eye health

Recommendations

- While conducting institutional mapping of actors and stakeholders in urban health, it is important to determine existing coordination mechanisms and options from which synergies can be derived. Future urban eye health interventions should aim at targeting multi-level coordination – central or ministerial level, metropolitan or city corporation level, and ensure that this extends to zonal and ward level coordination

Scalability/Replicability

Several project components have potential for scalability, Firstly, the PSPs have been accepted by the slum communities as an effective screening and referral option. If this is linked with the PECs under the Slum Development plans, PSPs can be scaled up. According to the partners, options to hold fixed venue PSPs should be considered as they would be more acceptable to slum communities instead of holding PSPs at different locations every time. Secondly, NGOs and CBOs who collaborated in DUCECP requested for training of their health staff for improved patient screening.

Islamia utilised the learning from DUCECP and adopted it in their field hospital in Jamalpur. They have established a similar system of community mobilisation, PSPs for screening and referral to their field hospital.

Vision Bangladesh Phase 2 is an example of replication of DUCECP.

The teacher training component is another scalable option if integrated in the education sector, taking into consideration the role of teachers to conduct vision screening rather than primary eye care.

The case at MGH also presents another option where surgical services can be introduced. The potential of UPHCs has not yet been explored from an institutional context, even though one INGO did try to introduce primary eye care at 10 centres. However, the intervention was project focussed and did not sustain itself after the project ended.

While several project interventions have demonstrated that it is feasible to scale them up, these have not been documented with a view to refine approaches or to develop an advocacy plan. Only three documentations were available – a baseline survey report, a mid term review report, and an assessment of two VCs.

In the no-cost extension year, some of the underspends were being used for research e.g. mapping of services, health seeking behaviour, willingness to pay, costing of cataract surgery and refractive error services etc. The results of these studies were not available as they took place at the time of the evaluation. On discussion with the research team leading on these studies, it was learnt that the results would be taken into account for future design of projects.

At the present time, some components of the project have potential for scalability e.g. PSPs, teacher training for vision screening, and using government facilities for screening and referral. However, the project as a whole is not at a stage where it can be said to have developed a model or approach for scalability. The gaps identified by the evaluation would need to be addressed and this may require a follow-up phase of the project in which deficiencies can be addressed and approaches and scalability options clearly documented.

The lessons learnt from the project are presented in a separate section.

One vital area that has an important bearing on urban health is climate change. Although this was not part of the project proposal or Seeing is Believing objectives, it would have been useful for the current project to have taken cognisance of the implications of climate change on Dhaka City and urban health.

Climate Change

Dhaka, as one of the most densely populated cities in the world, and Bangladesh's megacity, is also one of the top ten cities most vulnerable to the effects of climate change. In recent years, Dhaka has been exposed a variety of climatic events including temperature variation, flooding, cyclones and erratic rainfall.

With high rural-urban migration rates to the city, increasing population of Dhaka megacity from 0.4 million in 1951 to 16 million by 2015, illiteracy, inadequate basic facilities, burgeoning solid waste management issues, inadequate sewage and drainage management, and unplanned urbanisation, the combination of climatic and non-climatic factors places the vulnerable population of Dhaka city especially those residing in slums at high risk both to disease and loss of livelihoods[33].

Data from Bangladesh Centre for Advanced Studies (BCAS) shows that most of Dhaka city is prone to riverine flooding, rainfall and water logging (Fig 9). There have been four major floods in the last twenty years in 1988, 1998, 2004 and 2007. Over 50% of the city population was affected and this included mostly those who were slum dwellers[34]. Nearly 50% of the people in the city live in low-lying areas where water-logging and drainage congestion due to river floods and excessive rainfall cause serious miseries, especially to urban poor[35].

The government launched the National Adaptation Programmes of Action (NAPA) in 2005 (revised in 2009) and the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) in 2009.

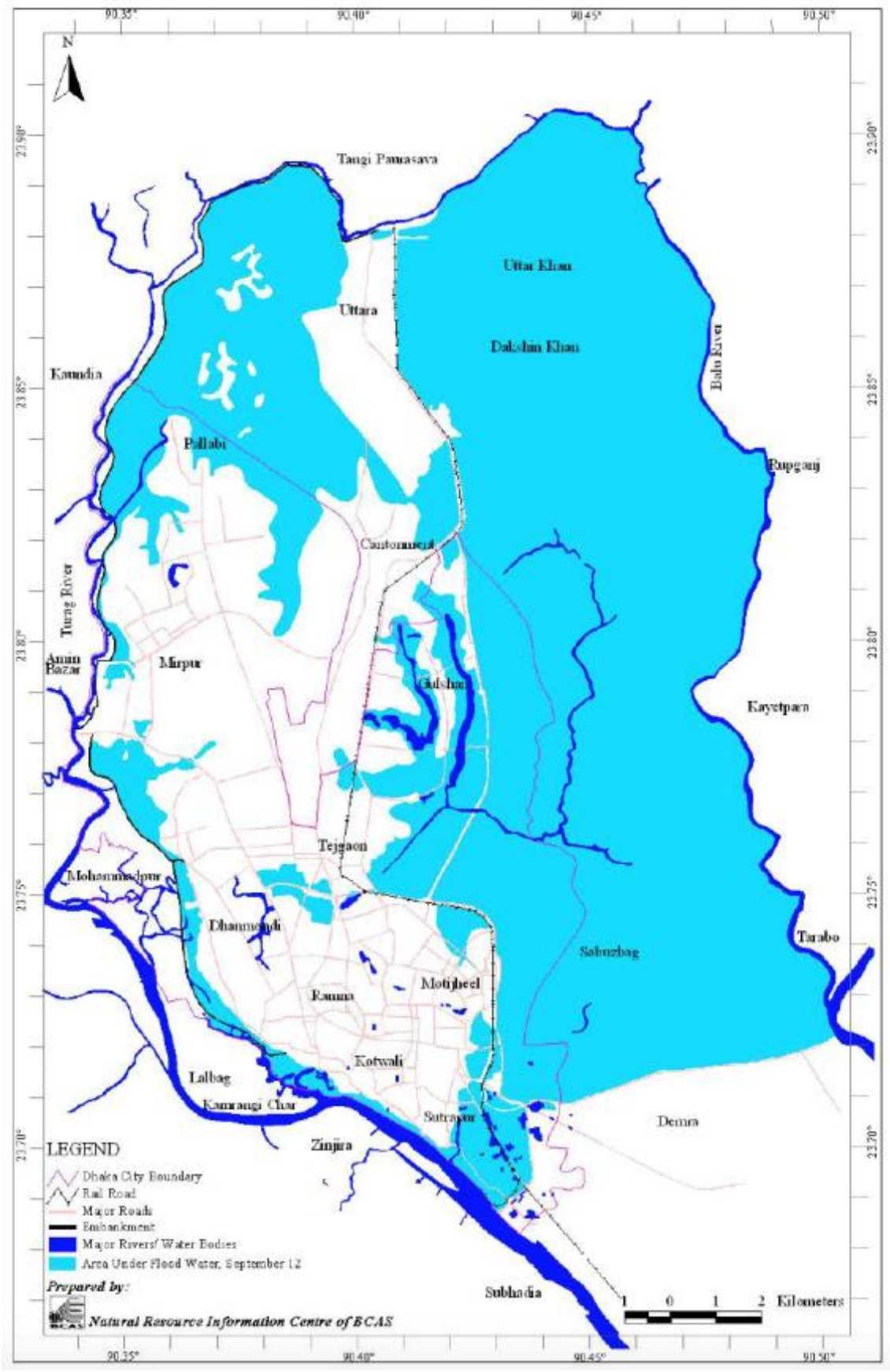
It would be prudent in any future urban eye health interventions to give consideration to building in a component of eye health preparedness in emergencies so that collaborating NGOs, field level partners and CBOs can integrate emergency eye health in their overall organisational programme portfolio and link with government strategies, action plans and coordination mechanisms. This would ensure that in the event of water-logging and flooding, a rapid response mechanism would exist to provide coverage of eye care services to affected slum dwellers.

[33] Resilient Cities. Local Sustainability Volume 1, 2011.Editors:Konrad Otto-Zimmermann.Chapter 52,pp 531-541. Climate Change Implications for Dhaka City:A Need for Immediate Measures to ReduceVulnerability. Golam Rabbani, A. Atiq Rahman, and Nazria Islam

[34] Dr. Atiq Rahman and Dr. DL Mallick. Climate Change Impacts on Cities of Developing Countries:A Case Study on Dhaka. Bangladesh Centre for Advanced Studies(BCAS) Dhaka, Bangladesh. Presented at the C40 Tokyo Conference on Climate Change – Adaptation Measures for Sustainable Low Carbon Cities, October 2008

[35] Sarder Mohammad Yahya, Shahriar Shams, A K M Sadrul Islam, Kashif Mahmud. Climate Change Impacts on Flood Vulnerability for Dhaka City. Proc. of International Conference on Environmental Aspects of Bangladesh (ICEAB10), Japan, Sept. 2010

Figure 9 - Dhaka City areas prone to water-logging and flooding



(Source: Bangladesh Centre for Advanced Studies – BCAS)

Conclusions

Several project components have shown potential for scalability, For instance, the PSPs have been accepted by the slum communities as an effective screening and referral option. Secondly, health staff of high performing field level NGOs and CBOs who collaborated in DUCECP can be trained for improved patient screening.

The project as a whole is not at a stage where it can be said to have developed a model or approach for scalability. The gaps identified by the evaluation would need to be addressed and this may require a follow-up phase of the project in which deficiencies can be addressed and approaches and scalability options clearly documented.

Future urban eye health interventions would need to give consideration to building in a component of eye health preparedness in emergencies so that collaborating NGOs, field level partners and CBOs can integrate emergency eye health in their overall organisational programme portfolio, so that in the event of water-logging and flooding, a rapid response mechanism would exist to provide coverage of eye care services to affected slum dwellers.

Learning

- Up to now, urban eye health has been viewed as a tri-pronged intervention – mobilise communities to generate demand, screen communities to identify those with avoidable blindness and visual impairment, and provide surgical and medical treatment. Urban eye health needs to be contextualised within broader urban health and development, and the factors that affect these. One example is climate change that cuts across development initiatives and health intervention strategies. Dhaka City embodies all the social, economic and development challenges of a densely populated metropolis, which is further compounded by the fact that it is one of the top ten megacities globally at high risk to effects of climate change. Urban eye health interventions and approaches in future will need to be redefined in cities that have high climatic risk.

Recommendations

- A follow-up phase to DUCECP is required to address gaps and deficiencies identified in the evaluation to develop a model for urban eye health that can be scaled up in other cities
- There is need to build and strengthen the capacities of civil society and public sector actors (involved in urban health) in eye health preparedness in emergencies and support the development of a rapid response mechanism in case of disasters

SUMMARY CONCLUSIONS

The programme is well aligned with the Global Action Plan for Universal Eye Health 2014-2019, government health plan 2011-2015, MDGs and poverty focus, National Blindness Survey 2000, National Eye Care (NEC) plan, Seeing is Believing, UNCRPD, Vision 2020 – The Right to Sight and partially aligned with the WHO Health Systems framework. However, the institutional and stakeholder analysis that had been done during the preparation of this project was insufficient and such a complex project warranted a much more detailed analysis. This has an important bearing on whether the project can be integrated, taken to scale and its overall sustainability, as the project did not derive synergies from policies and strategies of local government.

The targets were generally exceeded and there was overall good performance in terms of achievement of project outputs. Some of the factors that have contributed towards a high uptake of services include a well structured community awareness mechanism (delivered through well established NGO hospitals (4), field level partners (15), CBOs (75)); PSPs (treatable cataract referred and expectations for other eye treatments managed); logistic support through free transport; free surgery for the poor; previous experience of NGO partners with Sightsavers in the DUECP project and capacity of clinical partners to deliver high volume surgery.

Although the project was titled as ‘comprehensive’, it was in essence a cataract and refractive errors initiative. Slum dwellers required continuity of service and were more interested in a comprehensive service set-up that could cater to their other eye care needs as well. The guidelines for establishment of Vision Centres (VCs) were not available during the life of the project and it is only in May 2013 that a VC conceptualisation workshop took place, which was instigated by Sightsavers Programme Development Advisors. However, this left under a year (in the no-cost extension period) to establish four VCs. The proportion of patients referred for cataract surgery out of all patients referred remained steadily over 80% indicating an effective screening and referral service for cataract surgery.

For implementation of the project, appropriate partners were identified at each tier. Clinical partners with a history of high volume surgery served as the supply side of the project. The partnership arrangements of field level NGOs partnering with tertiary clinical partners, and CBOs partnering with field level NGOs were very effective in achieving the results. A Project Management Committee comprising of tertiary level partners provided stewardship, while a Working Group comprising of all implementing partners provided effective project decentralisation.

The project efficiency could have been improved if schoolteachers focussed on vision screening and eye health promotion, as in this approach a large number of children with ‘any eye problem’ were referred to refractionists, while only 30.6% of them needed refraction and spectacles. By changing the school eye health screening procedure, fewer children would need to be referred for assessment by refractionists.

The project generated demand for eye health services, increased partner capacities in high volume activity, and reduced the magnitude of cataract blindness in the target slum localities by 33,000. It also successfully refracted close to 130,000 slum dwellers and provided over 100,000 people with spectacles. Hospital attendances of outpatients at partner hospitals increased by almost 20% between 2008 and 2011, and this met the

project target of 20% increase in access to appropriate eye services for people living in poor urban communities.

The project strengthened most health systems building blocks, but fell short of aligning the information systems with the government e-health/health information system or that of LGRD&C, and did not adequately explore strategic entry points or options for synergy with other government initiatives.

The overall project design could have been improved through pre- and post- KAP studies, pre- and post- RAABs and by aligning the baseline with key logframe and impact indicators.

The community component of the project is likely to continue because the CBOs are already committed to other initiatives in the slum areas and have internalised eye health awareness into their community awareness activities. The frequency of the PSPs would reduce but are likely to continue intermittently as several NGO partners noted their value addition in increasing the uptake of services. During focus group discussions with communities, they indicated that they were willing to invest in local transport costs provided they were assured of quality and continuity of services i.e. a one-stop service for their eye health needs. With regards to spectacles, the community preferred to obtain these from private optical shops.

The NGO hospitals have provision for social protection of the extreme poor, while government hospitals provide a safety net for those who require surgery.

Recent initiatives like the Slum Development Plans by the Dhaka City Corporations provide strategic entry points for PSPs at poverty eradication centres to be established through these plans.

The data shows that only the VCs at MGH and Ad-Din were able to achieve and sustain an operating cost coverage ratio (OCCR) of 1 or more, where an OCCR of 1 means that a revenue amount equal to the operational cost has been generated, or in other words has achieved break-even cost. The performance trends of the VCs showed that generally, hospital based VCs were more sustainable as the patients had continuity of service, access to ophthalmologists and surgical facilities. However, those located in the market performed poorly.

Overall, the evaluation team found that while all the other components of DUCECP worked in a coordinated manner and achieved high performance for a generally successful project, the VCs were a discordant component to the rest of the project design. There were definitional gaps about VCs in the project design, which is understandable as this was a new experiment in Dhaka City, but the VC approach was not available until after the formal project life. Only 2 out of the six had any value addition to offer. The no-cost extension period may have been better served if time was spent to first understand and then develop a business model, rather than try and establish four more VCs.

The project generated synergies between different stakeholders. The PMC adopted a joint approach towards addressing project deliverables and ensured that each tier was aware of interaction with respective tiers. PMC and Working Group meetings provided an effective platform to resolve issues and improve project planning and execution. The project demonstrated good complementarity between community mobilisation and PSPs, and between PSPs and clinical services facilitated by logistic arrangements. The project

mobilised a network of NGOs and CBOs that contributed significantly to the success factor of PSPs.

The project had some contradictions. For instance, the VCs did not have any operational definition and the operational approach was not well defined in the project proposal. The VC design did not involve implementing partners, and although information sharing took place, there was no consultative planning.

Several project components have shown potential for scalability, For instance, the PSPs have been accepted by the slum communities as an effective screening and referral option. Secondly, health staff of high performing field level NGOs and CBOs who collaborated in DUCECP can be trained for improved patient screening.

The project as a whole is not at a stage where it can be said to have developed a model or approach for scalability. The gaps identified by the evaluation would need to be addressed and this may require a follow-up phase of the project in which deficiencies can be addressed and approaches and scalability options clearly documented.

Future urban eye health interventions would need to give consideration to building in a component of eye health preparedness in emergencies so that collaborating NGOs, field level partners and CBOs can integrate emergency eye health in their overall organisational programme portfolio, so that in the event of water-logging and flooding, a rapid response mechanism would exist to provide coverage of eye care services to affected slum dwellers.

LEARNING

Dhaka is a complex urban entity with overlapping boundaries. There is a pressing need to understand the functioning and structures of local government and ministry of health. When designing urban eye health interventions, it is vital to document institutional arrangements and undertake a policy analysis and stakeholder mapping. Preparatory time is required to undertake analysis and mapping so that options for synergy and engagement can be identified.

It is helpful to establish criteria to identify slum sites for intervention. Some examples of criteria may include population density, poverty score, on-going health initiatives, local government target areas, partnership areas of NGOs, location of and proximity to tertiary referral centres, etc.

In urban eye health projects, it is important to understand slum dynamics as most slum dwellers are daily wage earners. For this group of people, time lost in going to two or three service centres means loss of earnings. Slum dwellers seek continuity and quality of service and minimal time lost and cost incurred.

While estimating targets during the project design phase, they should not only be set for the purpose of the project, but also take into consideration the capacity of the partner to sustain those levels after the project ends.

For projects that include a component on school screening for refractive errors, a quality assurance mechanism that involves periodic and random sample review by an ophthalmologist or optometrist of children refracted should be built into project design.

School eye health is an important entry point for urban eye health. However, the role of teachers in vision screening needs to be clearly defined and an appropriate curriculum and training provided. Furthermore, in order to efficiently manage a school eye health programme, the age groups for screening need to be clarified. The needs of refraction in children require advanced knowledge and skills, competencies found in ophthalmologists or optometrists, and deploying refractionists for this purpose should be avoided. In a country like Bangladesh, where optometry training has only just taken root in the non-government sector, finding well trained optometrists for school eye health may be a challenge. School eye health should be linked with ministry of education programmes for school health.

A more efficient and effective advocacy approach could have been to deploy a small advocacy team with expertise in communications and marketing, identify the top three advocacy objectives, conduct a stakeholder analysis, develop a supporting advocacy strategy and implement a plan to address these.

The project design for urban eye health can be greatly improved by incorporating a baseline that is linked to project indicators, pre- and post- KAP, pre- and post- RAABs or even RAAB+DR. It is essential that a preparatory period leading up to project proposal development is included in the planning stage (or provision made for this in the first few months of the approved project) and at the end of the project stage. This may include a 3 months lead up time in proposal development for institutional and stakeholder analysis and mapping, baseline, KAP, RAAB, and refining the logframe, and a similar 3 months at the end for post studies before the evaluation.

Urban health projects are complex in nature as oftentimes urban slum settings do not have a planned health infrastructure, and are therefore exposed to a multitude of stakeholders and changing cityscapes. Furthermore, the institutional and organisational boundaries complicate the intervention strategies and partnerships. Urban eye health interventions in slum areas should be planned in a programme mode on a long term basis (e.g. 10 years) rather than as campaign projects, as the earlier part of the programme lays the foundation and provides the insight for a more refined and tactical strategy, while it is in the latter part of the programme that sustainable changes are likely to take place. The current project has mobilised support and acceptance for eye health, but not yet led to institutional change. A follow-up second phase would be required to galvanise institutional trends towards sustainability.

For future interventions in urban eye health, programme staff with a background or expertise in urban development should be recruited to improve the effectiveness of networking, linkages development, strategic positioning of eye health in urban development initiatives and maximising synergies with other urban health and development actors.

While the intent to establish VCs was well rationalised, the implementation modality remained a challenge. This is a concept that is new to the organisation and also to the implementing partners. An approach that may have worked elsewhere and possibly in semi-urban or rural settings, found itself in uncharted territory in a densely populated city like Dhaka abundantly endowed with specialist eye care services. One learns as much from programme successes as one does from programmatic challenges. The learning from the VC experiment in DUCECP should feed into meta-analyses of other urban eye care projects in the region that have incorporated a VC component and distil from this policy recommendations and improvements for programme design. VCs are like a bridge between socially inclined non-government services at one end and business oriented services at the other with a community that traverses to either end at will.

There is great merit in holding an organisational level consultation with a global leader in optometric and optical entrepreneurship models e.g. Brien Holden Vision Institute to develop an approach for VCs or their equivalent consistent with current global thinking and perhaps even explore outsourcing options.

There are numerous actors engaged in slum development related projects and programmes in Dhaka City. It would be prudent to identify a few select organisations to partner with in order to fast-track inroads to urban health and leverage organisational and institutional change supportive of eye health.

Up to now, urban eye health has been viewed as a tri-pronged intervention – mobilise communities to generate demand, screen communities to identify those with avoidable blindness and visual impairment, and provide surgical and medical treatment. Urban eye health needs to be contextualised within broader urban health and development, and the factors that affect these. One example is climate change that cuts across development initiatives and health intervention strategies. Dhaka City embodies all the social, economic and development challenges of a densely populated metropolis, which is further compounded by the fact that it is one of the top ten megacities globally at high risk to effects of climate change. Urban eye health interventions and approaches in future will need to be redefined in cities that have high climatic risk.

RECOMMENDATIONS

1. In design of urban eye health projects, it is imperative to undertake a thorough institutional and stakeholder analysis to identify strategic entry and synergy points, and to complement this with information on spatial mapping of slum areas, vulnerable communities and service providers so that interventions can reach the excluded groups, be more effective and sustainable
2. The three tiered approach adopted by the project proved to be an effective modality for urban eye health to enhance coverage and uptake of services, whose components include competent clinical partners with capacities for high volume surgery and provision of comprehensive eye care services, intermediary field-level NGO partners with expertise to collaborate and coordinate with CBOs, and a network of CBOs already working in the project area with expertise for community mobilisation and awareness raising. This approach should be replicated and adapted in other urban eye care projects as an example of good practice
3. A decentralised management structure in such a large project is essential for planning, execution, monitoring and coordination, while locating the project management unit or secretariat in a leading implementing partner greatly enhances ownership and builds capacities for improved project management
4. The advocacy needs of large and complex projects require a professional approach, and therefore a team with the right skill mix and expertise should be deployed for this purpose to develop the supporting advocacy strategy and execute it according to a well conceived plan
5. Large scale urban health projects should not only focus on the service delivery quotient, but also use it as a springboard to leverage community, organisational and institutional change through well planned and executed advocacy
6. The gains made in this project should be used to enhance engagement with higher levels of local government and jointly design and align eye health strategies with slum development plans of local government. This would require appropriate allocation of resources
7. Vision Centres should be treated as a separate project, for instance one linking entrepreneurship models with training of optometrists or establishing business oriented vision centres in partnership with the private sector and non-government organisations that have the capacity and inclination for private enterprise
8. While conducting institutional mapping of actors and stakeholders in urban health, it is important to determine existing coordination mechanisms and options from which synergies can be derived. Future urban eye health interventions should aim at targeting multi-level coordination – central or ministerial level, metropolitan or city corporation level, and ensure that this extends to zonal and ward level coordination
9. A follow-up phase to DUCECP is required to address gaps and deficiencies identified in the evaluation to develop a model for urban eye health that can be scaled up or replicated in other cities
10. There is need to build and strengthen the capacities of civil society and public sector actors (involved in urban health) in eye health preparedness in emergencies and support the development of a rapid response mechanism in case of disasters

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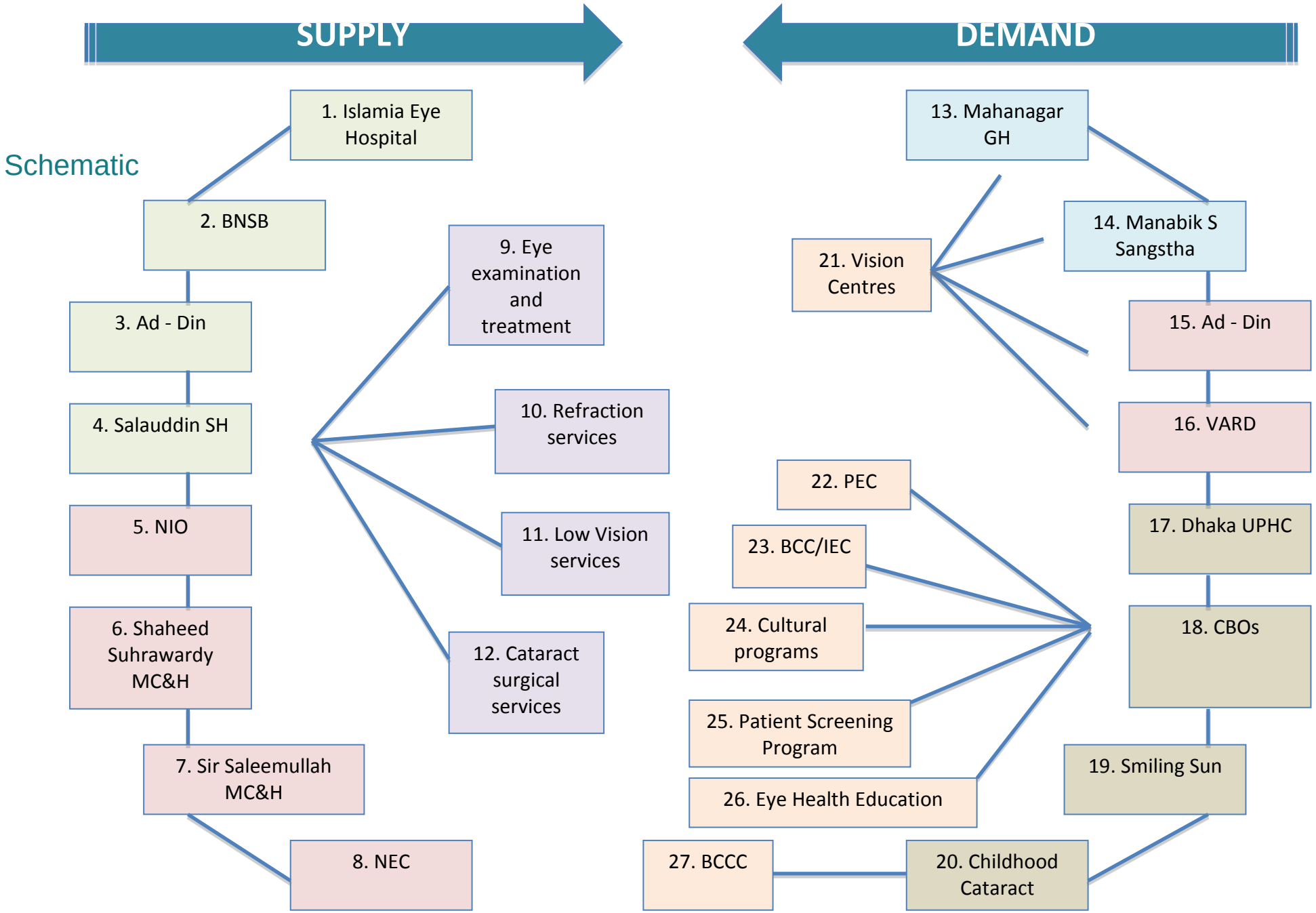
Schematic


SUPPLY
DEMAND
1. Islamia Eye Hospital
2. BNSB
3. Ad - Din
4. Salauddin SH
5. NIO
6. Shaheed Suhrawardy MC&H
7. Sir Saleemullah MC&H
8. NEC
9. Eye examination and treatment
10. Refraction services
11. Low Vision services
12. Cataract surgical services
13. Mahanagar GH
14. Manabik S Sangstha
15. Ad - Din
16. VARD
17. Dhaka UPHC
18. CBOs
19. Smiling Sun
20. Childhood Cataract
21. Vision Centres
22. PEC
23. BCC/IEC
24. Cultural programs
25. Patient Screening Program
26. Eye Health Education
27. BCCC

Appendix 1 – Evaluation Matrix and Indicators

Relevance

Main evaluation question	Indicator	Data Source	Data collection method	Sampling	Method of Data Analysis
How aligned is the project to Sightsavers strategic direction as set out in its Strategic Framework (2009 – 2013, and extended 2013 – 2018) and Bangladesh development priorities and policies and VISION 2020?	Alignment of project objectives against check-list of Sightsavers funding objectives	Project documents	Document review Interview		Tabulation
What specific local, national and international development priorities and policies is it aligned to and how?	Alignment of project outputs against check-list of priorities and policies	Project documents	Document review Interview		Tabulation
How relevant is the project in light of the broader objectives of SiB Phase IV?	Alignment of project with broader SiB phase IV objectives	Project documents	Document review		Thematic analysis

Effectiveness

Main evaluation question	Indicator	Data Source	Data collection method	Sampling	Method of Data Analysis
To what extent has the project delivered against the planned objectives and outputs and what factors (if any) have contributed/hampered this?	Project performance of key outputs against intended targets	Project documents	Document review Interview		Narrative
To what extent is trained staff competently performing their duties?	Training manuals and tasks specified for training	Project deliverers	Observation		Narrative
How effective have hospital partners become in managing high volume cases as a result of this project?	Project performance of key outputs against intended targets by key partners	Project documents	Document review Observation		Narrative
What are the strengths and weaknesses of the project and its approaches?	Identification of strengths and weakness factors	Project deliverers	Interview		Thematic analysis
How effective is the referral chain at different levels?	Project performance of referral statistics	Project documents	Document review Observation		Narrative
How effective are the services: mobilisation, clinical, counselling?	Project performance of mobilization, clinical and counselling	Project deliverers	Interview Observation		Thematic analysis
Measuring effectiveness with the help of some of the process indicators from the log frame, e.g. did the project achieve indicator for 1.3: At least 5% increase in patients being referred each year? Or 3.1 Increase in number of cataract patients referred to partner hospitals. What % of cataract operated patients gained vision between 6/6 to 6/18?	Project performance of key outputs against intended targets by key partners	Project documents	Document review		Narrative
Has the cataract surgical rate at the partner hospitals changed over the life of the project?	Project performance of key outputs against intended targets by key partners	Project documents	Document review		Narrative

Efficiency/Cost-Effectiveness

Main evaluation question	Indicator	Data Source	Data collection method	Sampling	Method of Data Analysis
To what extent has the project provided a cost-effective approach to delivering services that meet or have the potential to meet the V-2020, National Eye Care Plan as part of government's health sector programme?	Unit cost estimation of key activities/outputs	Project documents	Document review		Tabulation
How well is the project being implemented?	Percentage implementation plans achieved Referral pathway statistics for eye care, community and school components	Project documents	Document review		Tabulation
Have resources been captured in a way that maximizes their use?	Project performance of key outputs against intended targets	Project documents	Document review		Narrative
At what level is the project most cost-effective as far as reaching vulnerable/marginalised groups such as women, elderly, children, men, communities, urban, slum dwellers or a mixture of these	Project performance of key outputs against intended targets	Project documents	Document review Observation Interview		Narrative

Impact

Main evaluation question	Indicator	Data Source	Data collection method	Sampling	Method of Data Analysis
Has the project met the objectives, outputs & indicators from the log frame?	Percentage of key outputs / outcomes that are on track	Project documents	Document review Observation		Tabulation
In the context of World Health Organisation six building blocks for Health Systems Strengthening, what are the main changes produced by the programme, positive or negative and what are the key factors behind these changes?	Key project activities and their outcomes viz a viz health systems building blocks	Project documents Project deliverers	Document review Interview Focus groups (community)		Tabulation Thematic analysis
What is the evidence of increased demand for eye health services and preventative eye care measures within the targeted communities, and changes in the lives of beneficiaries as a result?	Views of stakeholders about project Outpatient visits records and referral trends	Project beneficiaries Persons with knowledge of project recipients Project documents	Interview Focus groups Document review		Thematic analysis
Has there been a change in the capacity of the partner hospitals and at what level?	Views of stakeholders about project	Project deliverers	Interview Focus groups		Thematic analysis
What is the perception of all the key stakeholders of the project and its impact? E.g. the beneficiaries, local authorities / government and staff (hospital, vision centre etc).	Views of stakeholders about project Views of local authorities about project	Project beneficiaries Persons with knowledge of project recipients	Interview Focus groups		Thematic analysis

Sustainability

Main evaluation question	Indicator	Data Source	Data collection method	Sampling	Method of Data Analysis
How likely is it that specific project activities and outputs will continue after the project funding finishes? Who will be responsible for this?	Key project activities internalized or not adopted by local, provincial and national institutions	Project deliverers	Interviews Observation		Thematic analysis
Will the trained staff stay in their roles? What incentive is there for them to stay – depending on the circumstances and discussions with stakeholders	Key project activities internalized or not adopted by local, provincial and national institutions	Project deliverers	Interviews		Thematic analysis
Are the VC's financially viable? Do the CBO's and hospitals 'managing' the VC's want to continue supporting them?	Key project activities internalized or not adopted by local, provincial and national institutions	Project deliverers	Interviews		Thematic analysis
What kinds of partnerships (if any) have been built with governmental and international organisations and how will these influence sustainability?	Partnership arrangements with local social development institutions	Project deliverers	Interviews		Thematic analysis
What are the key factors that ensure (or will ensure) sustainability of the programme beyond SiB and Sightsavers support?	Viability trends of key activitiesand vision centres	Project documents	Document review Observation		Tabulation

Coherence/Coordination

Main evaluation question	Indicator	Data Source	Data collection method	Sampling	Method of Data Analysis
To what extent has the intervention systemically created synergies with other institutions, towards achieving the defined objectives and goals over time?	Examples of synergies with project and non-project stakeholders	Project documents Project deliverers	Document review Interview		Tabulation Thematic analysis
Are there specific mutually reinforcing policies that have been promoted by the project over time to create these synergies?	Policy trends viz a viz key activities	Project documents	Document review		Tabulation
How have the project activities been coordinated in light of similar or other sectoral interventions/approaches in the region?	Coordination with non-project stakeholders	Project documents Project deliverers	Document review Interview		Tabulation Thematic analysis
To what extent do the project objectives, approaches and design complement and/or contradict each other?	Consistency between project objectives, outputs and activities	Project documents Project deliverers	Document review Interview		Tabulation Thematic analysis

Scalability/Replicability

Main evaluation question	Indicator	Data Source	Data collection method	Sampling	Method of Data Analysis
Is any aspect of the programme or its components likely to be scaled or replicated by participating partners, other agencies or government? How likely is this to occur or what conditions need to exist for this to happen? What factors or constraints might inhibit this process?	Key project activities internalized or scaled up by local, provincial and national institutions	Project deliverers	Interview		Thematic analysis
What evidence has been generated by the project to support scalability efforts by interested parties? How has the project packaged and shared this evidence to date?	Project activities aligned with sectoral strategies (e.g. health, education, disability etc)	Project documents	Document review		Tabulation
In the event of a scale-up, what lessons learnt from the implementation process in this context need to be taken into account?	Key project activities internalized or not adopted by local, provincial and national institutions	Project deliverers	Interview		Thematic analysis

Appendix 2 – Data Collection

Data Sources	Data Collection Methods	Justification
Sightsavers Country Office	Semi-structured Interview	Qualitative information and validation
Project managers	Semi-structured Interview	Qualitative information and validation
Local government officials	Semi-structured Interview	Qualitative information and validation
School administrators, teachers and students, communities	Semi-structured Interview Focus Group Discussions	Qualitative information and validation
Community members (if available) in project areas who have benefited from the project	Semi-structured Interview Focus Group Discussions	Qualitative information and validation
If possible non-beneficiaries as well to produce counterfactual evidence	Focus Group Discussions	Qualitative information and validation

Appendix 3 – List of Persons Met

List of Partners Visited:

1. Ad-Din Hospital
2. Ispahani Islamia Eye Institute and Hospital
3. Mahanagar General Hospital
4. National Institute of Ophthalmology and Hospital
5. National Eye Care
6. Shaheed Suhrawardy Medical College and Hospital
7. Voluntary Association for Rural Development

List of Officials:

1. Prof Deen Mohammad Noorul Huq – Director General Health Services
2. Dr Sheikh Mohiuddin – Executive Director, Ad-Din Hospital
3. Dr Mohammad Tariqul Islam – Deputy Director, Ad-Din Hospital
4. Dr Motin – Ophthalmologist, Ad-Din Hospital
5. Mrs Zahida Ispahani – Advisor, Ispahani Islamia Eye Institute and Hospital
6. Dr Michael Hall – Chief Executive Officer, Ispahani Islamia Eye Institute and Hospital
7. Dr Alamgir Hossain – Director Planning and Development, Ispahani Islamia Eye Institute and Hospital
8. Dr Mohammad Azmal Hossain – Director, Dhaka Mahanagar General Hospital
9. Prof Dr Jalal Ahmed – Line Director National Eye Care, and Director National Institute of Ophthalmology and Hospital
10. Dr Sharif Ahmed – Asst Professor, Department of Ophthalmology, Shaheed Suhrawardy Medical College and Hospital
11. Dr Syeda Nushrat Parvin - Asst Professor, Department of Ophthalmology, Shaheed Suhrawardy Medical College and Hospital
12. Mr Amranul Hoque Kamal – Founder and Executive Director, Voluntary Association for Rural Development

Appendix 4 – Interview Questions

Interviews of Partners

How did you plan the project activities? Setting targets, locations and coverage? Were targets realistic?
How did you review the progress of project activities? Work plan, meetings, visits
What were key achievements and challenges in identification and mobilization of people with VI?
What was the quality assurance mechanism in place for effective screening, examination, treatment and referrals? What process was followed to ensure quality in cataract surgery?
How was coordination maintained with various stakeholders? What synergies were created with other institutions?
In your opinion, has the project delivered against the planned objectives and outputs agreed with your organization?
What factors (if any) have contributed/hampered this?
What major change occurred in eye health as a result of your organization's advocacy?
If you were to implement this project again, what changes would you suggest in the project strategy or approach?
How did your organization benefit from this project? Capacities, resources, systems?
What kind of training did you organize for your staff and other stakeholders through this project? What was achieved through these trainings?
How will trained staff be retained after the project?
What exit strategies did you agree on and how will this project continue in the future? What components are likely to be replicated or scaled up?
What is your perception about the partnership with Sightsavers and other organizations specifically in this project?
What in your opinion are the main learnings of this project? How are they being shared and disseminated at national level?

Interviews of Ministry of Health (NEC) and Local Government

What do you know about Dhaka Urban Comprehensive Eye Care Project?
How is eye health reflected in current health (primary health care) and education policies and strategies? What were the key plans and strategies for primary health care in context of eye health?
How was eye health institutionalized into urban PHC?
How did eye health and urban PHC coordinate with each other for screening, examination, treatment and referrals?
What indicators of eye health were collected, collated and reported by urban PHC and other stakeholders? How are these aligned with the national HMIS?
How was coordination in this project similar or different to other sectoral projects?
What kind of training did you organize for your staff and other stakeholders through this project? What was achieved through these trainings?
Any suggestions?

Interviews of School Teachers

What training did you receive for eye health screening in schools?
Were you satisfied with the training? If not, why and what steps should be taken to improve it?
Where were children with VI referred for further check up?
What kind of support was provided by teachers to the VI students in classrooms?

Interviews of children with VI in schools

What difficulties were you facing before the identification of VI?
How was your VI identified?
Do you use spectacles or assistive devices?
If yes, what are the key benefits?
What challenges do you face in the use of spectacles or any other assistive devices?
What do you know about hygiene promotion?

Interview of NGOs and CBOs

How did you identify people with visual impairment in the community?
What steps did you take to mobilize the communities for seeking eye care services?
How many of these identified cases took your advice and went for further check-up? What process did you use to determine this?
How were the BCC strategy and IEC material developed, implemented and what changes occurred as a result? Which of the various methods for BCC and IEC material did you find most useful?
What kind of counseling services did your organization offer in this project?
How will this mobilization be sustained after exit?
What kind of training did you organize for your staff and other stakeholders through this project? What was achieved through these trainings?
Any other suggestions?

FGDs with communities

Where did you go for eye care examination and treatment before this project?
What do you know about the Dhaka Urban Comprehensive Eye Care Project?
How did you and your families benefit from this project? Give examples
How satisfied were you with the services?
Will you continue to seek services from the eye health clinics and vision centres after exit of the social mobilization teams?
How much/up to what price are you willing to pay for cataract surgery?

Questions for Sightsavers

How aligned is the project to Sightsavers strategic direction as set out in its Strategic Framework (2009 – 2013, and extended 2013 – 2018) and Bangladesh development priorities and policies and VISION 2020?
What specific local, national and international development priorities and policies is it aligned to and how?
What in your opinion are the main learnings of this project? How are they being shared and disseminated at national level?

Appendix 5 – Work Plan

	WO 20/10	WO 27/10	WO 3/11	WO 17/11	WO 24/11	WO 1/12	WO 8/12	WO 15/12	WO 22/12	WO 29/12	WO 5/1
Inception Phase											
Document Review											
Consult Sightsavers											
Preparing Draft Methodology											
Draft Inception Report	X										
Comments from Sightsavers			X								
Output 1: Final Inception Report			X								
Data Collection and Field Visits Phase											
Interviews in Dhaka											
Field visit to Dhaka											
Data Analysis and Report Writing Phase											
Systematize and analyse data											
Draft Evaluation Report							X				
Comments from Sightsavers									X		
Output 2: Final Evaluation Report											X

Appendix 6 – Persons Trained

Type of Training	Participants	Target Number	Duration of training	Number trained
Eye Care management course	Project Coordinator & Project Officer	1	14 Days	**2**
Social mobilisation course	Field Coordinator & Organiser	5	5	**5**
Advocacy training	Senior staff and representatives of the governing body of the hospital partners	6	3	**6**
Counselling training	Counsellors	5	6 days	**7**
Course on income tax	Accounts Officer	1	5 Days	**1**
Geographical Information System (GIS) course	Management Information System Officer	1	30 Days	**1**
IOL microsurgery including SICS training	Ophthalmologist	7	10 weeks	**4**
Nurses training on ophthalmology	Nurses	11	3 months	**18**
Refraction training course	Refractionist	14	1 year	**8**
Optical dispensing training	Optical dispenser	4	3 months	**9**
Low vision training	Refractionist	4	1 month	**4**
Orientation on Standard protocols & other eye care issues - twice in one year	Surgeons, Nurses, paramedics, counsellor, etc.	140	1 day	**264**
Orientation on primary eye care and case finding for CBO staff	Staff of different Community Based Organisations (CBO)	2,000	1 day	**2483**
Orientation Dhaka City Corporation & Local Government Institution (LGI) members	Members	300	1 day	**118**
Orientation of ophthalmologist and others on LV	Ophthalmologist & other professionals	240	1 day	**76**
Exposure visit for hospital management & ophthalmologist	Management Personnel	TBC	1 day	**27**
Basic ophthalmology training	Medical Officer		1 month	**4**
Social mobilisation course	Field Coordinator & Organiser			**15**
Motivation & enhancement training	Ophthalmologist & other professionals		2 days	**59**
		2,739		**3,111**

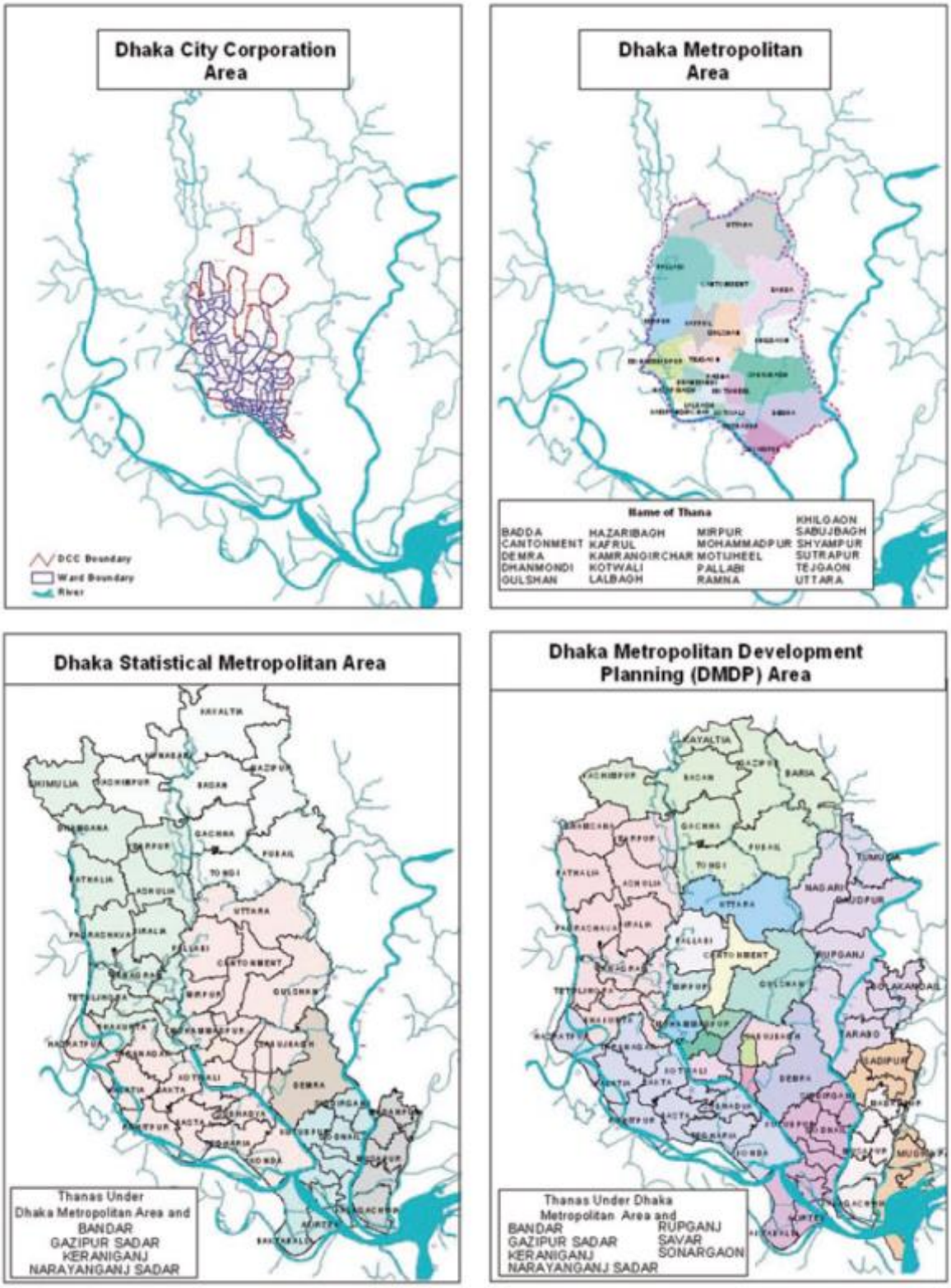
Appendix 7 – Financial Performance

Detail of Activities	Total Approved Budget	Approved budget to date	Expenditure to date	Burn Rate
				%
Staff Costs	143,812	143,812	143,825	100.01
Travel	1,782	1,782	1,476	82.86
Office Costs	20,082	20,082	19,422	96.71
Staff Training Costs	-	-	-	
Audit	2,766	2,766	2,766	100.00
Indirect costs sub-total	**168,442**	**168,442**	**167,490**	99.43
Medicines	327,519	327,519	327,518	100.00
Consumables / small equipment	330,667	330,667	328,794	99.43
Patient Support Costs	429,291	429,291	429,466	100.04
Primary Eyecare Activities	216,177	216,177	216,087	99.96
Advocacy costs	18,349	18,349	18,349	100.00
HRD costs	50,999	50,999	47,893	93.91
Project evaluation and Research costs	82,714	82,714	26,471	32.00
Direct costs sub-total	**1,455,716**	**1,455,716**	**1,394,578**	95.80
Infrastructure (IT, Vehicle etc)	-	-	-	
Capital Equipment	33,064	33,064	33,064	100.00
Capital costs sub-total	**33,064**	**33,064**	**33,064**	100.00
Total	**1,657,222**	**1,657,222**	**1,595,131**	96.25

Appendix 8 – List of collaborating NGOs

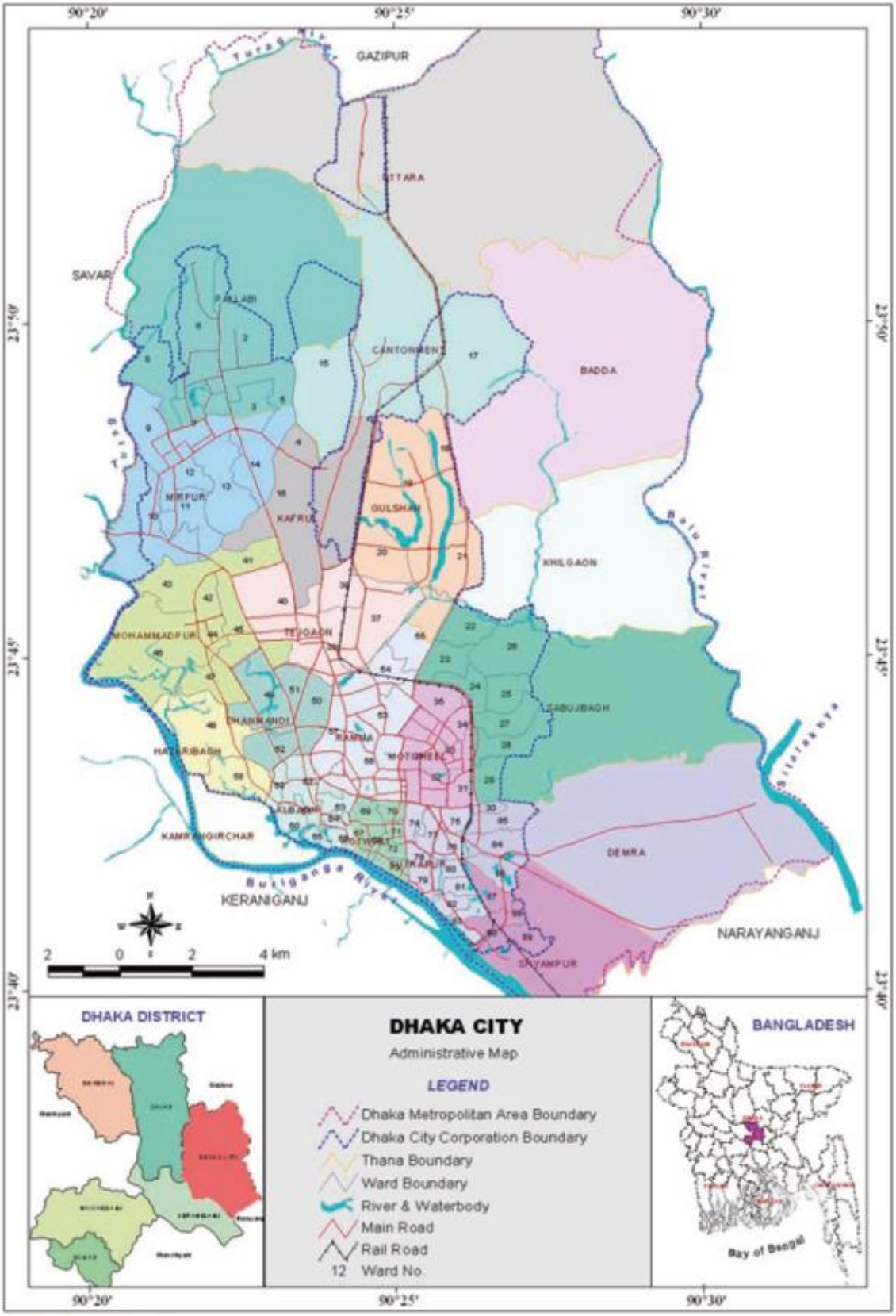
	Name of Partners	Type	Type of Works
1	PSKP (Progoti Samaj Kallyan Protisthan)	NGO	Health
2	DSK (Dushtha Shasthya Kendra)	NGO	Health, Microcredit, Water & Sanitation
3	Intervida/Educo	INGO	Education
4	Marie Stopes	INGO	Health
5	Padakhep Manabik Unnayan Kendra	NGO	Health, Agriculture, Microcredit, Education etc.
6	BAPSA(Bangladesh Association for prevention of Septic Abortion)	NGO	Health
7	PSTC (Population Service & Training Centre)		Health, Poverty Reduction, Disaster Preparedness and Management, Training & Communication
8	SHIMANTIK	NGO	Health
9	Nari Maitri	NGO	Sanitation, Health, Microcredit etc
10	World Concern	INGO	Education, Health, Relief & Rehabilitation
11	HEED Bangladesh	NGO	Education, Vulnerable Group Development, Training, Handicrafts etc.
12	BWHC(Bangladesh Women's Health Coalition)	NGO	Health
13	ASD(Assistance for Slum Dwellers)	NGO	Food, Education, Health and Nutrition , Rights and justice, Water and Sanitation, Information ,Institution Building, Skills Development and Savings & Credit.
14	BSWS (Bandhu Social Welfare Society)	NGO	Supporting Sexual Health and wellbeing of sexual Minorities
15	SHIREE (Stimulating Household Improvements Resulting in Economic Empowerment) - DFID	INGO	Work with extreme poor people

Figure 10 - Dhaka City Organizational Definition of Boundary



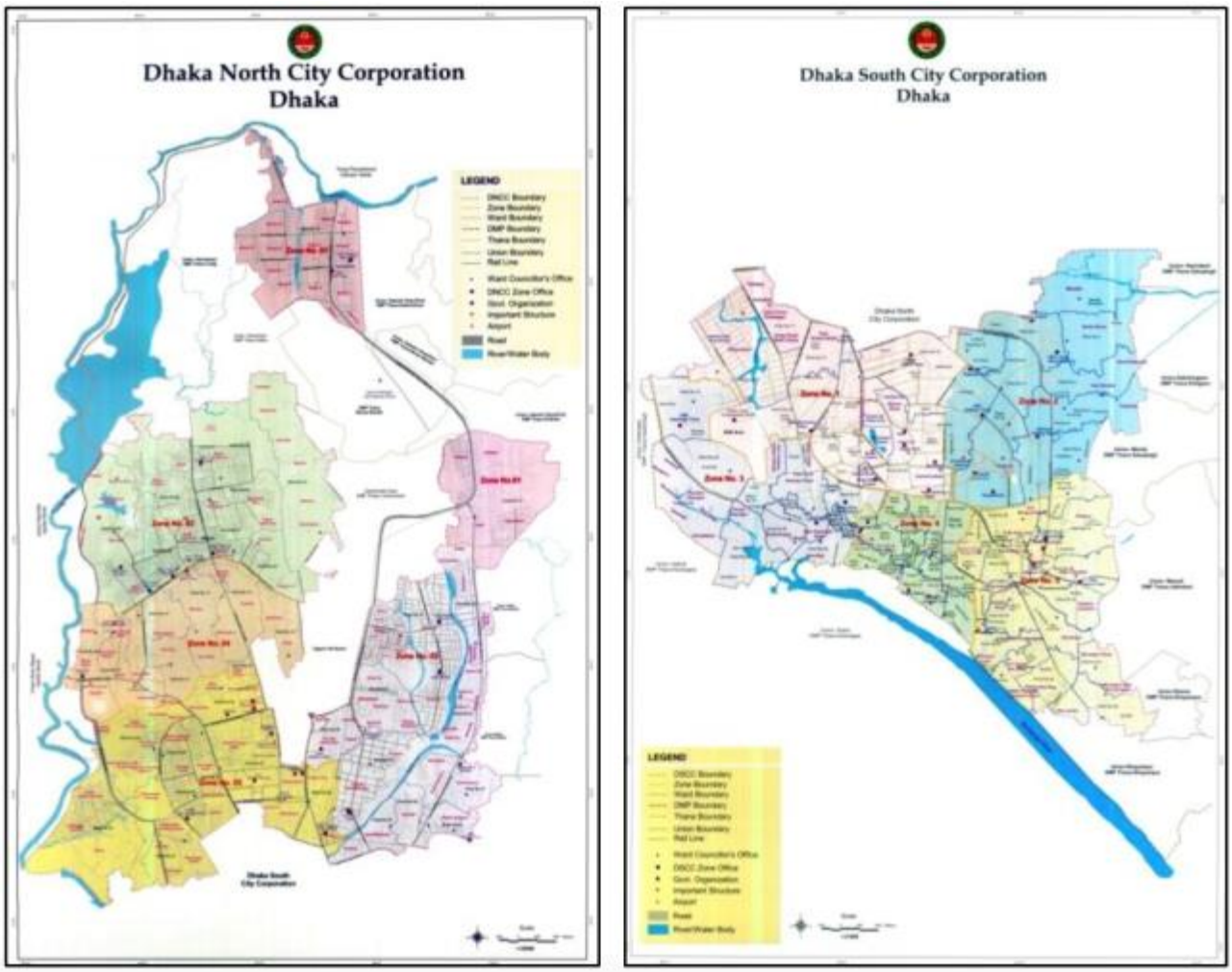
Source: Resilient Cities. Local Sustainability Volume 1, 2011. Editors: Konrad Otto-Zimmermann. Chapter 52, pp 531-541. Climate Change Implications for Dhaka City: A Need for Immediate Measures to Reduce Vulnerability. Golam Rabbani, A. Atiq Rahman, and Nazria Islam

Figure 11 – Location and Administrative Units of Dhaka City



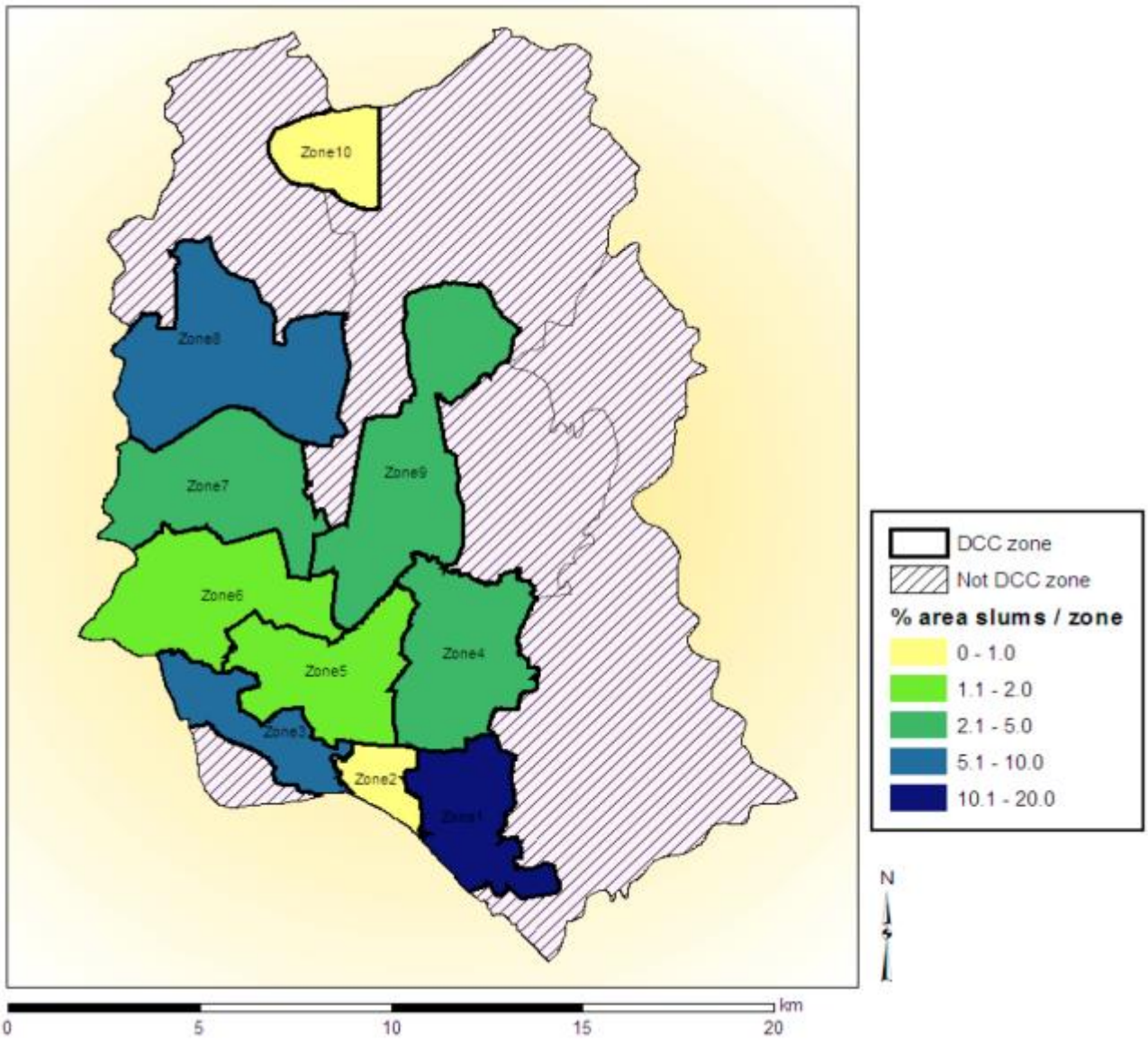
Source: Resilient Cities. Local Sustainability Volume 1, 2011. Editors: Konrad Otto-Zimmermann. Chapter 52, pp 531-541. Climate Change Implications for Dhaka City: A Need for Immediate Measures to Reduce Vulnerability. Golam Rabbani, A. Atiq Rahman, and Nazria Islam

Figure 12 - Dhaka North and South City Corporations



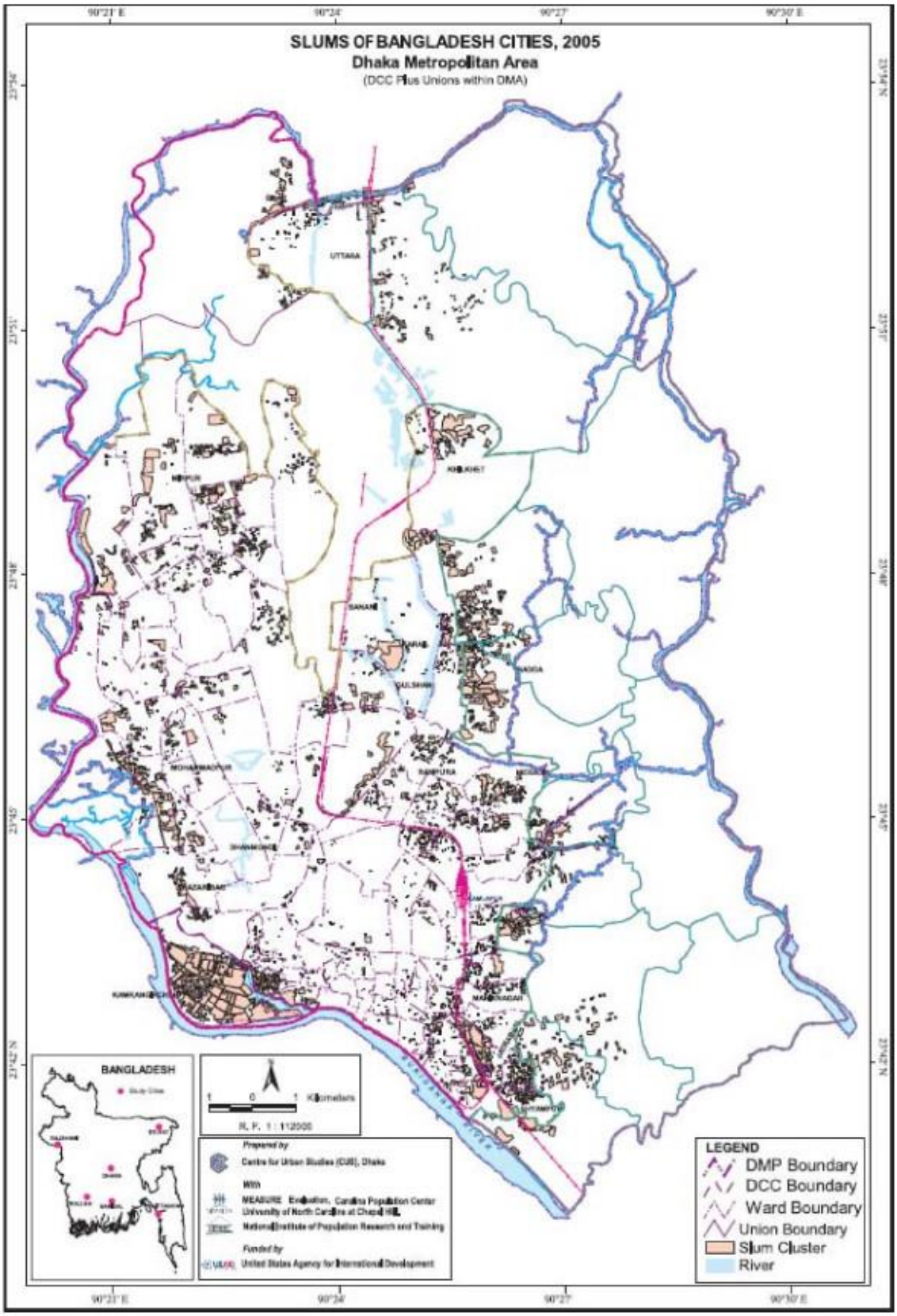
Source: Shiuli Pervin. Semantic web approach for dealing with administrative boundary revisions: A case study of Dhaka City. Master Thesis for Degree of Master of Science in Geospatial Technologies. 2013

Figure 13 - Slum Development in Dhaka City



Source: Dhaka: Improving Living Conditions for the Urban Poor. Bangladesh Development Series Paper No. 17. The World Bank Office, Dhaka. June 2007

Figure 14 - Slums of Dhaka Metropolitan Area



Source: Gustavo Angeles, Peter Lance, Janine Barden-O'Fallon, Nazrul Islam,AQM Mahbub and Nurul Islam Nazem. The 2005 census and mapping of slums in Bangladesh: design, selectresults and application. International Journal of Health Geographics 2009, 8:32.doi:10.1186/1476-072X-8-32

Appendix 9 – Terms of Reference

Title: Strategic Evaluation of Dhaka Urban Comprehensive Eye Care Project (DUCECP)

Sightsavers is an international development organisation working to contribute to the achievement of the MDGs by eliminating avoidable blindness, and promoting equality of opportunity for disabled people. Currently, Sightsavers is supporting projects in countries across Africa, Asia and the Caribbean.

On 1 October 2008, Sightsavers launched the Dhaka Urban Comprehensive Eye Care Project (DUCECP) supported by the Seeing is Believing initiative of Standard Chartered and co-financed by Sightsavers.

1. Background

1.1 Project name: Dhaka Urban Comprehensive Eye Care Project (DUCECP)

1.2 Project duration: 1 October 2008 – 30 September 2013 (as per the original proposal), which was given a 'no cost extension' till 30 September 2014 in order to allow the project complete one of its key outputs i.e. establishment of all (six) vision centres

1.3 Project budget: USD 1,657,222

1.4 Project Partners include:

- Ispahani Islamia I Eye Institute and Hospital (IIEI&H), Dhaka Bangladesh National Society for the Blind (BNSB) and Ad-Din Hospital, Salauddin Specialized Hospital Ltd who support project implementation and ensure availability of quality eye health services.
- Mahanagar General Hospital of Dhaka City Corporation and Manabik Shahajya Sangstha who have established two vision centres.
- Three public hospitals: National Institute of Ophthalmology & Hospital, Shaheed Suhrawardy Medical College and Hospital, Sir Salimullah Medical College and Mitford Hospital and the National Eye Care of the Government of Bangladesh. These partnerships were established as a direct result of recommendations included in the Mid-Term-Review to support sustainability and increase access to services for target beneficiaries.
- Voluntary Association for Rural Development, who support three vision centres, and Ad-Din Hospital who support one more Vision Centres. These partnerships were established during the 'no-cost-extension' period.
- The project has also developed a collaboration mechanism with other service providers in Dhaka City to support its community mobilization initiatives, such as organizing patient screening programme

1.5 Key Stakeholders

Key stakeholders include the National Eye Care, Director General of Health Services under the Ministry of Health & Family Welfare, collaborative NGOs/CBOs, Local Government, teachers and students of targeted schools, hospital partners, the Urban Primary Health Care Project of Dhaka City Corporation, slum dwellers and people requiring eye care services in the project area.

1.6 General information of the Project area:

Dhaka, the capital city of Bangladesh has a population of over 12 million living in the metropolitan area, making it the largest city in Bangladesh. Dhaka is one of the fastest growing cities in the world, with an estimated 300,000 to 400,000 new migrants, mostly poor, arriving to the city annually. The population is projected to grow to 20 million by 2020, making it the world's third largest city[36].

More than 11 million people in Bangladesh are considered urban poor. Of the urban poor, about 60% live in extreme poverty; the other 40% lives in 'hard-core' poverty[37]. Approximately 30% of Dhaka's population live in poor urban communities and squatters' colonies, where poor housing, high population density, a lack of environmental services such as water and sanitation, low socio-economic status and insecure tenures are common scenarios. These communities often lack the basic needs required for good health and quality of life. According to one survey, there are about 3,007 slums and squatters colonies in Dhaka alone, with a population growth rate of six to seven percent per annum[38] i.e., 216,000 per annum. Of the population of these areas, most household heads do odd jobs including working as day labourers, rickshaw pullers, garments factory workers, household workers, street site vendors etc. for their livelihood; on an average, monthly income of USD$30. The rapid growth of urbanization has also increased the number of homeless men, women and children living on the streets of Dhaka.

1.7 The Project

In July 2005, Sightsavers piloted a project titled 'Dhaka Urban Eye Care Project', in collaboration with Islamia Eye Hospital (IEH) as the lead hospital and coordinating with two more hospital partners – Dhaka BNSB and Bangladesh Lions Foundation BLF Dhaka with direct financial support from Sightsavers. The duration of this pilot project was from July 2005 to September 2008. The pilot project evaluation[39] recommended approaches to address comprehensive quality eye care:

- reviewing the location of the implementing partner in the context of access of beneficiaries
- introducing cost recovery from patients who can afford to pay for surgeries
- strong linkage development with existing health programmes other than eye care e.g. the government supported Urban Primary Health Care Project in order to ensure effective health system delivery in light of the magnitude of the cataract and other eye care problems[40].

36 Dhaka: Improving Living Conditions for thePaper No. 17, The World Bank Office, DhakaJune 2007

37 The Urban Poor in Bangladesh, Nazrul Islam et al. 1996

38 Centre for Urban Studies: Survey of Slum and Squatter Settlement in Dhaka, 1996

39 Dhaka Urban Eye Care Project Review Report, 2008 by Dr A.M. Zakir Hussain, Dr KhandakerRezaulHaque, Mr Morris Lab, Mr NurunNabi and Ms Rifat Shahpar Khan

40 Cataract blindness was identified as the major cause of blindness amongst adults (over 30 years old) in Bangladesh, according to the Bangladesh National Blindness and Low Vision Survey (2003). Approximately 4,200 people per million of the population are blind due to cataract. Using an estimate of 12 million for Dhaka's population and 140 million for Bangladesh's population, the number of adult cataract cases in Dhaka is about 50,400, with 10,000 new cases occurring each year. Amongst the urban poor, the number of cataract cases in Dhaka is about 15,120 bilateral cases, around 22,000 unilateral cases, and an annual incidence of around 3,000 cases. The estimated number of child cataract cases is 1,200 with bilateral blindness and 1,800 with unilateral blindness.

Sightsavers Strategic Framework (2009 – 2013) emphasises sustainable system development to promote access to services for all people. The role of the government is particularly highlighted, and greater emphasis is placed on quality, policy and advocacy, and systems development. Both the organisational and Bangladesh Country Office strategy highlights the need to demonstrate scalable and cost effective approaches to eye care by strengthening health systems.

On completion of the pilot project solely supported by Sightsavers till Sept. 2008, the '**Dhaka Urban Comprehensive Eye Care Project' (DUCECP)'** was launched with financial support from Standard Chartered's 'Seeing is Believing' (SiB) Phase IV initiative. The DUCECP was designed more comprehensively in the context of the type of eye health services required, with inclusion of services for refractive error, Pterygium surgeries, and dacryocystectomy (DCT)/ dacryocystorhinostomy (DCR) associated with cataract. DUCECP is being implemented from **October 2008 to September 2013, with a one year no-cost extension until September 2014**. DUCECP has partnership with four hospital partners, led by 1) Islamia Eye Hospital (renamed as Islamia Ispahani Eye Institute and Hospital (IIEI&H) recently), and located at Farmgate, Dhaka; 2) Dhaka Bangladesh National Society for the Blind (BNSB) located at Mirpur; 3) Ad-Din Hospital located at Mogbazaar; and 4) Salahuddin Specialized Hospital Ltd. located at Hatkhola for extensive geographical coverage of the 15 constituencies of Dhaka City. A Project Secretariat has been established, located at IIEI&H to coordinate the project with the other three hospital partners.

DUCECP's target population includes day labourers, rickshaw pullers, garments factory workers, household workers, and vendors, living on an average monthly income of USD30. Homeless men, women and children living on the streets of Dhaka City also benefit from the project.

All project activities implemented under DUCECP will be completed by September 2013, with the exception of the establishment of four Vision Centres under a 'no-cost extension' period till September 2014. This final strategic evaluation will also serve the purpose of project completion evaluation and inform us on the quality and achievement of the intervention according to the following seven criteria: relevance, effectiveness, efficiency, impact/results, sustainability, scalability and coherence/coordination. The evaluation should generate lessons learned to guide Sightsavers decision making in future.

1.8Goal: Contribute to the elimination of avoidable blindness in Dhaka City by the 2020

1.9 Project Purpose: The purpose of this project is to "Increase the utilization of cataract, refraction, low vision and other eye care services to cater the needs of urban people, especially the poor."

1.10 Specific Objectives:

- To increase demand for eye care services in the community and encourage preventative eye care measures
- To increase partners' capacity in providing services
- To reduce the prevalence of cataract in the project area
- To increase the use of refraction and low vision services

1.11 Outputs

- Communication and marketing strategy developed and implemented by June 2009.

- IEC and BCC materials developed, and increased volume of eye health messages disseminated.
- CBO referral network in place, holding screening camps and raising awareness
- Four partner hospitals able to provide services for cataract, Refractive Error (RE) and Low Vision (LV) by 2009.
- All categories of staff trained according to V2020 standards.
- Cataract patients referred to partner hospitals from screening camps.
- Cataract surgeries performed through partner hospitals according to standard cataract surgical protocol.
- Six vision/sub-centres established and providing refractive error services by 2010.
- Three secondary low vision centres established and operational by 2010.

2. Purpose of Evaluation

The purpose of the evaluation is to assess the projects' achievements, challenges, capture the lessons learned and way forward for Sightsavers and partners in context of relevance, effectiveness, efficiency and cost-effectiveness, ownership, strengthening of existing health system and sustainability, replicability, access creation and quality.

Thus, the evaluation will review the progress against objectives and outputs as detailed in the project document including the log frame, as well as take stock of the long-term effects made by the project on eye health. The review is depending on the availability of data such as baseline data, HMIS data at the hospitals etc. The key issues to be addressed are service delivery, institutional and overall programmatic development at the partners' level, contribution to health system strengthening and contribution made at the beneficiary level as well as financial management of the project. As the evaluation will also be shared with SiB, it should include 'the significant change' or 'biggest change created by the project' (only topline change at the instutional level).

This will ultimately provide an analysis on how scalable and replicable the project is in national context.

2.1 Evaluation criteria

2.1.1 Relevance:

- How aligned is the project to Sightsavers strategic direction as set out in its Strategic Framework (2009 – 2013, and extended 2013 – 2018) and Bangladesh development priorities and policies, and vision 2020
- What specific local, national and international development priorities and policies is it aligned to and how?
- How relevant is the project in light of the broader objectives of SiB Phase IV?

2.1.2 Effectiveness:

- To what extent has the project delivered against the planned objectives and outputs and what factors (if any) have contributed/hampered this?
- To what extent are trained staff competently performing their duties?
- How effective have hospital partners become in managing high volume cases as a result of this project?
- What are the strengths and weaknesses of the project and its approaches?
- How effective is the referral chain at different levels
- How effective are the services: mobilisation, clinical, counselling?
- Measuring effectiveness with the help of some of the process indicators from the log frame, e.g. did the project achieve indicator for 1.3: At least 5% increase in patients being referred each year? Or 3.1 Increase in number of cataract

patients referred to partner hospitals. What % of cataract operated patients gained vision between 6/6 to 6/18? – based on the availability of data at the partner level.

- Has the cataract surgical rate at the partner hospitals changed over the life of the project – based on available data

2.1.3 Efficiency:

- To what extent has the project provided a cost-effective approach to delivering services that meet or have the potential to meet the V-2020, National Eye Care Plan as part of government's health sector programme?
- How well has the project been implemented?
- Have resources been captured in a way that maximizes their use?
- At what level is the project most cost-effective as far as reaching vulnerable/marginalised groups such as women, elderly, children, men, communities, urban, slum dwellers or a mixture of these

2.1.4 Impact/Results

- Has the project met the objectives, outputs & indicators from the log frame?
- In the context of World Health Organisation six building blocks for Health Systems Strengthening, what are the main changes produced by the programme, positive or negative and what are the key factors behind these changes?
- What is the evidence of increased demand for eye health services and preventative eye care measures within the targeted communities, and changes in the lives of beneficiaries as a result?
- Has there been a change in the capacity of the partner hospitals and at what level?
- What is the perception of all the key stakeholders of the project and its impact? E.g. the beneficiaries, local authorities / government and staff (hospital, vision centre etc).

2.1.5 Sustainability:

- How likely is it that specific project activities and outputs will continue after the project funding finishes? Who will be responsible for this?
- Will the trained staff stay in their roles? What incentive is there for them to stay – depending on the circumstances and discussions with stakeholders
- Are the VC's financially viable? Do the CBO's and hospitals 'managing' the VC's want to continue supporting them?
- What kinds of partnerships (if any) have been built with governmental and international organisations and how will these influence sustainability?
- What are the key factors that ensure (or will ensure) sustainability of the programme beyond SiB and Sightsavers support?

2.1.6 Scalability:

- Is any aspect of the programme or its components likely to be scaled or replicated by participating partners, other agencies or government? How likely is this to occur or what conditions need to exist for this to happen? What factors or constraints might inhibit this process?
- What evidence has been generated by the project to support scalability efforts by interested parties? How has the project packaged and shared this evidence to date?

- In the event of a scale-up, what lessons learnt from the implementation process in this context need to be taken into account?

2.1.7 Coherence/Coordination:

- To what extent has the intervention systemically created synergies with other institutions, towards achieving the defined objectives and goals over time?
- Are there specific mutually reinforcing policies that have been promoted by the project over time to create these synergies?
- How have the project activities been coordinated in light of similar or other sectoral interventions/approaches in the region?
- To what extent did the programme objectives, approaches and design complement and/or contradict each other?

3. The Evaluator(s)

The evaluation shall be conducted by an external consultant, or evaluation team which will be selected through competitive proposal submission. The consultant/s or firm will have demonstrated competence in having undertaken similar work before, including experience in programme design and management, planning, monitoring and evaluation.

The lead evaluator will have as a minimum the following core competencies; public health specialist experience, possess projects/programme analysis, comprehensive understanding of public health policy (national and global) and demonstrate sound skills in health systems strengthening and financing in developing countries. S/he should have extensive experience in conducting medium scale evaluations.

The evaluator/evaluation team will work closely with an evaluation working group. The role of this group (or their representatives) will include validation of strategic information, issuing of relevant directives or endorsement of necessary proposals during the course of the exercise and coordination of local logistics.

The working group will include the following:

1. Two members from Sightsavers country office
2. Representatives from partner organizations
3. Sightsavers PDA Eye Health & Health Systems Strengthening (Asia)

4. Methodology

The team should detail their approach and methodologies to be used to indicate how they will fulfill the requirements of the ToR in their Expression of Interest application. These may include qualitative and quantitative tools as appropriate to conduct this evaluation.

The evaluator/evaluation team is responsible for developing the evaluation framework and methodology that addresses the key evaluation questions. The evaluator/evaluation team will define an appropriate sample size and specify to the Sightsavers programme what mechanisms will be adopted to avoid selection bias. The evaluation should meet the principles of participation involving both male and female beneficiaries.

As a minimum, the evaluation will include the following key steps:

- Review relevant reference material, as listed in Section Five below.
- Development and application of appropriate data collection tools (e.g. questionnaire schedules and tools, interview checklists and focus group templates) for interviews

and discussions with stakeholders including the project implementers, donors, service recipients and other actors in the eye care delivery system.
- Visit partners' hospitals (NGO & Govt.), Vision Centres, collaborative partners, NEC, Standard Chartered, Sightsavers, Schools, staff, and meet beneficiaries
- Interviews/focus groups with project implementers, partners, donors, other relevant actors in the sector and service recipients/beneficiaries. The evaluation should seek a representative sample of service recipients from relevant groups.
- The team leader will hold debriefing session for partners and stakeholders of DUCECP at the end of the field work period.
- Analysis and report writing.

5. Reference Material

- Project documents (2008) – proposal, logframe, budget, annual reports, six monthly reports, grant agreement and Letters of Variation
- MOU with partners 2008
- Project Action Plan (latest)
- Baseline Report 2009
- DUECP final evaluation report 2008
- Vision Centre Assessment Report 2013
- Vision Centre modalities (2013)
- Project monitoring and annual reports
- Project mid-term review report July 2011
- Standard Cataract Surgery Protocol
- Sightsavers strategic plan (2009 – 2018)
- Vision 2020 document
- WHO six building blocks
- Sightsavers Strategy Implementation Card (SIM) Card and the Change Themes
- Bangladesh National Eye Care Plan-2005
- Summary Report of the National Blindness & Low Vision Survey 2000
- Beneficiary Case Studies
- Seeing is Believing Phase 4 documents
- Other relevant documents

6. Timeframes

The duration of the assignment will be approximately 18 working days and the evaluation team will be expected to demonstrate through their expression of interest indicative timeframes for undertaking the key activities. The Start date of the evaluation field work will be between October 19 – 30, 2014 for 10 days.

A completed draft report t is expected *[please refer to 'key deliverables' for deadlines]*. The final report with other required documentations must be submitted *[please refer to 'key deliverables' for deadlines]*.
The evaluation will follow the key phases:

Phase I - Desk study: Review of documentation and elaboration of field Study [5 days]

The lead consultant/evaluation team will review relevant documentation from section 5 above (Reference material). Based on this review, they will produce an inception report which will include an elaborate plan, methodology and sampling strategy of the data collection for this study. The evaluation will only proceed to the next stage upon approval of this inception report. An appropriate inception report format will be made available to the team as part of this TOR.

Phase II: Field Data Collection [10 days]
This phase of the evaluation will seek to collect primary data on the key evaluation questions explained under evaluation criteria. The team will use the agreed plan, methodology and sampling strategy from phase 1 to conduct the field work.

Phase III – Data analysis and production of evaluation report [7 days]
The team will draw out key issues in relation to evaluation questions and produce a comprehensive report. This analysis should draw on the wider issues in the development sector and to what extent does the use of funding represent value for money.

The table below summarizes the key activities outlined above

Phase	Activity	No of Days
Phase I – Desk study: Review of documentation and elaboration of field Study	Desk research /literature Review	1 days
	Inception Report	3 days
	Revision of collection methods and tools based on inception report comments	1 days
Phase II: Field Data Collection	Field Visits & Data-collection	10 days
Phase III – Analysis and production of evaluation report	Debriefing (In-country)	1 days
	Data analysis and preparation of draft report	4 days
	Review of draft report from feedback.	1 days
	Submission of final report	1 days
Total		**22 days**

Deliverables: The minimum expected outputs are:

- An Inception report will be submitted to Sightsavers by 30/09/2014
- A draft review/evaluation report will be submitted to Sightsavers by 13/11/2014
- At least 7 case studies with photos of primary and secondary beneficiaries linked with the project with signed consent form
- A final review/evaluation report submitted by 10 December 2014
- Data sets (SPSS, Excel, Word) – for all collected data (quantitative). The data sets should be in an appropriate format (SPSS, Excel, Word) and will be submitted together with or as part of the final evaluation report
- PowerPoint presentation, summarizing the key findings from the evaluation submitted together with the final evaluation report

7.1 INCEPTION REPORT
The inception report should be available to Sightsavers within five working days of project commencement. Feedback will be provided within seven days following acknowledged receipt of inception report.

The purpose of this report is to ensure that the evaluator/s covers the most crucial elements of the exercise including the appropriateness and robust methodology to be employed. The inception report provides the organisation and the evaluator/s with an opportunity to verify that they share the same understanding about the evaluation and clarify any misunderstanding at the outset. The report should reflect the team's review of literature and the gaps that the field work will fill.

Field work will only commence once this inception report has been reviewed and agreed with the designated representatives1 (consortium) of the stakeholders.

7.2 DRAFT REPORT

A draft report (not more than 40 pages including executive summary and excluding annexes) should be submitted to Sightsavers within 5 working days following the completion of field work. The report should provide an inventory of equipment, tools and HR training (if any) provided and lessons learned. Sightsavers will provide feedback on the draft report to the evaluation team within 3 weeks after acknowledged receipt of the draft report.

7.3 FINAL REPORT

The Final Report will be submitted to Sightsavers within 5 working days after receiving the feedback of Sightsavers on the draft report. Findings and recommendations from the Final Report will be used to inform future decisions.

7.4 DATA SETS

The evaluation team will be expected to submit complete data sets (in Access/ Excel/Word) of all the quantitative data as well as the original transcribed qualitative data gathered during the exercise. These data sets should be provided at the time of submission of the final report.

7.5 SUMMARY FINDINGS

On submission of the final report, the team is expected to submit a PowerPoint presentation **(maximum 12 slides),** summarizing the methodology, challenges faced, key findings under each of the evaluation criteria and main recommendations.

8. Reporting Format

Detailed guidelines on how to structure the evaluation report will be provided to the evaluator/s prior to commencement of the activity. The evaluator/s should conform to this format.

Please note that penalties up to 10% of agreed fees will be imposed for noncompliance with the requirements 7.1 to 7.4 and reporting format provided.

9. Administrative/Logistical support

9.1 BUDGET

The consultant should submit to Sightsavers an Expression of Interest indicating their daily rates for the assignment. Sightsavers will assess Expression of Interests submitted according to standardized quality assessment criteria, as well as on the basis of their competitiveness and value for money in line with the budget available for this evaluation. The daily fees proposed by the applicant should exclude expenses such as:

- Economy class airfares and visas. (where applicable)
- In-country transportation
- Hotel accommodation (bed, breakfast and even meals taken at the place of accommodation)
- Stationery and supplies
- Meeting venue hire and associated equipment e.g. projectors

Sightsavers usually cover the above costs, unless otherwise stated. The consultant/team is expected to cover all other costs and materials not mentioned above related to this exercise as part of their daily fees or equipment (e.g. laptops).

9.2 SCHEDULE OF PAYMENT

The following payment schedule will be adhered to:

- On signing the contract: 20%
- On submission of draft report: 40%
- On acceptance and approval of final report: 40%

9.3 MODE OF PAYMENT

As agreed by Sightsavers and the consultant

Strategic Evaluation of Dhaka Urban Comprehensive Eye Care Project (DUCECP)

Evaluation Report

Project Number 71031