IAPB AFRICA HUMAN RESOURCES FOR EYE HEALTH

STRATEGIC PLAN 2014-2023

VISION FOR AFRICA

Phase 1: 2014-2018

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ACRONYMS

CE Continuing Education

AeHP Allied Eye Health Professionals

AFCO African Council of Optometry

APHI African Public Health Information

AP/HRH African Platform for Human Resources for Health

AVRI African Vision Research Institute

CCF Country Collaboration and Facilitation

CDTI Community Directed treatment with Ivermectin

CHW Community Health Worker

CeHW Community Eye Health Worker

CME Continuing Medical Education

COECSA College of Ophthalmology East, Central and Southern Africa

CPD Continuing Professional Development

DESSO Diplome d'Etudes Superieures Specialisee en Ophthalmologie

ECSAHC East, Central and Southern Africa Health Community

GHWA Global Health Workforce Alliance

HAF Human Resources for Health Action Framework

HRH Human Resources for Health

HReH Human Resources for Eye Health

HRIS Human Resources Information System

HMIS Health Management Information System

HSS Health System Strengthening

IAPB International Agency for the Prevention of Blindness

ICT Information Communication technology

ICEH International Centre for Eye Health

INGO International Non-Government Organisations

IST Inter-country Support Team (WHO-Afro)

MDGs Millennium Development Goals

NCDs Non-Communicable Diseases

NTDs Neglected Tropical Diseases

NECC National Eye Care Coordinator

NTDs Neglected Tropical Diseases

OCO Ophthalmic Clinical Officer

ON Ophthalmic Nurse

PEC Primary Eye Care

PEH Primary Eye Health

PHC Primary Health Care

SADC Southern Africa Development Community

SSA Sub Saharan Africa

TSO Technologiste Superior d'Ophthalmologie

WAHO West African Health Organisation

WHO World Health Organisation

WHO-AFRO World Health Organisation: Africa Regional Office

EXECUTIVE SUMMARY

The International Agency for the Prevention of Blindness is the coordinating membership organisation leading international efforts in blindness prevention activities. IAPB Africa comprises over 30 member agencies working in almost every country in Sub Saharan Africa.

In Africa in 2010 it was estimated that 4.8 million people were blind and further 16.6 million had severe to moderate visual impairment [1]. This is not a challenge that can be overcome by the NGO sector alone and it is clear that a paradigm shift is needed in how eye health services are planned, coordinated and resourced at all levels.

One of the biggest barriers to this transformation and achieving progress in wider health goals is the critical shortage of health workers, the heart and soul of the health system. The eye health sector in Africa is not impervious to the larger health worker crisis and is in fact part of it. The shortage of eye health workers at all levels in SSA is particularly alarming. For example, the Region has less than 50% of the minimum number of ophthalmologists required to meet needs. Without rectifying this, reaching WHO Global Action Plan targets and achieving universal eye health coverage will be impossible [2].

The interventions to address the crisis take place in complex and changing political, geographic and social contexts and the crisis in the eye health work force extends far beyond numerical shortfalls. Even if we can successfully address this gap much more remains to be done in terms of training and development, deployment and distribution, supervision and support, standards of practice and performance and productivity for all eye health service providers.

The consultation and planning process for this strategy has been extensive, involving all member agencies in Africa and 38 countries who participated in a series of sub-regional and regional planning events between 2009 and 2013. This strategy is therefore the strategy for the members of IAPB, when acting together and is not a strategy for individual members acting in their own capacity. The strategy does however suggest how member agencies can work individually and collaboratively to address the eye health work force crisis in Africa. The IAPB Africa HReH strategy is summarised in the Box below.

Vision:

All people in Africa have access to the highest possible standard of eye health care.

Mission:

To ensure, through collective action, that everyone in Africa has access to skilled and motivated eye health providers.

Goal:

Eye health workers are integrated at all levels as part of an efficient and effective heath system.

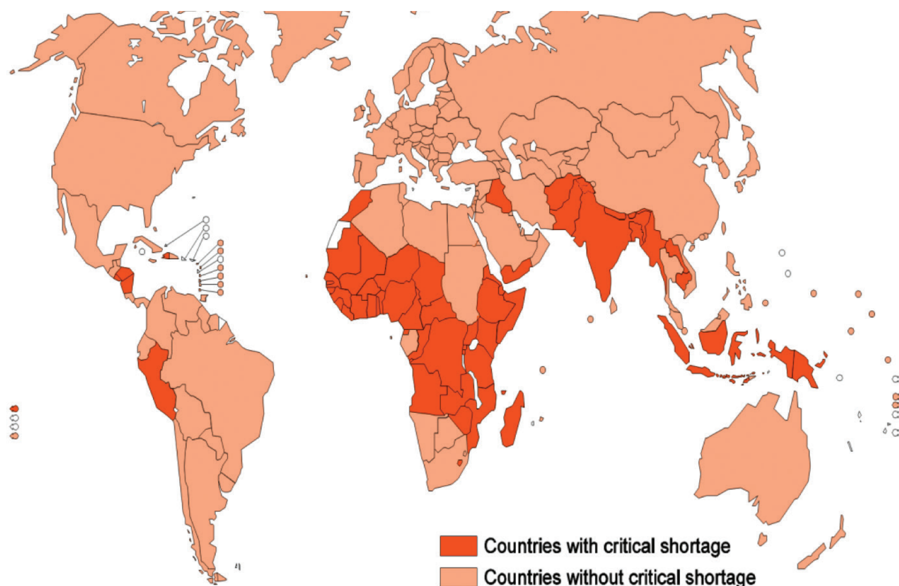
Immediate Objectives :

1. Integrate eye health work force planning into broader HRH planning processes.
2. Develop competency frameworks for the five different levels of the eye health workforce.
3. Strengthen the eye health training institutions across Africa

Members of IAPB and Ministries of Health have been investing in strengthening the eye health work force in SSA for many years with success invariably built around strong and sustainable partnerships between Government, WHO, professional bodies, civil society and international funding partners. The success of this strategy is therefore highly dependent on an enhanced level of coordination and a greater synergy between our member agencies and strategic partners. While this cannot be taken as given, IAPB Africa is confident that sufficient commitment and mutual understanding exists in Africa to make this happen.

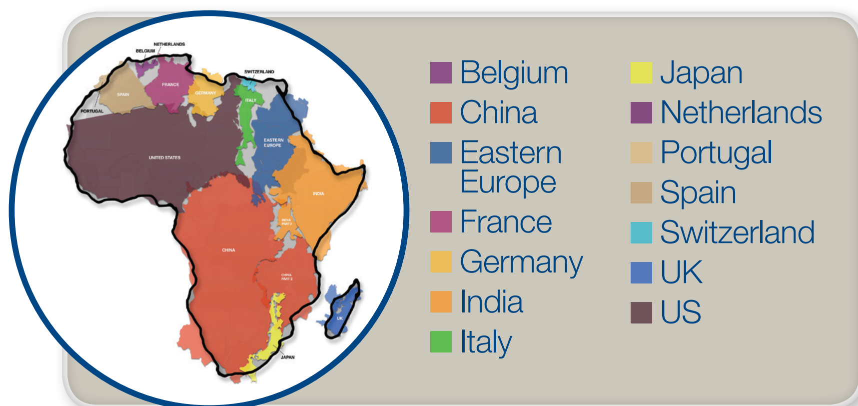
1. THE HEALTH WORKFORCE CRISIS

The critical shortage of health workers is now widely recognised as one of the most fundamental constraints to achieving progress on health and achieving wider development goals. 57 countries are considered to be in crisis, with 36 of them in Africa.



Data source:
World Health Organization.
Global Atlas of the Health Workforce
(http://www.who.int/globalatlas/
default.asp)

Health workers are the heart and soul of health systems and yet the world is faced with a chronic shortage – an estimated 4.2 million health workers are needed to bridge the gap, with 1.5 million needed in Africa alone [3]. The facts in Africa are startling.



- 24% of the burden of disease
- 10% of the global population
- 3% of the global health work force
- 1% of global health resources
- 4.8 Million people blind
- 16.6 Million people visually impaired
- Less than 1% of the total number of ophthalmologists

GLOBAL [5]
86% now have an HRH Plan
65% have a national HRH Coordinating Committee
80% reported improved recruitment at higher levels

AFRICA [6]
89% now have an HRH Strategic Plan or in the process
76% now have an HRH Observatory or are in the process
52% have a HRH policy framework or are in the process

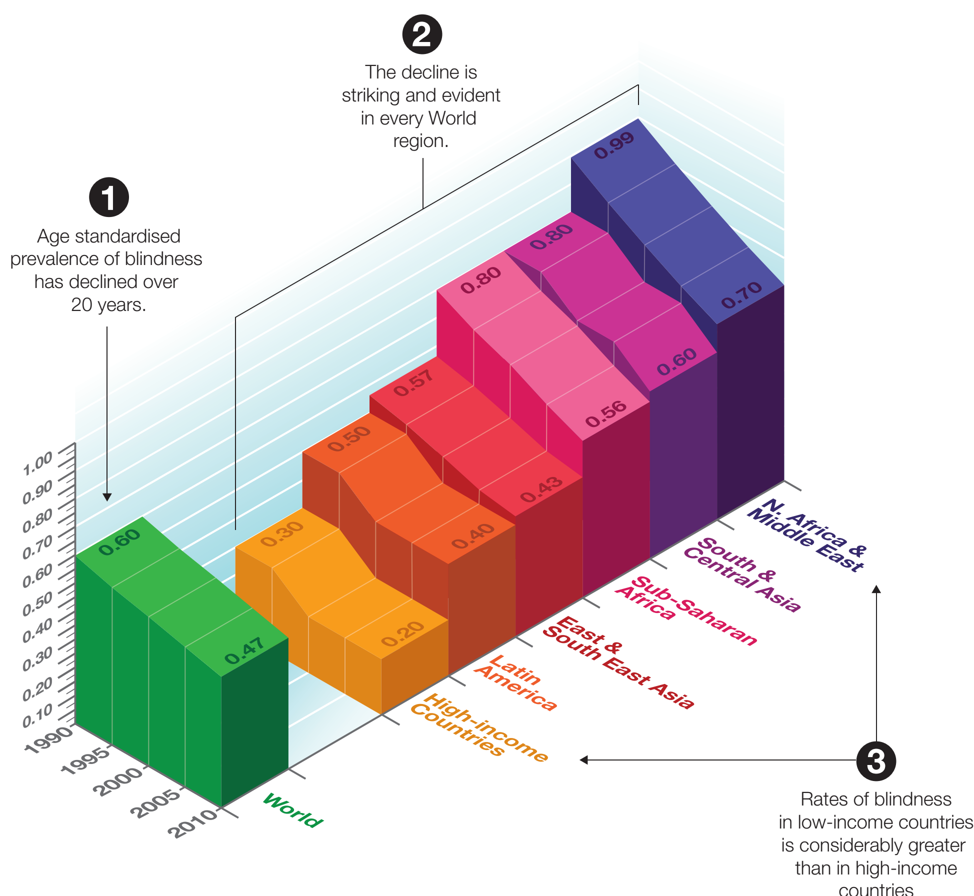
Yet, progress is being made across a range of HRH challenges as countries, supported by international partners, develop specific national strategies and policies to address the crisis, developing new approaches to policy and planning, to distribution and retention, data management and decision making and to task sharing and training. At the regional level, WHO-Afro, in partnership with national governments has now launched a long term Road Map to address the crisis in support of global commitments [4].

2. THE EYE HEALTH CRISIS

It is estimated that 4.2% of the global population - 285 million people - have a vision impairment of whom 39 million are blind. In spite of these disconcertingly high numbers, there have been many achievements since the launch of VISION 2020 [7] with major progress in the control of infectious diseases such as trachoma and onchocerciasis and exciting developments in cataract surgery and uncorrected refractive error.

Partnerships in eye health, such as VISION 2020 and Seeing is Believing [8] have set standards for coordination and collaboration across governments, the private sector and civil society and more than 100 national blindness action plans have been developed by governments around the world to tackle avoidable blindness and promote access to eye health for all. These efforts are now paying dividends with clear evidence of a global reduction in the number of blind people thanks to the increasing emphasis on evidence and data to measure impact. Figure 2, below, is from The Global Burden of Disease Study, 2010.

The age-standardised prevalence rates of blindness for all ages over time for the world and for regions.



The cost-benefit arguments of eye health are also well known. For example cataract surgery and the provision of glasses are simple and inexpensive ways to tackle vision impairment and far outweigh the economic and social costs of non-treatment. Research made available in 2013 shows that globally for every dollar spent on improving eye health services there is more than a two-fold return on investment. In the lower income countries the return is considered to be even greater, providing a four-fold return [9].

Another important aspect of scaling up Vision 2020 has been the forging of new links with other health initiatives such as the Global Health Workforce Alliance and networks of organisations involved with NCDs and NTDs as well as the new emphasis on disability in the emerging post-MDG framework. However, while this work proceeds, securing the commitment of governments everywhere to strengthening eye health services at country level is now regarded as the single most important factor in determining future success [10].

Achieving the goals of the new WHO Action Plan (a 25% reduction in blindness and visual impairment by 2019) and achieving universal eye health coverage will be impossible without addressing the eye health workforce crisis [11]. While the challenge is particularly pronounced in Francophone and Lusophone countries, across the entire region the clear pattern is that African Governments, supported by eye health partners, need to give a much higher priority to eye health and this includes considerably higher investment in health in line with the Abuja Commitment of 2001 [12] with enhanced coordination of interventions within the framework of stronger health systems.

Conventional wisdom in health work force planning suggests we need to work towards having the **right number,** in the **right place**, at the **right time**, with the **right skills** if we are to provide the right services. To generate support for these goals it is essential that this strategy is based on the principles of health system strengthening and makes use of the best available data, existing evidence and policy direction provided by WHO and national governments [13].

2.1 THE RIGHT NUMBER

The table below highlights the current situation in SSA with respect to gaps in the eye health workforce for five critical cadres at tertiary, secondary, primary and community levels, based on an anticipated population of one billion people by 2020 [14-15].

According to a recent study of the eye health work force in 16 countries in SSA [17] while regional practitioner to population ratios are predicted to increase slightly, the HReH workforce as a whole is not growing fast enough to achieve programme targets in most countries by 2020 as practitioner growth is outpaced by population growth. A greater challenge is the unequal distribution within and between countries that mask the greater deficits of the current human resources.

This is a sobering conclusion and while more can be done to make the most of the existing eye health workforce we also need to encourage more investment in the production of eye health workers to meet the needs of a growing and ageing population.

Cadre	Key Competencies	Targets	Availability in SSA		
			Needs	Available	Gap
Ophthalmologists	Leadership, Surgery	1/250,000	4,000	1,814	2,186
Optometrists [16]	Correction of refractive error	1/250,000	4,000	6,895	
Allied Eye Health Professionals	Diagnosis, Treatment, Wards, Theatres	1/100,000	10,000	5,003	4,997
Primary Health Care Workers	Basic Treatment and Referral	1/10,000	100,000	10,000	90,000
Community Health Workers	Eye Health Promotion	1/1000	1,000,000	100,000	900,000

2.2 THE RIGHT PLACE

The crisis in the eye health workforce extends far beyond numerical shortfalls and even if we can successfully mobilise the additional resources necessary to address this gap much more remains to be done. Of particular concern is the issue of distribution of existing eye health workers and the associated challenges of retention in underserved areas [18]. This concern is particularly pronounced in relation to the distribution of ophthalmologists between urban and rural areas given that the bulk of the population and the greatest needs exist in rural areas [19].

Country	Ophthalmologists		Cataract Surgeons		Ophthalmic Nurses	
	Urban %	**Rural %**	**Urban %**	**Rural %**	**Urban %**	**Rural %**
Senegal	89	11	10	90	46	54
Tanzania	59	41	12	88	11	89
DRC	81	19	34	66	27	73
Kenya	49	51	11	89	12	88
Ethiopia	59	41	10	90	8	91
Average	67.4%	32.6%	15.4%	84.6%	20.8%	79.2%

The second aspect of mal-distribution lies in the striking imbalance between the size of the eye health workforce in Anglophone Africa, on the one hand, and Francophone and particularly Lusophone Africa, on the other hand [20].

Linguistic Areas	Population	Ophthal-mologists	Cataract Surgeons	Optometrists	AeHP	Eye Health Professionals Per Million
Anglophone	521	1,276	291	6,636	3,228	1/45,000
Francophone	259	501	147	150	1,615	1/107,000
Lusophone	98	37	n/a	32	85	1/636,000
Totals	**827 million**	**1,814**	**438**	**6,818**	**4,928**	**1/59,000**

2.3 THE RIGHT TIME

Given the urgency of addressing the eye health workforce crisis (and the time it takes to train and deploy tertiary level specialists in particular), it is important to consider how other areas in health are addressing the issue. One approach is to strengthen both mid-level health workers and community health workers and both strategies are now widely accepted by workforce planners, expanding the pool of available health workers from which specialist and generalist eye health workers can be recruited and trained [21]. A second approach is to consider the potential of task sharing, or skill mixing, to make key services more quickly and more widely available [22]. A third approach is to improve performance management and support to ensure that the existing workforce can become more productive [23].

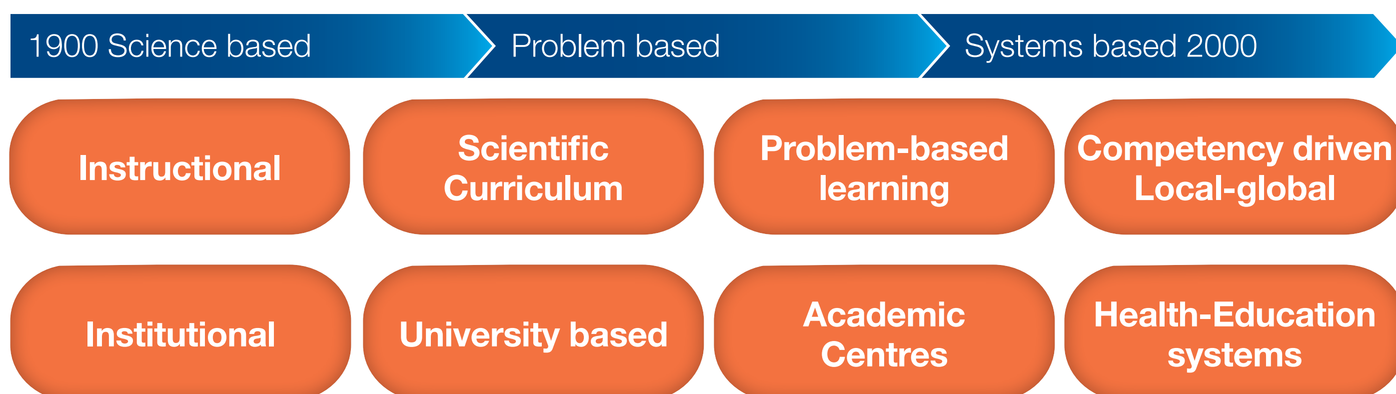
All these approaches have a relevance to the eye health work force as we work to ensure that services

are available, accessible and acceptable to those who need them as quickly as possible.

2.4 THE RIGHT SKILLS

Only ophthalmologists, ophthalmic nurses, optometrists, opticians and orthoptists are specifically recognised in the current WHO Health Work Force Classification, despite an increase in the number of eye health cadres as the profession has developed over the last 50 years. The recognition, by Ministries of Health and Public Service Commissions, of these new cadres is critical in ensuring that an eye health workforce, fit for purpose in the 21st century, is recognised, rewarded and supported to address the crisis in service delivery. The development of a clear set of competencies and defined scopes of practice for all is an important first step in this process as we seek to address dissatisfaction, turnover and sometimes the emigration of eye health workers [24].

Strengthening the training institutions needs to be tackled across a range of issues including faculty development, on-line learning, better infrastructure and equipment and Continuing Professional Development. The emphasis must be on ensuring that all existing training capacity is fully utilised and that CPD is available to all eye health workers as a matter of course, before new institutions are established [25]. The development of competency based training and clarifying scopes of practice leading to the harmonisation of training curricula is a critical first step in strengthening the quality of service provision at all levels.



The table below summarizes the current situation with respect to the specialist eye health training institutions in SSA [26].

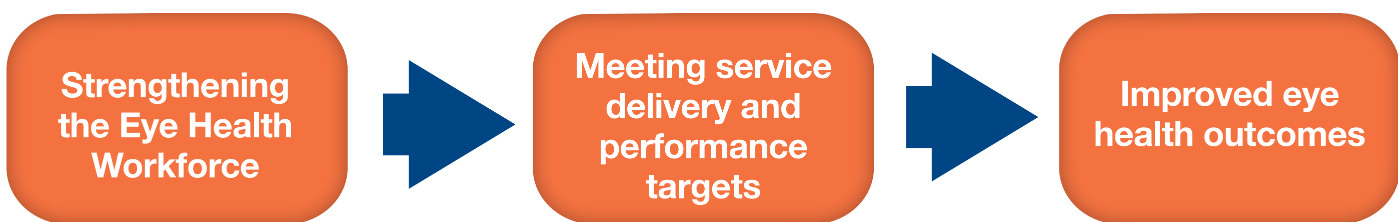
Cadre/Linguistic Zone	Anglophone	Francophone	Lusophone	Total
Population	**522,000,000**	**259,000,000**	**47,000,000**	**828,000,000**
Ophthalmologists	39	9	2	50
Physician & Non-Physician Cataract Surgeons	9	2	1	12
Optometrists	20	3	1	24
Allied Eye Health Professionals	22	11	3	36
Number of training Institutions	**90**	**25**	**7**	**122**
Ratio of Training Institutions/ Population	1/5,800,000	1/10,360,000	1/6,700,000	1/6,786,000

2.5 THE RIGHT SERVICES

Strengthening the eye health workforce is not an end in itself and must be viewed as only the first step in ensuring that everyone in Africa has access to the highest possible standard of eye care. Governments and member agencies must also consider how to ensure that all eye health workers have access to appropriate equipment, supplies and supportive supervision to make them productive [27].

Strengthening staff performance and support are widely regarded as critical issues in enhancing productivity and meeting service delivery targets and research is now urgently needed to assist governments and member agencies to establish what appropriate service delivery targets might be in the eye health sector.

This vision requires us to adopt a team approach to the eye health workforce which develops and supports all members of the eye health team, from community health workers who promote good eye health to tertiary level sub-specialists who undertake increasingly sophisticated micro-surgery as skills and technology expand.



2.6 ACHIEVING UNIVERSAL EYE HEALTH COVERAGE

To achieve Universal Eye Health Coverage we will require strong, efficient and well run eye health systems; a system for financing eye health services which ensures that all people can obtain the eye health services they need without suffering financial hardship; access to essential eye medicines and technologies and a sufficient capacity of well trained and motivated eye health workers.

To achieve this longer term objective we need to change the way we operate as a sector. The table below suggests the strategic shifts we need to make if we are to successfully address the eye health crisis. This strategy, working within a health system strengthening framework, and with its emphasis on coordination and integration, therefore represent a major step in this direction.

From:		To:
Focusing on blindness and disease control	→	Focusing on comprehensive eye health
Building capacity for individual projects	→	Building capacity to meet national needs
Being a fragmented eye health sector	→	Being a united and collaborative eye health sector
Working in isolation from other health sectors	→	Engaging with wider health and HRH initiatives
Having programmes led and owned by INGOs	→	Integrating with Government service provision
Emphasising programme implementation	→	Emphasising advocacy to change systemic barriers
A ‘vertical’ approach to eye health	→	A comprehensive and integrated approach
Supporting the health system	→	Strengthening the health system

3. BUILDING ON SUCCESS

Evidence: We are not starting from scratch. Member agencies and Ministries of Health have been investing in strengthening the eye health work force in SSA for well over a generation, with growing momentum since 2005 and now have a much better appreciation of what works and what does not work [28]. Many important lessons can also be learned from how some countries and other parts of the health sector have addressed the health workforce crisis according to a number of systematic reviews [29]:

- Increase health budgets to allow Ministries to introduce rural incentive schemes.
- Recruit from rural areas to enhance rural retention.
- Task shifting to expand key services economically and quickly
- Remove user fees
- Strengthen mid-level and community health workers
- Strengthen work force planning
- Improve health workforce information systems
- Undertake integrated workforce planning

In addition to these generic policy lessons and a number of case studies and evaluations we also know that:

Working collaboratively in multi-country, multi-agency consortia can generate the rigour and the resources necessary to scale up the production of eye health workers [30].

- Adopting a standardised approach to assessing the training of eye health workers can provide a benchmark against which the impact of future investments can be measured [31].
- Developing the teaching faculty can lead to an improvement in student performance [32].
- Providing equipment ensures new graduates become productive and effective immediately [33].
- Regular CPD promotes skill enhancement and job satisfaction [34].

The key message is that success is invariably built around strong and sustainable partnerships between Ministries, professional bodies, civil society and international funding partners. We also know that working with WHO, our partner in Vision 2020, generates the reach and recognition that civil society agencies cannot match.

We have also learned what does not work [35].

- Training workers for individual projects does not generate the national success we need.
- Introducing short training programmes for cadres which are not subsequently recognised by Ministries of Health does not produce the levels of job satisfaction and career development which individual health workers require and expect.
- Ignoring in-service training leads to static skill sets and poor performance.
- Expanding training opportunities without first establishing government posts
- Vertical approaches which cannot be taken to scale
- Planning for eye health in isolation from national health plans

In many programmes and countries we are now starting to see the kind of success which will impact on services for years to come. Prior investment in addressing the eye health work force crisis has also produced a legacy of knowledge [36], insight and expertise to which we can now add a number of new tools and frameworks to facilitate our entry into mainstream health work force planning [37]. The table below highlights a few recent success stories.

Region/Country	Training Programme	Partnerships	Results
Sub Saharan Africa	Schools of Optometry	Universities, INGOs, AFCO	10 schools of optometry since 2006
Eastern Africa	COECSA	Universities, INGOs, OSEA, EU	30 new ophthalmologists by 2015
West Africa	Health for Peace	3 Countries, INGOs	Many new AeHPs
Guinea	DESSO	WAHO, Ministry of Health, INGOs	46 ophthalmologists since 2004
Zambia	Chainama College	Ministry of Health, INGOs	66 new OCOs and ONs
Mozambique	Beira and Nampula	Ministry of Health, INGOs, EU	20 'technicos' in 2011 to 109 in 2014

4. OUR RESPONSE

IAPB Africa comprises over 30 member agencies working in almost every country in SSA. Our ambition is to influence change in eye health work force planning in SSA by aligning our efforts with health system strengthening and advocating for the full implementation of the 2014-2019 WHO Action Plan for the Prevention of Avoidable Blindness to achieve Universal Coverage.
To achieve our vision we have established a 10 year time frame, divided into two, 5 year, implementation phases and supported by a rolling set of priorities. This strategy lays out our immediate objectives for the first 5 years. We will achieve this change by:

- Prioritising our work
- Engaging all our members
- Establishing new partnerships with a wide range of non-eye health agencies.
- Ensuring a close alignment with other health work force initiatives.

4.1 PRIORITISATION

IAPB Africa has prioritised four inter-related areas - Human Resources for Eye Health, Research, Advocacy and Health Management Information Systems - and has established Task Teams, comprising both IAPB member agencies and eye health partners to take these issues forward. We have aligned the work of the Task Teams to generate new synergies around our key focus issue – HReH.

4.2 ENGAGING OUR MEMBERS

Our members in Africa have been widely consulted in the development of this strategy and in Section 6 we suggest various ways in which they can support the strategy, in addition to the growing organisational commitment of member agencies to address the HReH crisis. Additionally, 18 member agencies have agreed to work

collectively to address the crisis in the eye health training institutions following a review and planning meeting in 2013. This strategy marks an important change in the way IAPB operates in Africa and will be further consolidated as we move forward.

4.3 NEW PARTNERSHIPS

Many of the changes we would like to see in the eye health sector cannot be brought about by member agencies working alone and it is a core value of IAPB that by working together we have a far greater chance of achieving change.

However, we also need to look beyond our traditional partners in the eye health sector given that issues such as remuneration, deployment, retention, and supervision can only be addressed at a national level by Ministries of Health. Indeed, Ministries of Health are themselves usually required to produce compelling evidence of the cost benefit of health interventions and in this respect at least are potential partners as we seek to increase their negotiating strength as they try to increase public sector spending on eye health.

We will work to influence change by developing new partnerships at regional, sub-regional and national levels and working to integrate eye health more fully into the health system. In this respect, partnership at all levels remains central to the success of our strategy.

4.4 ALIGNMENT

This strategy was not developed, nor can it flourish, in isolation from other health and eye health development strategies. To succeed, our strategy for the eye health work force must be aligned with the relevant sections of the following two key strategies, as well as national HRH plans and policies.

WHO-Geneva: Action Plan for the Prevention of Avoidable Blindness and Visual Impairment, 2014-2019	WHO African Regional Office: Road Map for Scaling up the Health Workforce, 2012-2025
1. Develop and maintain a sustainable workforce for the provision of comprehensive eye care services as part of the broader human resources for health workforce **2.** Undertake planning of human resources as part of wider HRH planning. **3.** Provide training and professional development for eye health professionals. **4.** Ensure retention strategies for eye health staff are in place and being implemented. **5.** Identify, document and share best practice with regards to eye health human resource development.	**1.** Strengthening health work force leadership and governance capacity **2.** Strengthening HRH Regulatory Capacity **3.** Scaling-up education and training of health workers **4.** Optimising the utilisation, retention and performance of health workers **5.** Improving health work force information and generation of evidence **6.** Strengthening health work force dialogue and partnership

5. OUR STRATEGY

A strategy exists to provide focus and direction for an organisation and given the urgency of the situation and the range of priorities confronting us we have to choose between what we **could** do and what we **can** do. In this strategy we have set out to achieve what is possible by setting realistic objectives rather than an unachievable set of aspirations.

IAPB, as a membership organisation with a clear mandate but limited resources, cannot itself mobilise the major investments needed to address all the challenges which were identified in the planning process such as regional investment imbalances, strengthening specialist training institutions, improving productivity or resolving distribution and retention issue. These can only be taken forward by member agencies and governments working together.

What we can do, as IAPB, working with members, professional bodies and key strategic partners such as WHO-Afro and the African Platform for HRH is to influence national HRH policies and provide guidance to ensure that the eye health workforce in Africa is 'fit for purpose' in the 21st century.

Our immediate emphasis, in Phase 1 of this Strategy, therefore lies in promoting the integration of eye health workforce planning into health workforce planning, developing new competency based scopes of practice for all eye health workers and taking forward the recommendations of the Dar workshop on strengthening then training institutions. We will also undertake a range of other activities in support of these three principal change objectives.

Our change objectives have been selected to prepare the ground for further change as the strategy is implemented. Our efforts and successes will be measured on an annual basis through a set of key performance indicators with agreed outputs and a clear set of outcomes. These will be available, along with a detailed schedule of activities, in an accompanying implementation plan.

GOAL:

Eye health workers are integrated at all levels as part of an efficient and effective health systems.

5.1 OBJECTIVES:

1. INTEGRATE EYE HEALTH WORK FORCE PLANNING INTO BROADER HRH PLANNING PROCESSES

Eye health workforce planning integrated into national HRH plans

Governments assume greater responsibility for the eye health workforce

Quality eye health services more widely available

1.1 Activities

- Position papers produced to provide compelling evidence on critical eye health issues
- Advocacy at regional, sub-regional to promote the HReH agenda
- Advocacy at national levels to promote integrated workforce planning

2. DEVELOP COMPETENCY FRAMEWORKS FOR THE FIVE DIFFERENT LEVELS OF THE EYE HEALTH WORKFORCE [38]

Competency frameworks exist for all eye health workers

Scopes of practice agreed with professional bodies and Ministries of Health

Government assumes greater responsibility for eye health services

2.1 Activities

- Develop key competency frameworks
- Curriculum review where necessary
- WHO, professional bodies and member agencies promote new scopes of practice
- Implement new scopes of practice

3. STRENGTHEN THE EYE HEALTH TRAINING INSTITUTIONS ACROSS AFRICA

3.1 Activities

- Work collaboratively to share planning information
- Complete Francophone and Lusophone situation analysis
- Sustain and expand existing levels of support

One stop clearing house for information and e-learning

Agreed methodology for situation analysis of training institutions

Explore options of joint funding initiatives

Work together to support capacity building initiatives

Stronger eye health training institutions

5.2 OUTPUTS

By 2018:

1. 10 countries have integrated HReH into HRH planning and 5 countries are implementing these plans.
2. 5 competency frameworks exist and 15 countries are utilising these frameworks
3. Increased investment by member agencies and governments in the eye health training institutions with particular emphasis on Francophone and Lusophone Africa.

By 2023:

1. 25 countries have integrated HReH into HRH planning and 10 countries are implementing these plans.
2. 25 countries are utilising competency frameworks
3. 25 countries are on track to achieve national eye health workforce targets
4. 10 key training institutions strengthened through collective action with increased production of eye health professionals in Lusophone and Francophone Africa

5.3 OUTCOMES

For operational purposes and to win the necessary financial support from governments and member agencies, it is imperative to set targets that are realistic and achievable and which are within the capacities of countries and member agencies. This strategy has set 3 medium term objectives to achieve our goal of integrating eye health workers at all levels of the health system in 25 countries in SSA by 2023, with a set of activities which we would expect to deliver the desired set of outcomes.

IAPB Africa is currently completing a 3 Year Implementation Plan: 2015-2017, which will explain in detail how our current activities around HMIS (by promoting the WHO-Afro Catalogue of Eye Health Indicators and integrating the IAPB Africa data base into the WHO-Afro Health Workforce Observatory): Advocacy (by building capacity to influence Ministries of Health from above and below) and HReH (building planning capacity at national level) will help achieve our objectives.

By 2023

- 10 countries are demonstrating increased government commitment to eye health services.
- Competency based curricula are being used in all eye health training institutions.
- Increased investment by member agencies and governments has resulted in strengthening the eye health workforce in Francophone and Lusophone countries
- Increased production of eye health professionals in 10 key training institutions leading to improved eye health services

5.4 IMPACT BY 2023

From a 2014 baseline it is now accepted that the majority of countries in SSA will not achieve VISION 2020 workforce targets by 2020 without significant new investments and interventions. To achieve the impact we seek by meeting the global target of reducing avoidable blindness by 25% in Africa by 2019 IAPB Africa will work to influence regional/sub-regional health organisations and build capacity to influence planning and service delivery processes at national level.

6. THE WAY FORWARD

This strategy aims to build momentum for action by consolidating what we know about human resources for eye health in Africa and recommending how to attain, sustain and accelerate progress to achieve universal eye health coverage.

6.1 WHAT IAPB MUST DO

To achieve our Phase 1 objectives we must excel in four key areas to create an enabling environment for members and countries to address other aspects of the crisis.

- **Advocacy** and influencing at regional, sub-regional and national levels
- **Brokering** new partnerships and relationships beyond eye health, particularly with potential funding partners, cooperating agencies and other sectors such as finance and education.
- **Convening** meetings of member agencies, partners and other key stakeholders to coordinate activities
- **Data collection** and dissemination to ensure that accurate and reliable information is available to make decisions.

IAPB, working alone, cannot achieve the wider change required and we hope this strategy can also act as a guide to our member agencies to take up the work force challenge and achieve the wider goals of Vision 2020 and the Global Action Plan.

6.2 WORKING TOGETHER ORGANISATIONALLY

We would encourage our member agencies and our strategic partners at regional and national levels to support this strategy by:

- Sensitising country teams to the crisis and the creation of national coordinating mechanisms
- Supporting the work of the Task Teams and Working Groups
- Increasing commitments to Francophone and Lusophone countries.
- Supporting sub-regional advocacy strategies and the work of the WHO ISTs [39]
- Supporting the training institutions in line with the Dar Commitment
- Identifying, documenting and sharing best practice
- Promoting a coordinated approach to research into the eye health workforce
- Investing in the eye health workforce and working with IAPB to monitor additional investments

6.3 WORKING TOGETHER NATIONALLY

- Making use of proven HReH planning tools and approaches [40]
- Supporting in-country advocacy coalitions to promote policy change
- Strengthening eye health leadership and governance
- Supporting HReH regulatory capacity in Ministries of Health
- Encouraging the provision of equipment as part of the unit cost of training
- Promoting the use of new competency frameworks
- Supporting national professional bodies where they exist
- Providing CPD as a matter of course
- Supporting partners to implement the WHO-Afro Road Map
- Researching the eye health workforce

The success of this strategy is highly dependent on enhanced coordination by members and partners above and beyond an individual organisational focus. While this cannot be taken as given, IAPB Africa is confident that sufficient commitment and understanding exists in Africa to make this happen.

7. FOOTNOTES

1. Naidoo, Gichui et al, Prevalence and Causes of Vision Loss in Sub Saharan Africa: 1990-2010, BJO, February 2014

2. Resolution A/66/11, Universal Eye Health: A Global Action Plan 2014-2019, WHO, Geneva, May 2013.

3. Global Health Workforce Alliance, Adding Value to Health, Annual Report, 2010, echoing the World Health Report which noted that human resources are' the most important of the health system's inputs', WHO, 2000.

4. WHO African Regional Office: Road Map for Scaling up the Health Workforce, 2012-2025. Workforce planning has been described by WHO as 'the process of estimating the number of persons and the kinds of knowledge, skills and attitudes they need to achieve predetermined health targets and ultimately health status objectives'. Jhiepgo, 2013.

5. GHWA, Progress Report, 2011

6. WHO-Afro, 4th Regional Consultation on HRH, Brazzaville, December 2013

7. Vision 2020: The Right to Sight, WHO and IAPB, 1999. Vision 2020 is a global partnership between IAPB and WHO. It was launched in Africa in 2001.

8. Seeing is Believing is a collaboration between Standard Chartered Bank and IAPB. Established in 2003, by 2013 had raised over US$50 million in support of sustainable eye care with the aim of raising US$100 million and reaching 50 million people by 2020

9. Investing in Vision – Comparing the Costs and Benefits of Eliminating Avoidable Blindness and Visual Impairment, The Fred Hollows Foundation and PriceWaterhouseCoopers (PWC), February 2013.

10. African Development Bank, Tunis Declaration, 2012 and GHWA, Recife Declaration, 2013

11. Resolution A/66/11, Universal Eye Health: A Global Action Plan 2014-2019, WHO, Geneva, May 2013.

12. WHO, The Abuja Declaration, Ten Years On, 2012

13. The eye health sector in Africa still suffers from a deficit of data and evidence in several key areas. Our approach is to base our strategy on existing data and evidence, encourage member agencies to strengthen the evidence base and, in due course, revise our strategy to reflect new knowledge. See Wormold, Bridging the Gap to Evidence-based Eye Care', CEHJ, where he concludes that 'compared to other specialties, ophthalmology has a long way to go in developing its evidence base'.

14. The data in this table is derived from a number of sources including Global HRD Assessment, IAPB, 2006, Resnikoff, BJO, 2012, Palmer J., ICEH, 2014 and the IAPB Africa data base, updated February 2014.

15. Targets for a health workforce can be established in a number of ways including population-based, need-based, utilisation-based and effective demand-based. WHO has made available 'Models and Tools for Health Workforce Planning and Projections; WHO, HRH No. 3, 2010 as well as 'Workload Indicators of Staffing Needs (WISN), WHO, 2010. See also Bossert and Ono, Finding Affordable Health Workforce Targets in Low-Income Nations, Health Affairs, No. 7, 2010. In eye health, targets for specific cadres in Africa were set by IAPB in 1999 and revised in 2006. These remain in place until new targets are agreed. Targets at the primary and community levels are indicative given the poverty of reliable data but are important given our focus on comprehensive eye health and increasing evidence of the burden of non-blinding ocular morbidities at the community level. See Du Toit, An Overview of Primary Eye Care in Sub-Saharan Africa: A Retrospective Overview, Forthcoming, IAPB Africa, 2014.

16. Figures for optometrists must be treated with caution given that 80%+ are in only two countries - Nigeria and South Africa. Additionally, specific mention must be made of the category of 'refractionists'. 'Refractionists' are typically mid-level eye health professionals who have been given a short course in refraction and who will, for the foreseeable future, provide the primary cadre for addressing uncorrected refractive error, A target of 1/50,000 has been proposed and needs to be confirmed.

17. Palmer, Chinanayi, 2014.

18. It is unlikely that member agencies, working individually, can influence national approaches to rural retention and distribution.

19. Palmer, 2014.

20. The reasons behind this imbalance are largely historical with many more IAPB member agencies working in Anglophone Africa than in Francophone and Lusophone Africa. See 'The IAPB 'Footprint', IAPB Africa Newsletter, Vol. 3 No. 1 2014.

21. Strengthening the mid-level workforce was the central recommendation of the 2nd GHWA Global Symposium, 2011 and strengthening community health workers was the key recommendation of the 3rd GHWA Global Symposium, 2013.

22. The application of the principles of task shifting to eye health is the subject of considerable debate, particularly in relation to cataract surgeons, less so with respect to TT surgeons. The position of the International Council of Ophthalmology is clear: Cataract surgery is 'owned' by ophthalmologists and it is the responsibility of the professional bodies to suggest how best cataract surgical rates can be increased in Africa.

23. There are many approaches to enhancing the productivity of the health work force from purely labour market analyses, to applying the principles of health system strengthening to more pragmatic approaches

such as ensuring the provision of appropriate equipment, the reliable supply of consumables, supportive supervision and the mobilisation of patients. With respect to patients, a variety of approaches have been promoted but no cost-benefit comparison of different approaches has yet been undertaken.

24. Competency based education (CBE) is training that is focused on outcomes, with a curriculum designed to help learners achieve defined competencies. See Figure 3, Three Generations of Reform, in Systemic Management of Human Resources for Health, Jhpiego, 2013.

25. While mid-level training programmes are regularly over-subscribed, many ophthalmology training programmes do not attract a full quota of students. In optometry, a significant number of students do not complete the course.

26. With 122 specialist eye health training institutions, it is hard to argue that Africa faces a shortage of training opportunities.

27. HRH strategies, whether global, regional or national, invariably address the key issues affecting the health work force – production, employment, retention and financing. The impact of a successful HRH plan on health outcomes is usually to be found in a National Health Plan. See for example the Kenyan National HRH Plan and the Kenya Health Strategy.

28. Sightsavers, FHF and BHVI have all now developed significant initiatives to address the crisis in a range of countries and across a range of issues. ORBIS have also now aligned the work of the Flying Eye Hospital with the IAPB HReH strategy. In March 2013, 18 IAPB member agencies met in Dar es Salaam to review their collective support to the eye health training institutions. The joint commitment to strengthen the training institutions became the Dar Commitment, signed by all CEOs.

29. See, for example, Fulton, Scheffler et al, Health Workforce Skill Mix and Task Shifting in Low Income Countries: A Review of Recent Evidence', HRH 9:1, 2011, Meesen, Hercot et al, Removing User Fees in the Health Sector: A Review of Policy Processes in 6 sub-Saharan African Countries, Health Policy and Planning, Vol. 26, 2011. Lehmann, Dieleman and Martineau, Staffing Remote Rural Areas in Middle- and Low-Income Countries: A Literature Review of Attraction and Retention', BMC Health Services Research, 8:19, 2008, GHWA, Mid-Level Health Workers for Delivery of Essential Health services: A Global Systematic Review and Country Experiences, WHO, 2012. Soucat, Scheffler et al, The Labour Market for Health Workers in Africa: A New Look at the Crisis, World Bank, 2013. 'Documenting Best Practices for Retention of Health Workers, ECSA Health Community, Arusha, 2o11

30. An Appreciative Enquiry into Consortium Working, Sightsavers, 2011

31. Situational Analyses of Eye Health Professional Training Programmes in Ethiopia, August 2012, Detlef Prozesky and Gerhard du Plessis, University of Witswatersrand and FHF, Unpublished, 2014.

32. See the Faculty Development Project, BHVI, Unpublished, 2012.

33. To date, several agencies have supplied equipment kits costing approx. S$1,000 to AeHPs on graduation as a matter of course. Less had been done to equip ophthalmologists, cataract surgeons or optometrists.

34. 'A study of CPD of OCOs and 'Technicos' in Malawi and Mozambique', Sightsavers, Unpublished, 2012.

35. Service providers often lack basic equipment and supplies while the lack of good management practices and incentives can result in deficient work environments, low workforce motivation and poor productivity and outcomes. See also 'Can International Heath Programmes be Sustained after the end of International Funding: The case of Eye Care Interventions in Ghana', Blanchet and James, MBC Health Serv. Res, 14:77, 2014.

36. See for example, Blanchet, Gordon et al, How to Achieve Universal Coverage of Cataract Surgical Services in Developing Countries: Lessons from Systematic Reviews of Other Services, Ophthalmic Epidemiology, Online, 2012. See also Ranson, Chopra et al, Priorities for Research into Human Resources for Health in Low- and Middle-income Countries, which concludes that questions concerning incentives and dual practice rank as the most important and that coordinated action to support and implement research could have an important impact on health worker policies and the health of the poor.

37. In December 2013, WHO-Afro noted that 31 countries in SSA now have HRH Strategic Plans with a further 10 under development. An internal IAPB review of 23 national HRH plans noted that 15 were scheduled for 5-7 years and 8 for a period of 10-20 years. The time frame is critical since many aspects of HRH dynamics take time. Only in Cameroon has an eye health workforce plan been integrated into the larger process.

38. To date, only optometry has produced a single curriculum, recommended for use in Africa by AFCO. There are several curricula available for ophthalmology and many different curricula for ophthalmic nurses and OCOs. WHO-Afro is currently testing a set of algorithms at the primary level which may in due course provide the basis for a scope of practice for eye health at the front line health facilities. IAPB Africa has also recently commissioned a base line study of eye health and Community Health Workers.

39. The IAPB Africa Regional Advocacy Strategy will be available by June 2014.

40. Many tools have been developed and tested by the WHO, the GHWA and USAID Capacity+. These are available from the IAPB Africa office on request. Two planning frameworks are particularly important for the implementation of our strategy – Health System Strengthening and the HRH Action Framework

8. REFERENCES

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9. STRATEGY MAP

Vision:

Everyone in has access to the highest possible standard eye health

Mission:

To ensure, through collective action, that everyone in the African Region has access to skilled and motivated eye health providers

Goal:

To develop and maintain a sustainable eye health workforce as part of the broader human resource for health workforce

9. DATA

The table below, compiled over the last two years, brings together information collected from a range of sources and reflects the usual provisos placed on such data.

Eye Health Professionals in Sub-Saharan Africa: April 2014 *

15% Ranking	Country	Population		Results	Results	Results
APHI		UN Economic & Social Affairs 2011	Ophthal-mologists	Cataract Surgeons	AEHP	Optometrists
1	Rwanda	10 943 000	12	1	34	6
2	Botswana	2 031 000	9		100	39
3	Niger	16 069 000	12	6	52	11
4	Malawi	15 381 000	7	12	77	14
5	Zambia	13 475 000	21	15	77	19
6	B. Faso	16 968 000	26	4	156	2
7	Gabon	1 534 000	21		7	3
8	Chad	11 525 000	11	7	56	1
9	Tanzania	46 218 000	35	68	326	280
10	Mozambique	23 930 000	25		134	15
11	Mali	15 840 000	34	7	119	10
12	Senegal	12 768 000	57	23	101	2
13	The Gambia	1 776 000	2	13	30	6
14	Swaziland	1 203 000	1		5	3
15	Cape Verde	501 000	6		9	6
16	C.A.R	4 487 000	4	4	14	7
17	Benin	9 100 000	26	3	54	3
18	Namibia	2 324 000	2		56	0
19	S. Tome	169 000	1		3	0
20	Ethiopia	84 734 000	104	54	130	140
21	Liberia	4 129 000	7	6	14	6
22	Kenya	41 610 000	85	92	200	86
23	Mauritius	1 307 000	8		92	0

* See Boerma and Siyam, WHO, 2013 who emphasised the important point that measuring the size and distribution of the health workforce involves drawing data from several sources. ‘Currently too little is done to make use of these multiple, imperfect, sources, reconcile the numbers and develop a best estimate’.

15% Ranking	Country	Population		Results	Results	Results
APHI		UN Economic & Social Affairs 2011	Ophthal-mologists	Cataract Surgeons	AEHP	Optometrists
24	Madagascar	21 315 000	24	42	67	0
25	S. Africa	50 460 000	324		66	3 300
26	Uganda	34 509 000	41	12	246	16
27	Zimbabwe	12 754 000	21	4	51	30
28	Seychelles	87 000	4		3	2
29	Comoros	754 000	1		13	1
30	Lesotho	2 194 000	4		32	8
31	S. Leone	5 997 000	6	6	45	1
32	Eq. Guinea	720 000	2		3	2
33	Cameroon	20 030 000	50	2	110	10
34	D.R.C	67 758 000	79	36	617	21
35	Togo	6 155 000	22		80	2
36	Congo	4 140 000	8	3	5	0
37	Angola	19 618 000	15		41	15
38	Guinea	10 222 000	22	2	16	4
39	Ghana	24 966 000	54	2	395	230
40	C. d'Ivoire	20 153 000	82	17	100	20
41	Eritrea	5 415 000	8	18	16	2
42	G. Bissau	1 547 000	3	6	9	8
43	Nigeria	162 471 000	529		1323	2 560
44	Burundi	8 575 000	10		14	2
45	South Sudan	10 000 000	2	4	19	2
	Total	827 862 000	1827	469	5117	6 895

Data Sources

V2020 HRD Working Group 2006, ICEH/ AVRI/ Sightsavers Mapping Study 2011, BJO 2012, AFCO 2012/ 2013/ 2014, Sightsavers, Brien Holden Vision Institute, FHF, WAHO, WCO, IAPB Africa Internal Database, African Public Health Information Services, National Eye Care Coordinators

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