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# Strategic Plan for Vision 2020: The Right to Sight

*Elimination of Avoidable Blindness  
in the South-East Asia Region*

WHO Project: ICP OSD 002



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## 1. BACKGROUND

There are an estimated 180 million visually-disabled people in the world. Of these, 45 million are unable to move about without help (blind). Cataract is responsible for more than half of the blindness. Trachoma and childhood blindness respectively account for 15 per cent and 4 per cent of all blindness. Uncorrected refractive error, glaucoma, diabetic retinopathy, age-related macular degeneration make up for the rest. Onchocerciasis is an important cause of blindness in Africa. However, this is not seen in the South-East Asia Region. Eighty per cent of the blindness in the world is either preventable or curable (avoidable).

One-third of the world's 45 million blind and half of the world's 1.5 million blind children live in this region. Of the 12 people who become blind every minute in the world, 4 are from South-East Asia. With one quarter of the global population and one-third of the world's blind, South-East Asia has a disproportionate burden of blindness. The blind persons in this Region are among the poorest in the world and the weakest in the society (most of them women), often leading a miserable life and are disenfranchised. There are another 45 million people in this Region with low vision and different grades of visual impairment. The Region is thus estimated to have 60 million visually impaired persons (VIPs).

Ninety per cent of the blindness in the Region is avoidable (preventable or curable). Xerophthalmia and trachoma are easily preventable. Cataract can be cured with inexpensive surgery. Refractive errors are correctable with simple optical devices.

Blindness is estimated to cost the countries of the Region US\$ 5.6 billion annually, in lost productivity, education and rehabilitation. It is therefore an additional burden for the already poor economies of the Member States. Further, the life expectancy of blind persons is one-third less than that their sighted peers, and most of them die within 10 years of becoming blind. Two-thirds of the Region's 10 million blind persons who have cataract, die without their sight being restored. Blindness not only causes human suffering but is

also economically devastating. It is also a cause of many early deaths. Blindness in this region is therefore, truly a public health problem, the full societal implications of which are now being appreciated.

Against this backdrop, the Director-General of WHO launched **Vision 2020: The Right to Sight**, a global initiative to eliminate avoidable blindness, on 18 February 1999. Following this, the Regional Director of the South-East Asia Region launched **Vision 2020: The Right to Sight**, on 30 September 1999 to eliminate avoidable blindness from the Region. This is part of WHO's global strategy for Elimination of Avoidable Blindness from the world by the year 2020. One significant way in which this initiative differs from previous ones is that the concept centres around Rights issues. Recognition of sight as a fundamental human right by all countries can be an important catalyst of initiatives for the prevention and control of blindness.

International initiatives for the prevention and control of blindness are not new. They have been part of WHO's international health development agenda for many years. The first initiative by WHO in this area was the call that the Organization gave in 1956 for the control of trachoma through international cooperation. As a result of this, trachoma control programmes were launched in many countries.

A new strategy for controlling trachoma blindness was developed with WHO initiative. This strategy, called SAFE includes: S (surgery for entropion/trichiasis), A (antibiotic treatment for active trachoma, F (face wash) and E (environmental improvement). This led to a dramatic reduction in blindness as well as active trachoma cases in the world.

With the decline in trachoma and changes in the demographic pattern and epidemiology of diseases in the countries, WHO issued a new call to deal with new challenges. In 1976, World Health Day was celebrated with the slogan: "foresight prevents blindness". The partnership that ensued between WHO and the International Agency for Prevention of Blindness (IAPB) saw major advances with focused programmes currently in operation in many countries. National societies and national programmes for prevention and control of blindness were constituted in many countries. This saw a spurt in activities, which resulted in the reduction of vitamin A deficiency as a cause of blindness in many parts of the world, including this region. In fact, the programmes for prevention of blindness from vitamin A deficiency led to the major discovery of the role of vitamin A in reducing childhood morbidity and

mortality. Large volume cataract surgeries helped to restore sight to millions. Onchocerciasis (not of importance to the Region) is now greatly under control.

WHO's continued vigilance subsequently revealed that as infectious and nutritional diseases came under control, age-related cataract has become the single most important cause of blindness in the developing world. It also became apparent that non-cataract, age-related vascular and degenerative conditions have progressively become more important causes of blindness. WHO's initiatives also brought to surface the importance of uncorrected refractive errors as a cause of blindness.

Despite these concerted efforts for the prevention of blindness during the past 25 years, the number of blind persons in the Region has been increasing. There are more blind people in the Region (15 million) today than there were in 1975 (7 million). At the present rate of intervention, it is estimated that this number will double by the year 2020. The reasons for this are the rapid increase in the total population as well as ageing population and the low priority and the consequence, poor financial allocations that blindness prevention programmes have received in the past in the countries of the Region. All this requires a change in focus. Vision 2020: The Right to Sight, a worldwide initiative to eliminate avoidable blindness with mobilization of additional resources, is an attempt to address these demographic and epidemiological changes through large-scale partnerships.

## **2. SEARO'S MISSION FOR REGIONAL EYE HEALTH**

To assist the countries of the Region to develop **sustainable models** of eye care delivery systems that are able to provide **promotive, preventive, curative and rehabilitative** services to **all citizens**, particularly the marginalized and the vulnerable, to **ensure that no one will go blind needlessly, or having gone blind will not remain so** if his or her sight can be restored by utilizing the knowledge, technology and the means available to the countries.

### **2.1 Objective of Vision 2020**

The overall objective of Vision 2020 is to assist Member Countries in building their national capacity for prevention and control of blindness, specifically to

assist them to eliminate avoidable blindness from major causes (cataract, xerophthalmia and other causes of childhood blindness, refractive errors and low vision, trachoma and other causes of corneal blindness) by the year 2020. While targets will necessarily vary according to the specific country situation and must be determined by the countries themselves, it is aimed that no country in the Region will have a blindness prevalence rate higher than 0.5 per cent. The existing blindness prevalence rates and the number of blind in the countries of the Region are given in Annex-1.

## 2.2 Strategies

- (1) Development of an integrated approach for disease control, human resource development as well as infrastructure and technology development at various levels of the health system.
- (2) Advocacy for promoting Vision 2020 by strengthening the information base at various levels of health functionaries for formulating evidence-based policies and strategies in support of Vision 2020.
- (3) Establishing partnership among countries, collaborating centres, professional organizations, financial institutions, non-government development organizations and WHO to mobilize additional resources.

## 3. REGIONAL ACTIVITIES PROPOSED FOR VISION 2020

### 3.1 Advocacy

#### *Issues*

Blindness prevention programmes have been generally viewed in the context of disability issue requiring attention of a compassionate civil society, often as a service and, sometimes as charity offered to the disabled community. Its economic impact and role in causing early death are only recently being recognized. As noted earlier, blindness prevention programmes are among the most cost-effective health interventions. The economic benefits far out weigh the investment in eye care. The resultant saving could be released for other national development activities. Decision-makers, unaware of the full implications of blindness and its impact on early death, and faced with more

pressing and competitive demands, tend to accord a low priority to blindness prevention programmes.

It is not widely recognized by the people that much of the blindness is preventable and curable with already available resources. The concept that people themselves can take a major responsibility for their eye health also needs to be promoted.

The professional response to this public health problem has been varied from indifference to outright obstruction. The eye health profession has, with some exception, shown only a lukewarm response to the calls for prevention of blindness.

### ***Regional activities***

A concerted and sustained advocacy targeted at all constituencies, **political**, **professional** and **public**, will be launched. The following are some of the proposed activities:

- Advocacy workshops in needy countries
- Production of advocacy and education materials
- Regional Director to write to Ministers of Health and presidents of ophthalmic societies
- Staff/consultant(s) to visit countries to assist nationals in awareness building and programme development
- Observe 1 October every year as Regional Vision 2020 Day, and the second Tuesday of October every year as World Sight Day
- Publications in scientific and lay journals/magazines
- Provide support to, and participate in, major ophthalmic society meetings/ workshops in the Region
- National launchings of Vision 2020 in the countries
- Vision 2020 will be given sufficient visibility in all WHO activities, such as Consultative Committee for Programme Development and Management (CCPDM), Regional Committee (RC), Health Ministers meeting, Health Secretaries meeting and Parliamentarians meetings

- Appointment of roving ambassador (s)
- Holding special sessions in conjunction with professional meetings
- Professional society resolutions endorsing Vision 2020 with an expression of commitment of support to Vision 2020 activities.

### ***Expected outcome***

- Increased political commitment and public awareness in countries where these are inadequate
- Professionals will have a better understanding of the goals of Vision 2020. This may help to mobilize their support in future
- Increased public awareness for self-care as well as greater utilization of available services.

### ***Targets and Indicators***

- Observe World Sight Day
- Workshop for opinion leaders and decision-makers
- National launches
- Production of advocacy materials
- Interface with professional societies.

## **3.2 Development of a Regional Coordinating Mechanism**

### ***Issues***

Vision 2020 has been officially launched; mechanisms for coordination and financial outlays still need to be worked out.

### ***Regional activities***

- Establishment of a post of Regional Adviser and PBL unit in the Regional Office

- A Regional Coordinating Group (RCG) consisting of INGOs, IAPB and WHO to be constituted
- Establishment of an in-house task force with the participation of the relevant units in WHO
- Constituting a corporate advisory group to mobilize additional resources.

#### ***Expected Outcome***

- A mechanism for coordination among partners in operation
- Regional implementation targets and indicators for monitoring set.

#### ***Targets and Indicators***

- The post of Regional Adviser (PBL) established by 2000
- In-house task force, RCG, CAG established and functional by mid-2001.

### **3.3 Strengthening Human Resources for Health**

#### ***Issues***

There is a general shortage of eye care personnel in the Region. Ophthalmologists in some countries do not operate on cataracts and some are even inappropriately deployed as general duty medical officers not practising ophthalmology at all. In addition, there is a very serious mal-distribution of eye care personnel with their concentration in urban areas. Another disturbing observation is the fact that the number of mid-level workers (ophthalmic paraprofessionals) is even fewer, only two-thirds the number of ophthalmologists. A more desirable ratio of paraprofessionals to ophthalmologists would be 4:1. Several initiatives are being proposed to address these issues.

The HRH policy will emphasize the development of effective team work among an appropriate mix of professionals who are equitably distributed and adequately supported.

### ***Regional activities***

- Review of ophthalmic curricula to examine components of public health ophthalmology in speciality training programmes with a view to reorienting education of ophthalmologists to goals of Vision 2020. Orient residency programmes to community eye health and management of eye care programmes
- Improvement in teaching/learning of ophthalmology in graduate medical and nursing education programmes
- Involving general practitioners in programmes for prevention of blindness
- Training primary health care workers for in care and school teachers in visual screening of school children
- Enhancement of mid-level ophthalmic workforce (ophthalmic assistants and refractionists) in SEAR countries. WHO is developing a standard curriculum for training mid-level workers. Each country may adapt the curriculum to address country-specific needs
- Institutional capacity building for enhancing training of ophthalmologists, ophthalmic nurses and allied health personnel for eye health
- Training of ophthalmic instrument maintenance technicians
- Training of eye health managers in programme planning, implementation and monitoring
- Training paediatric eye care teams to deal with surgical causes of childhood blindness
- Training local NGO workers to develop/strengthen local NGO resources
- Better utilization of existing HRH through refresher training, redeployment, equipment and staff support.

### Expected Outcome

- Education and training of all categories of eye health workers oriented to public health ophthalmology and aligned to the goals of Vision 2020
- Adequate number of professionals with appropriate mix developed and equitable distribution of health personnel for different levels of eye care delivery achieved
- National capacities to manage eye health programme developed.

Table 1: **Targets for Human Resources, 2000-2020**

	2000		2010		2020	
Ophthalmologist	1:200000	14000	1:100000	17000	1:50000	40000
Ophthalmic Asstt	1:200000	14000	1:100000	17000	1:50000	40000
Ophthalmic Nurse	?	?	?	?	?	?
Refractionist	1:250000	12000	1:100000	17000	1:50000	40000
Manager	5% sec 20% ter	?	25% sec 80% ter	800	80% sec 100% ter	1400
Equipment Maintenance Technician	5% sec 20% ter		25% sec 60% ter	800	50% sec 100% ter	1400
PHC workers trained in primary eye care	?	?	1:20000	150000	1:10000	200000

An additional 25000 ophthalmologists would need to be trained in the next twenty years to meet the global target of one ophthalmologist for 50000 population in SEAR. In view of the difficulties in achieving this target in many countries, the intercountry meeting of national representatives, held in Jakarta has suggested that the countries may revise their targets to suit the number of ophthalmologists for 100000 population.

### 3.4 Infrastructure and Technology Development

#### *Issues*

There is evidence to show that the available infrastructure in many countries is inadequately and, often, inappropriately utilized. It has also been pointed out that the surgical output of the existing facilities can be doubled in many countries with little additional financial input. Also, there are many situations where appropriate facilities are not available at all. Issues related to the use of technology also need to be addressed.

#### *Regional activities*

- Assessment to determine the capacity of the existing infrastructure, its level of utilization, quality of services and barriers to utilization
- Operations research to increase productivity of the existing infrastructure
- Development/adaptation of existing cost-effective models in the Region
- Strengthening eye banking systems (donation, preservation, distribution, etc.) in SEAR
- Guidelines for acquiring good quality, cost-effective and appropriate equipment
- Manufacture/bulk purchase of low-cost spectacles, low vision devices, pharmaceuticals and surgical consumables.

#### *Expected outcome*

- Barriers to utilization identified and minimized; productivity of existing infrastructure increased
- Adequately-equipped appropriate infrastructure developed
- Eye banks in the Region become more effective with improved quality and achievement of regional self-sufficiency
- Guidelines for manufacture, purchase of cost-effective equipment, optical devices and surgical consumables developed.

Figure 1: *Proposed service delivery model*



The details of services at the various levels of infrastructure are indicated in Annex 2.

Table 2: *Targets and Indicators for Infrastructure, Access, Utilization and Coverage 2000-2020 (percentage)*

Targets	2000	2010	2020
Availability of infrastructure	50	90	95
Accessibility	40	75	90
Utilization	25	50	90
Coverage	25	50	90

### 3.5 Reduction of Disease Burden (Elimination of Avoidable Blindness)

#### *Issues*

There are many blinding conditions in the Region, their proportion varying not only between the countries but also within the countries. The lack of sound population-based data also makes the choice of a disease for intervention difficult, often leading to controversy about choices. The most significant aspect of blindness in the Region is that almost 90 per cent of the blindness is either preventable or curable with simple cost-effective technology.

#### *Regional activities*

The identification of diseases for intervention should be based on their magnitude and feasibility of intervention with the available resources. From among the blinding conditions identified for priority action at the global level, the following have been identified as current priority for disease control in the Region. These priorities will change with a change in disease epidemiology and availability of cost-effective interventions and resources.

*Table 3: Criteria for identification of target diseases*

		Effectiveness of Intervention	
Cataract	++++	++++	1
Childhood blindness including xerophthalmia	++++	+++	3
Corneal blindness including trachoma	+++	+++	4
Refractive error and low vision	++++	++++	2

Conditions causing blindness may be divided into two groups, according to the share of disease burden at present and in the foreseeable future.

Table 4: *Priority causes of blindness*

	Countries								
	BAN	BHU	IND	INO	MAV	MMR	NEP	SRL	THA
Cataract	1	1	1	1	1	1	1	1	1
Refractive error and low vision	2	2	2	2	2	3	2	2	3
Xerophthalmia and childhood blindness	3	3	3	3	3	4	3	3	2
Trachoma	X	X	4	X	X	2	4	X	X
<b><i>Emerging Issues</i></b>									
Glaucoma	4	1	1	1	1	1	2	1	1
Injury	1	2	4	3	2	2	1	2	2
Ant segment infection	3	3	5	4	3	3	3	3	4
Diabetic retinopathy	2	4	2	2	4	4	4	4	5
Age-related macular degeneration	5	5	3	5	5	5	5	5	3

Table 5: *Targets for Disease Burden*

Indicator	2000	2010	2020
Population of the Region	1.5 billion	1.7 billion	2.0 billion
Blindness prevalence rate per 100	0.85	0.60	0.40
Estimated number of blind persons	15 million	10 million	8 million

## **(1) Cataract**

### ***Issues***

Cataract is responsible for 50-80 per cent of blindness in the Region and is the commonest cause of blindness in all countries. Some of the issues related to cataract blindness, such as non-optimal utilization of health facilities and inadequate and inappropriate use of human resources, have been mentioned earlier. Low surgical output of cataract remains the most critical issue in Region at the present. Coupled with this, the number of new cataract cases is rapidly increasing because of the rapid increase in the population, particularly the elderly population. The backlog of cataract is therefore increasing very rapidly.

While on the one hand, the number of surgery done is inadequate, one-third of those operated for cataract remain blind due to uncorrected aphakia, surgical complications or other co-morbid conditions. Poor surgical outcome is often responsible for low surgical uptake, thus creating a vicious cycle. In addition to these, several other barriers to uptake of surgery have been identified and many more await to be discovered.

### ***Regional activities***

The strategies to combat cataract blindness in the Region will take into account the following:

#### ***Prevention of cataract***

- Analyse available evidence on the role of anti-oxidants and ultraviolet rays protection devices
- Undertake multi-centric studies to identify feasible and cost-effective methods.

#### ***Surgical treatment of cataract***

- Increasing cataract surgical rate
- Improving quality and outcome of surgery
- Understand the barriers to uptake and design strategies to address them.

### ***Prevention of cataract***

At the present state of scientific knowledge, cataract is not preventable. Several ongoing studies have indicated the possibility of delaying the onset of cataract and cataract blindness. This will receive serious attention in South-East Asia where most blindness is caused by cataract. Even modest gains in delaying cataract will have a significant impact on reducing cataract blindness by allowing breathing time for the health system to cope with the rapid increase in cataract blindness. The role of anti-oxidants and devices to reduce ultraviolet exposure to the eyes are currently being studied. The Regional Office will analyse available evidence to undertake multi-centric studies to identify effective methods.

### ***Surgical treatment of cataract***

Until such time as cataract prevention becomes a practical proposition, surgery will remain the mainstay of cataract intervention. Currently, just over three million cataract surgeries are being done in the Region. This will need to be doubled to clear the backlog and take care of the new incidence of cataract blindness. Several successful models are available in the Region for high volume, high quality and cost-effective cataract surgery. Suitable adaptations to specific country and local situations will need to be developed. Some specific regional activities include:

- intercountry study(ies) to identify barriers to the utilization of cataract surgical services
- intercountry operational research to increase the number of cataract surgeries in Bangladesh and Indonesia
- development of guidelines for careful monitoring of outcome of surgery to ensure acceptable levels of outcome to ensure quality.

### ***Expected outcome***

- Improved cataract surgical rate
- Improved visual outcome and quality of life
- Elimination of cataract backlog.

Table 6: *Targets and Indicators*

	BAN	BHU	IND	INO	MAV	MMR	NEP	SRL	THA
<b><i>Cataract Surgical Rate</i></b>									
Current	500	1019	3400	350	700	500	900	1337	1667
Target rate	1000	1400	4000	2800	1000	1000	3500	1600	2500
<b><i>IOL RATE (percentage)</i></b>									
Current	30	100	34	20	35	50	85	100	90
Target rates	60	100	68	50	70	90	100	100	100
<b><i>VA TARGET (6/12) or better (percentage)</i></b>	70	70	85	85	70	70	85	85	85

## (2) Xerophthalmia and childhood blindness

### *Issues*

Half of all the blind children in the world live in this region. Among the leading causes of childhood blindness in the Region are xerophthalmia, congenital cataracts, congenital glaucoma, optic atrophy due to meningitis, retinopathy of prematurity, and uncorrected refractive errors. While blinding xerophthalmia is largely under control with vitamin A distribution in many countries, strategies to provide long-term solution, including promotion of consumption of vitamin A-rich food, are needed.

The inclusion of rubella vaccination in the general programme for immunization in the countries will go a long way in preventing rubella cataracts, an important cause of childhood blindness. It is a useful strategy to combat childhood blindness.

### *Regional activities*

Many of the conditions causing childhood blindness lend themselves admirably to primary health care interventions. The control of xerophthalmia is

expected to be achieved by the year 2000 through the global child survival programme. The key strategies include closely working with nutrition, immunization and PHC systems to achieve and sustain elimination of vitamin A deficiency. Secondary care centres will need to be developed for dealing with refractive blindness. In view of the complexity of surgery in children's eyes, tertiary care centres will need to be geared to provide these services. The following are some specific strategic actions:

- Primary prevention with vitamin A supplementation through EPI and other channels
- Promotion of consumption of vitamin A rich food
- Primary prevention of rubella cataract, by rubella immunization
- Training of paediatric eye care team to deal with surgical causes of childhood blindness with the establishment of paediatric eye care centres
- School screening programmes for early detection and correction of visual defects
- Training of paediatricians/neonatologists for prevention, early diagnosis and treatment of retinopathy of prematurity (ROP)
- Development of strategies for prevention of blindness due to meningitis
- Development of low vision services for visually-handicapped children
- Inclusion of eye health in school curricula
- Evaluation and provision of ophthalmic services, including low vision services in blind schools
- Rehabilitation services for unavoidable blindness in children.

***Expected outcome***

- Elimination of blindness due to vitamin A deficiency
- Primary prevention of rubella cataract and improved surgery for congenital cataracts and congenital glaucoma
- Strategies for prevention of blindness from optic atrophy due to meningitis

- School children screened, corrected for refractive errors and treated for trachoma
- Paediatric eye care centres established.

*Table 7: Targets and Indicators, 2000-2020*

Target	2000	2010	2020
Surveillance system for vitamin A	In place in all countries	Maintenance is needed in some countries	x
Incidence of blindness due to vitamin A deficiency	?	Nil in all countries except disaster situation	x
Establishment of tertiary care paediatric eye centers		One paediatric tertiary care unit for 10 million population	One paediatric tertiary care unit for 5 million population
Proportion of children screened for visual defect	?	50 per cent of child population	90 per cent of child population

### **(3) Trachoma and other causes of corneal blindness**

#### ***Issues***

An estimated three million people are blind in the Region due to corneal diseases. Trachoma remains an important cause in pockets in some countries although its importance as a cause of blindness has declined over the years. Many corneal scars are an aftermath of xerophthalmia. Ocular injury and corneal ulcer constitute other important causes. Their role in causing corneal blindness is not well appreciated as blindness due to these conditions is traditionally considered to be unilateral.

#### ***Regional activities***

Strengthening primary eye care through the primary health care approach is effective in preventing corneal blindness in a vast majority of cases. Facilities for eye banking and corneal graft surgery will be developed at tertiary care

centres to restore sight in those already blinded by corneal scar. The following regional activities are proposed:

- Primary prevention of trachoma employing SAFE strategy
- Eye banking and corneal graft surgery at secondary and tertiary centres
- Development of strategy for prevention of blindness from ocular trauma and corneal ulcer through primary health care approach.

### ***Targets and Indicators***

- Targets to be drawn by countries in view of the localized nature of disease burden
- Active infection in children and trichiasis in adults would serve as indicators for control of trachoma blindness.

### ***Expected outcome***

- Trachoma eliminated from the remaining pockets in the Region
- Strategy for prevention of blindness from ocular trauma and corneal ulcer developed
- Eye bank services in the Region strengthened.

## **(4) Refractive error and low Vision**

### ***Issues***

Uncorrected refractive error is now recognized to be an important cause of visual impairment and blindness in the Region. Although the exact magnitude of the problem is not known with certainty, it is large enough to require the attention of eye care programmes. National Eye Institute (NEI) – supported studies may provide data for some countries. With an increase in literacy the demands for refractive services are likely to increase dramatically.

### ***Regional activities***

The strategies for prevention of blindness and visual disability from uncorrected refractive error will include demand creation, need identification

and service provision, such as refraction, manufacture and dispensing of glasses. Key strategies would be:

- Development of modules for training school teachers for screening school children
- Determining cost-effective screening methods
- Creation of facilities for refractive services at secondary centres
- Awareness and demand creation for refractive services
- Need assessment of low vision services in the Region
- Manufacture of low-cost spectacles and low vision devices.

### ***Expected outcome***

- Refractive blindness reduced by increasing awareness and improving screening and service provision
- Need for low vision services assessed, demand for the same created and services provided.

### **(5) Emerging causes of blindness**

In addition to the target diseases identified for elimination (cataract, trachoma, vitamin A deficiency and childhood blindness, refractive error and low vision), the Region is facing an increasing challenge from emerging causes such as glaucoma, diabetic retinopathy, ocular injury, corneal ulcer and age-related macular degeneration. The importance of each varies from one country to another. Many of them are related to ageing and lifestyle. The following strategies are proposed:

### ***Regional activities***

- Create public awareness for early detection and control of glaucoma and diabetic retinopathy
- Develop effective comprehensive service delivery modules
- Screening for glaucoma should be included in all eye camps
- Measures for identifying the size of the problems should be initiated

- Initiative taken by the Regional Office for development of a regional strategy for prevention of trauma and trauma-induced corneal ulcer to be intensified
- Promote further research and development in areas such as health promotion, eye care for the elderly and Healthy Eye City concept
- Orient training of residents to emerging causes of blindness and make appropriate curricular changes.

## **(6) Resource Mobilization**

### ***Issues***

Although **Vision 2020** has been formally launched by the Regional Director, WHO Regular Budget for this activity has not been earmarked either in the regional budget or in the country budget for 2000-2001 biennium. Serious efforts to mobilize funds will therefore need to be undertaken to translate the political commitment and policy directions into technical implementation.

### ***Regional activities***

The following have been identified as potential sources for funds. Effective and efficient facilitatory mechanisms, however, will need to be put in place for mobilizing resources.

- Global vision 2020
- Regional Vision 2020
  - Country budgets
  - Extrabudgetary resources
  - Inter-country budget
- Collaboration with other UN agencies at regional and national levels
- Coordination with NGOs and IAPB at regional and national levels
- Collaboration with industry, the private sector and professional organizations.
- Banks: World Bank, Asian Development Bank
- Collaborating centres

- Philanthropic organizations and foundations
- Technical cooperation among developing countries (TCDC).

A Regional Coordination Group (RCG), as suggested by the WHO/IAPB meeting held in New Delhi from 28-30 September 1999 and endorsed by the Inter-country meeting on Development of Regional Strategies for Vision 2020 held in Jakarta from 14-17 February 2000, has been constituted. It will be the overall responsibility of the group to mobilize resources in addition to the much-needed coordination between several partners. The terms of reference and composition of RCG is at Annex 3.

### ***Expected outcome***

- Wider networking
- More resources mobilized.

## **(7) Evidence and Information for policy**

### ***Issues***

Most Member States in this region are developing countries with poor to moderately developed health infrastructure. Effective management information systems are not in place for constant flow of information from the periphery to the centre and vice versa. These have often hindered effective policy formulation and monitoring of programmes for prevention of blindness. The process of collecting information is time-consuming in addition to being resource intensive, often beyond the means of the countries. The level of technical expertise in the countries is also weak. Support for conducting operation research in order to obtain reliable evidence for information and policy is strongly needed. Such hard data are needed to convince sponsors of the value of their support.

### ***Regional activities***

Quick, reliable, inexpensive and simple methods for generating information for programme planning, prioritizing and monitoring need to be developed. Support will also need to be provided to the countries on the following aspects:

- Rapid assessment of cataract services and other causes of blindness and visual impairment (developed by WHO)
- Population-based studies to assess causes of blindness and impaired vision in children (format developed by WHO and International Centre for Eye Health, London)
- Prevalence of refractive errors as a cause of blindness and impaired vision
- Population-based data on ocular trauma and corneal ulcer
- Database on diabetic retinopathy, glaucoma and other potentially blinding diseases
- Databases on human resources, infrastructure and technology
- Establishment of a Web site on Vision 2020 SEAR
- Strengthening of management information system in the countries and in the Region
- Population-based surveys for planning/monitoring/evaluating programmes
- Regional consultative meetings to determine information needs for planning and monitoring of eye care services.

### ***Expected outcome***

- Database on disease burden, human resources and infrastructure
- Population-based data on programme implementation and outcome.

## **(8) Strengthening PBL in the Regional Office**

### ***Issues***

The Regional Office will have to play an important role in promoting **Vision 2020**. This role will expand as the programme develops. Dedicated staff to provide leadership and to perform ground work for programme development as well as for planning, coordination with the countries and other agencies, implementation, monitoring and resource mobilization will be required.

### **Regional activities**

In view of the intensive and extensive work required, the PBL programme will need to be considerably strengthened to meet the goals of Vision 2020. The following are some strategic measures suggested by the intercountry meeting of WHO/IAPB on the eve of launching of Vision 2020 and endorsed by the Intercountry Consultation on Development of Regional Strategies for Vision 2020, held in Jakarta from 14-17 February 2000.

- Establishment of the post of Regional Adviser with appropriate staff for PBL at the Regional Office
- Adequate resource allocation
- Regional Coordination Group with IAPB and NGOs
- In-house Task Force/Advisory Committee for Vision 2020.

### **Expected outcome**

- Improved coordination between the different units in WHO
- Better coordination with the countries
- Better coordination with INGOs, bilateral and multilateral agencies, and greater resource mobilization.

## **(9) Vision 2020 activities in the countries**

### **Issues**

The countries of the Region are at different stages of socio-economic development as well as eye health care services. Some countries have blindness prevalence rates comparable to developed countries (Thailand) while some others have prevalence rates as high as 1.5% (Indonesia), one of the highest in the world. The countries are also at varying levels as far as programmes for prevention of blindness are concerned. Some have well-developed programmes while others have virtually none. National programmes for prevention and control of blindness with effective plans of action are critical for the success of Vision 2020, as are the roles of governments, which leave much to be desired in some countries.

### ***Regional activities***

The Regional office will adopt multiple strategies to suit the country needs so far as initiation of the activities are concerned. However, the Regional Office will play a sustained supportive role in programme monitoring and evaluation as well as in mobilizing technical and financial support.

- National Coordination Committees/Task Force for prevention of blindness and Vision 2020 in the countries to be constituted or strengthened. The suggested composition of national coordination committees is at Annex 4
- National plans with new goals and targets to be drawn up through a process of consultation and consensus. The proposed template for the development of a national plan of action is at Annex 5
- Identification of nature and quantum of support to national programmes from the Regional Office, WHO headquarters and the Task Force
- National launching of Vision 2020
- National focal points in the countries
- Improve information system for planning, monitoring and evaluation.

### ***Expected outcome***

- Prevention of blindness and Vision 2020 to become important components of national health development agenda
- National programmes realigned to goals of Vision 2020 developed in the countries
- National focal points identified in the countries
- Greater support to the countries mobilized
- Cooperation from professional organizations and media obtained
- Advocacy and educational materials produced and disseminated.

## Annex 1

### SITUATION REGARDING BLINDNESS IN THE COUNTRIES OF SOUTH-EAST ASIA<sup>1</sup>

	Prevalence of blindness (percentage)		Prevalence of cataract (percentage)	
Bangladesh	1.00	1,300,000	60	738,816
Bhutan	0.80	5,600	74	3,777
DPR Korea*	NA	NA	NA	NA
India	0.70	6,800,070	77	6,546,053
Indonesia	1.47	2,948,761	53	1,562,843
Maldives	0.80	1,959	64	1,254
Myanmar	0.90	427,617	64	273,675
Nepal	0.80	325,918	72	129,508
Sri Lanka	0.50	92,920	70	64,579
Thailand	0.31	242,341	74	136,296
<b>Total</b>	<b>0.82</b>	<b>12,145,186</b>	<b>69</b>	<b>10,456,800</b>

\* Recent data not available.

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<sup>1</sup> Based on information provided by countries and some population-based studies.

## Annex 2

### ACTIVITIES AT DIFFERENT LEVELS OF HEALTH SYSTEM

Level	Activity	Key manpower	Other infrastructure
District	Cataract surgery Refractive services Spectacle supply Training Outreach activities Coordination	Ophthalmologist (1:250 000) Ophthalmic assistant/ nurse	1 eye bed/20 000 population 1 eye operating theatre per district 1 spectacle workshop and eye drop unit per district (optional)
Sub-district	Case referral Outreach cataract surgery Refraction services Trichiasis surgery	As above	Refraction facility Spectacle dispensary
Primary	Screening/case referral Health education Treatment of common eye infections	PHC worker trained in primary eye care (1:5000)	Vision measurement Basic eye medicine: Tetracycline eye ointment Vitamin A capsules (ivermectin)

### **Annex 3**

## **REGIONAL COORDINATION GROUP (RCG) FOR VISION 2020**

### **1. Terms of Reference**

- Coordination
- Review meetings at regional level
- Advocacy
- Resource mobilization
- Regional projects and initiatives
- Documentation and dissemination of information
- Guidelines and tools for assessment of coverage, outputs and outcomes
- Formats for review of programme status by Member Countries.

### **2. Composition**

- National focal persons (10)
- IAPB Regional Chair (1)
- Representatives of INGOs of IAPB Task Force (5)
- WHO Collaborating Centre (PBL) (2)
- World Bank, Asian Development Bank (2)
- WHO (2)
  - Non-communicable Diseases
  - Prevention of Blindness focal person
- UNICEF (1)

**3. Chair**

- INGOs by rotation every two years

**4. Secretariat**

- Regional IAPB Secretariat (now at Aravind Eye Hospital, Madurai)

**5. Channel of communication**

- From Secretary of RCG to Secretaries of National Committees
- Chairperson and Secretary of RCG to work in close coordination with focal point (Regional Adviser on Prevention of Blindness) in SEARO.

## Annex 4

### NATIONAL COORDINATION GROUP

Vision 2020 requires a great deal of coordination between different organizations and individuals at international, national and subnational levels for successful programme implementation in the countries. A three-tier coordination mechanism is suggested.

#### 1. Coordination

- Central National Coordinating Body  
(Interdisciplinary group consisting of representatives of:)
  - Ministry of Health
  - NGOs
  - Academic institutions
  - Professional bodies
  - Medical councils
  - Zonal/Regional/State Representatives of eye care providers and centres of excellence
  - Representatives of health care industry
  - WHO/UNICEF/World Bank
- District level
- Operational level

#### 2. Terms of Reference

- To develop national eye health care policy, strategy and plan to ensure equitable access to quality and sustainable eye care services
- To act as the directing and coordinating authority for eye health care
- To facilitate cooperation for eye health care among member organizations

- To assist in formulating a partnership plan between organizations together with WHO for achieving the goals of Vision 2020
- To mobilize needed resources within and outside the country
- To facilitate regional coordination and cooperation.

Coordinating Committees should also be constituted at the district and subdistrict level for operational efficiency. The composition and specific responsibilities for each should be country-specific.

## Annex 5

### PROPOSED TEMPLATE FOR DEVELOPMENT OF NATIONAL PLAN OF ACTION

#### 1. Introduction (background)

- Extent of problems
- Action undertaken to address the problems
- Constraints
- Areas that need more emphasis in the plan of action.

#### 2. Objectives

- Operational objectives, not disease reduction objectives (e.g. to improve quality of cataract surgery, to increase availability of low-cost spectacles etc.)

#### 3. Targets

- Operational targets, not disease reduction targets (e.g. to increase coverage of eye care services, particularly in rural areas to 70 per cent, to increase cataract surgical rate to 500 per million etc.)

#### 4. Strategies

- Strengthening advocacy
- Reduction of disease burden
- Strengthening human resources for health
- Improve health system, infrastructure and technology development
- Improve information system for planning, monitoring and evaluation.

**5. National Activities**

- Activities related to each of the above strategies.

**6. Expected outcome (of each strategy)**

Example: Strengthening advocacy

- National vision 2020 launched
- Advocacy materials produced and disseminated
- Commitment from high-level decision-makers obtained
- Cooperation from professional organizations and media obtained.

**7. Resources and Time frame**