



WORLD HEALTH ORGANIZATION

WHO/PBL/97.6
Distr.: Limited
Original: English

PLANNING FOR THE GLOBAL ELIMINATION OF TRACHOMA (GET)

Report of a WHO Consultation

*Geneva, Switzerland
25 & 26 November 1996*

PROGRAMME FOR THE PREVENTION OF BLINDNESS AND DEAFNESS
Alliance for the Global Elimination of Trachoma



© World Health Organization, 1997

This document is not issued to the general public,
and all rights are reserved by the World Health Organization (WHO).

The document may not be reviewed, abstracted, quoted, reproduced
or translated, in part or in whole, without the prior written permission of WHO.

No part of this document may be stored in a retrieval system
or transmitted in any form or by any means - electronic, mechanical
or other - without the prior written permission of WHO.

The views expressed in documents by named authors
are solely the responsibility of those authors.

TABLE OF CONTENTS

INTRODUCTION.....	3
-------------------	---

1.	REVIEW OF FOLLOW-UP ACTION AFTER THE GLOBAL SCIENTIFIC MEETING ON FUTURE APPROACHES TO TRACHOMA CONTROL	3	
2.1	Morocco	4	
2.2	Preliminary Report of the Collaborative Trial of Azithromycin for Trachoma (ACT)	4	4
	• Results	4	
	• Compliance with Treatment	5	
	• Clinical Response of Sub-study Children	5	
	• Response of Ocular Chlamydial Infection among Initially Active Children	5	
2.3	Discussion	6	
3.	INTERNATIONAL COORDINATING GROUP FOR THE GLOBAL ELIMINATION OF TRACHOMA	7	
3.1	Present Activities of Participating Organizations	7	
	• African Medical and Research Foundation (AMREF), Kenya	7	
	• Christoffel-Blindenmission (CBM), Germany	7	
	• The Edna McConnell Clark Foundation (EMCF), USA	8	
	• Francis I. Proctor Foundation for Research in Ophthalmology, USA	8	
	• International Agency for the Prevention of Blindness (IAPB), UK	8	
	• International Eye Foundation (IEF), USA	8	
	• International Organization Against Trachoma (IOAT), France	9	
	• Helen Keller International (HKI), USA	9	
	• Lions Clubs International Foundation/SightFirst Project (LCIF/SF), USA	9	
	• Sight Savers International (SSI), United Kingdom	10	
	• Pfizer Inc. (USA) (Observer)	10	
	• The World Health Organization (WHO), Switzerland	11	
	• WHO Regional Office for Africa	11	
	• WHO Regional Office for the Eastern Mediterranean	12	
3.2	Global Coordination Group	12	
3.3	Future membership of the Alliance	13	
4.	TRACHOMA RAPID ASSESSMENT METHODOLOGY: ONGOING DEVELOPMENT	13	
4.1	Validation	13	
4.2	Geographic Information Systems	14	
5.	ASSESSMENT AND MANAGEMENT OF TRACHOMA IN INTEGRATED DISTRICT HEALTH-CARE PROGRAMME	14	
5.1	Trachoma Control Programme in the Northern Region of Ghana	14	

5.2	A suggested strategy for implementing a Trachoma Control Programme through the District Health Care System.....	15
6.	NEWSLETTER ON "GLOBAL ELIMINATION OF TRACHOMA"	17
7.	OUTLINE OF FUTURE PLAN OF WORK	17
7.1	Priority actions over the next six months.....	17
7.2	Operational research.....	17
7.3	Plan of action for 1997	19
8.	OTHER MATTERS	20
	CONCLUSIONS AND RECOMMENDATIONS	21
	ANNEX 1	22
	ANNEX 2	23
	ANNEX 3	26
	ANNEX 4	27

INTRODUCTION

A meeting of nongovernmental development organizations (NGDOs) and other interested parties was convened by the WHO Programme for the Prevention of Blindness and Deafness on 25 and 26 November 1996 in Geneva, Switzerland, to plan for the global elimination of trachoma. The purpose of the meeting was to follow up the recommendations made by the Global Scientific Meeting on Future Approaches to Trachoma Control held in June 1996, and to consider establishing a group to coordinate efforts to attain the goal of the Global Elimination of Trachoma by 2020 (**GET 2020**), its terms of reference and work priorities.

Dr Ralph H. Henderson, Assistant Director-General of WHO, opened the meeting, noting advances made in the control of trachoma thus far, and the challenge of forming new alliances and partnerships, especially among the non-governmental development organizations and private industry, as interested parties working toward the goal of GET 2020.

After introductions, Dr Allen Foster was unanimously elected Chairman, and Dr Virginia Turner, Vice-Chairman. Mr Jeffrey Mecaskey agreed to act as Rapporteur. The draft agenda was adopted (Annex 1); a list of participants is given in Annex 2.

1. REVIEW OF FOLLOW-UP ACTION AFTER THE GLOBAL SCIENTIFIC MEETING ON FUTURE APPROACHES TO TRACHOMA CONTROL

In briefly reviewing the final draft of the report of the Global Scientific Meeting on Future Approaches to Trachoma Control (WHO/PBD 96.56), a number of minor modifications were noted and further amendments were suggested for the final version, which will be available in English and French in early 1997. It is hoped that Arabic and Spanish versions would be prepared subsequently.

Several other documents related to trachoma had been developed by the WHO Programme for the Prevention of Blindness and Deafness (PBD), including an editorial on trachoma for the *British Journal of Ophthalmology*, and by UN agency publications, e.g., UNICEF's *The Prescriber* and WHO's *Drug Information*. Additionally, the manual *Achieving Community Support for Trachoma Control* has been reprinted and, following the model of other WHO programmes, a boxed set of WHO trachoma material will be ready for distribution, as part of a new WHO literary kit to all Member States, in early 1997.

To strengthen its role in the GET 2020 initiative, WHO/PBD will receive a grant from the Edna McConnell Clark Foundation, a pledge from the Task Force of the Partnership Committee of Nongovernmental Organizations collaborating with the WHO Programme, and anticipated support from Pfizer Inc. These resources will cover administrative support and travel costs. Since the June Meeting, WHO/PBD staff has also provided technical assistance on the design of the azithromycin trial in Morocco, heightened the priority of trachoma on the agenda of the Partnership and Strategic Planning Committee, and communicated recent developments with WHO's Regional Offices for Africa (AFRO) and the Eastern Mediterranean (EMRO). They have also brought the emerging trachoma agenda to the attention of appropriate divisions within WHO, e.g., for Drug Management and Policies and for Disease Surveillance and Control. In addition to the recommendations of the Global Scientific Meeting, it was suggested that the recommendations of the current meeting should note the following points:

- ▶ potential emergence of drug resistance to azithromycin in relation to nonchlamydial infections;
- ▶ intermediate mile stones to be defined toward the goal of the Global Elimination of Trachoma by 2020;
- ▶ clarification of the definition of the elimination of trachoma; e.g., as a blinding disease;
- ▶ assessment of national and global progress in elimination.

2. UPDATE ON THE USE OF AZITHROMYCIN AGAINST TRACHOMA

2.1 MOROCCO

Azithromycin, an azalide antibiotic, has shown tremendous promise in the control of trachoma. Trials have demonstrated that the drug is much more effective than topical tetracycline, though the optimal treatment interval for suppression of inflammatory disease in a single dose scheme remains to be assessed. With financial support from the Edna McConnell Clark Foundation and technical and in-kind support from Pfizer Inc., the Ministry of Public Health in Morocco has begun a trial to evaluate two alternative intervals of treatment in a single dose and the feasibility of alternative distribution schemes. As a public health trial, this study will form the basis for the Ministry's policy on treatment of trachoma and Pfizer Inc.'s consideration of a donation for other country programmes.

2.2 PRELIMINARY REPORT OF THE COLLABORATIVE TRIAL OF AZITHROMYCIN FOR TRACHOMA (ACT) (by Dr C. R. Dawson)

The new antibiotic azithromycin is uniquely effective against *C. trachomatis* infections. For endemic trachoma, azithromycin treatment of whole village populations (mass treatment) offers the possibility of suppressing chlamydial infection in the entire community, thus eliminating the disease. The ACT study is a comparison of six weeks mass treatment with topical tetracycline ointment daily in one village compared to mass treatment with a single dose of oral azithromycin, once weekly, for three weeks in a second village. This trial has been done simultaneously in Tanzania, The Gambia and Egypt.

- **Results**

The pre-treatment rates of active trachoma for children of 1 to 10 years in Egypt were 57% and 42%; in Tanzania, 70% and 57%; and in The Gambia 35% and 47% for azithromycin and terramycin treated villages.

- **Compliance with Treatment**

For children with active disease (the sub-study group), the compliance for azithromycin was between 91% and 98% and from 87% to 92% for topical terramycin. For adults, compliance to azithromycin was excellent, but there was a considerable resistance to taking the ointment (e.g. only 55% of adults in Egypt accepted four weeks or more of treatment).

- **Clinical Response of Sub-study Children**

The clinical disease was judged from photographs of the right eye. In Egypt, the cure rate at four months in the azithromycin group was 73% and in the tetracycline ointment group, 11% ($p < .001$). By 12 months, the cure rates were 56% for azithromycin and 54% for tetracycline ointment.

In Tanzania, the cure rates at two and four months were about 50% for both antibiotics and fell slowly to about 40% at 12 months. In The Gambia, technical problems with the photographs and lower rates of follow-up preclude the use of all but the two-month follow-up when cure rates were 61% in the azithromycin group and 64% in the tetracycline group.

- **Response of Ocular Chlamydial Infection among Initially Active Children**

There was a dramatic decrease in chlamydial infection by DNA amplification (LCR) in the eyes of children treated with azithromycin in Egypt and Tanzania from 50-75% to 2%. While these low rates in azithromycin-treated children persisted in Tanzania, there was a partial return of infection in Egypt during the period of seasonal conjunctivitis. In both countries, the ocular infection rate was higher (15-45%) after tetracycline ointment. In The Gambia, the fall with both forms of treatment was about the same at two months (to about 15%).

- **Preliminary Conclusions**

- (i) Oral azithromycin is more effective than topical terramycin ointment in reducing ocular chlamydial infection and, for Egypt, in suppressing clinical disease.
- (ii) Oral azithromycin is better accepted than an eye ointment by these rural populations.
- (iii) Antibiotic treatment in trachoma control programmes should be adapted to epidemiological and other variables in different regions.

2.3 DISCUSSION

Azithromycin could become an important approach to the **A** of the **SAFE** strategy (**S**urgery for trichiasis, **A**ntibiotics for active disease, **F**acial cleanliness and **E**nvironmental improvement for the determinants of transmission and disease). Given that it will be at least two years before Pfizer could consider philanthropic activity beyond Morocco, promotion of the use of topical tetracycline remains a priority. Nevertheless, treatment alternatives should receive further consideration, including possible new vehicles for topical preparations.

The **possible development of resistance** to azithromycin by common organisms causing respiratory infections was put forward by Dr M. R. Couper from the Division of Drug Management and Policies; a single-dose scheme may imply a particular risk in this context. However, Dr E. K. Mulholland from the Division of Child Health and Development also commented on the issue of potential resistance to azithromycin. Noting that there was little data on the issue, it was suggested that, from a theoretical basis, it was unlikely that using a single as opposed to triple dose of azithromycin would increase the probability of agents such as *pneumococcus* developing resistance to azithromycin. In fact, the Division of Child Health and Development was considering the same dosage. He added, however, that there is no standard protocol for monitoring the emergence of drug resistance.

Ms Paula Luff, on behalf of Pfizer Inc., clarified the rationale for the differential dosage of azithromycin in the treatment of trachoma and of pneumococcus in children. Treatment for trachoma was based on a pediatric equivalent of the adult dosage for chlamydial infections: this dosage was demonstrated to be, in a single dose, at least as successful as topical tetracycline applied over 6 weeks, in clearing chlamydial ocular infection. Treatment for pneumococcus is based on a more limited set of clinical trials. Pfizer's position is that a child presenting with both trachoma and pneumococcus should be treated as for pneumococcus. With respect to emerging resistance, it was noted that azithromycin had been available in major North American, European and Asian markets for more than five years, and no resistance had been documented; the five year follow-up data would be available in 1997 for detailed analysis.

It was concluded that the issue of potential resistance development is a most important one, which will be closely monitored by all available information.

Dr H. Hogerzeil from the Action Programme on Essential Drugs, expressed his programme's support for the GET 2020 effort and offered it support in promoting the adoption by countries of rational guidelines for the treatment of inflammatory disease. Dr Hogerzeil also suggested that the programme might help facilitate an initiative to develop improved topical antibiotics.

3. INTERNATIONAL COORDINATING GROUP FOR THE GLOBAL ELIMINATION OF TRACHOMA

3.1 PRESENT ACTIVITIES OF PARTICIPATING ORGANIZATIONS

Each organization participating in the meeting briefly outlined both its interest and present activities with respect to trachoma); Summaries of their respective activities are presented below (see also Annex 4).

The potential value of involving indigenous nongovernmental development organizations was also noted.

- **African Medical and Research Foundation (AMREF), Kenya**
(*Mr M. Gerber, Director-General*)

AMREF is an international NGO headquartered in Nairobi with a staff of 650, 95% of whom are African. AMREF has been working in Africa for 40 years.

AMREF's five priority programme areas are:

- Sexual and Reproductive Health
- Child and Adolescent Health and Development
- Environmental Health
- Health Policy and Health Sector Reform
- Clinical Service Delivery and Emergency Response

- **Christoffel-Blindenmission (CBM), Germany**
(*Mr C. Garms, Executive Director*)

CBM is an international interdenominational Christian organization providing services to prevent, treat and rehabilitate blind and other disabled people. At present, CBM supports about 1 000 projects in over 100 countries.

CBM's activities in the field of trachoma control have so far come under the more general programme of community eye care. At present, CBM supports more than 300 eye care programmes in 70 countries of Africa, Asia and Latin America. Approximately 650 000 tubes of tetracycline eye ointment were provided to partners and more than 40 000 operations for trichiasis were performed in 1995.

CBM has now begun to initiate specific trachoma control programmes using the SAFE strategy in a few pilot areas in West and East Africa. These programmes are being closely monitored to find out what works and what does not work and also to develop sustainable, low-cost programmes.

- **The Edna McConnell Clark Foundation (EMCF), USA**
(*Dr J. Cook, Director, Program in Tropical Disease Research*)

The Edna McConnell Clark Foundation has supported research on trachoma, both immunology and epidemiology, for eleven years.

The Trustees of the Foundation are pleased with the momentum that has recently been displayed in the prevention of blindness community toward trachoma control and particularly the GET 2020 initiative. In December 1996, they will consider a proposal to extend funding for trachoma control for the next five years. **If approved**, the Foundation may support efforts to implement control through four areas:

- coordination and resource development;
- country programs;
- operation research;
- information, education, communications (IEC).

- **Francis I. Proctor Foundation for Research in Ophthalmology, USA**
(*Dr C. Dawson, Director*)

The Proctor Foundation is a research institution with a very long-standing interest in trachoma research. It has been involved in most of the developments for trachoma control since the 1960s, in its role as a WHO Collaborating Centre, originally as a specific reference centre, and subsequently linked to the WHO Programme for the Prevention of Blindness.

The Foundation is very interested and committed to continue trachoma research, and the new initiative for Global Elimination of the disease falls well within this centre's mandate.

- **International Agency for the Prevention of Blindness (IAPB), United Kingdom**
(*Dr R. P. Pararajasegaram, President*)

IAPB is an "umbrella" organization for all parties interested in blindness prevention; its main function is in global advocacy and coordination of policies amongst nongovernmental development organizations. IAPB is very supportive of the Global Elimination of Trachoma initiative, and it could prioritize this matter in its future advocacy. There is a possibility to have a poster, or specific display, on the GET initiative at the forthcoming IAPB General Assembly in Beijing, China, in 1999.

- **International Eye Foundation (IEF), USA**
(*Ms V. Sheffield, Executive Director*)

The International Eye Foundation (IEF) is 35 years old with offices in 10 countries in Africa, Latin America, and Eastern Europe. Programmes focus on clinical/surgical services, training, prevention of childhood blindness, onchocerciasis control, vitamin A deficiency/child survival programs, and operational research. The IEF does not have any vertical trachoma control programs. However, trachoma is addressed within the IEF's

general primary eye care programs in countries where trachoma is prevalent, and through support for national blindness prevention programmes.

- **International Organization Against Trachoma (IOAT), France**
(*Professor G. Coscas, President*)

The aim of both the International Organization Against Trachoma and La Ligue contre le Trachome (IOAT-ICT) is to mobilize as many ophthalmologists, general practitioners, and academic people as possible, in both the control of trachoma and the fight against tropical ocular diseases. Through its largely disseminated *Revue internationale du Trachome et de Pathologie oculaire tropicale et subtropicale et de Santé Publique*, IOAT-ICT tries to improve communication in publishing bilingual clinical, epidemiological, and research papers.

- **Helen Keller International (HKI), USA**
(*Mr J. Palmer, President*)

HKI, founded in 1915, has been sponsoring blindness prevention for over 25 years. Working in 27 countries, HKI has been involved with trachoma control as part of primary eye care programmes (in Morocco, with support from Pfizer Inc.). For the future, HKI will continue to serve as the headquarters for the Trachoma Control Task Force, supported by the Edna McConnell Clark Foundation. In particular, HKI is anxious to further trachoma control in countries with an established presence such as: Morocco, Niger, Mali, Burkina Faso, Tanzania, Nepal, Viet Nam.

As a technical assistance agency, HKI develops innovative strategies which involve a range of partners and approaches. As part of the WHO Alliance for the Global Elimination of Trachoma, HKI anticipates an active advocacy role as well as putting into operation a number of trachoma programmes. It will continue to maintain a strong relationship with a number of universities in operational research and look forward to such research in trachoma control.

- **Lions Clubs International Foundation/SightFirst Project (LCIF/SF), USA**
(*Mr M. Pajonk, Manager*)

SightFirst, which is funded by the Lions clubs International Foundation (LCIF), is the major global service initiative of Lions Clubs International to combat preventable and reversible blindness. SightFirst was launched in July 1990 and currently has 285 projects in 55 countries on five continents. SightFirst projects include ivermectin distribution to fight river blindness, cataract surgery programmes, training, public education, and some capital investments (facilities and equipment). SightFirst projects funded by LCIF are undertaken by the 1.4 million local Lions around the world. Trachoma was targeted by SightFirst for project activity. However, up to now, local Lions have not put forward applications for funds to support trachoma work. LCIF hopes to motivate local Lions to begin planning for possible trachoma initiatives, where appropriate, and to seek local partners, as needed.

- **Sight Savers International (SSI), United Kingdom**
(*Mr R. Porter, Executive Director*)

Sight Savers International is working for the prevention and cure of blindness in over 20 countries, mainly in Africa and the Indian sub-continent. SSI has eye care programmes in many of the trachoma endemic countries, e.g., The Gambia, Ghana, Mali and Tanzania.

For the most part, trachoma is not addressed as a specific issue but all programmes have primary health care education and eye health trainer components. Non-directly, SSI has been involved in a trachoma research programme in The Gambia through SSI's eye care consultant, Hannah Faal. SSI is also seeking to include a specific trachoma element in their eye care programme in Mali, hopefully in cooperation with the Edna McConnell Clark Foundation.

In general, SSI is keen to extend its support for trachoma programmes in line with its current programme thrust of putting more resources in primary and community health care. SSI is therefore strongly supportive of the SAFE initiative.

- **Pfizer Inc. (USA) (Observer)**
(*Ms P. Luff, Corporate Philanthropy Programs*)

Pfizer Inc is a global, research-based health care company. The company's philanthropy programmes support a wide range of projects in health care, mathematics and science education.

In health care, Pfizer's Corporate Philanthropy Program focuses on efforts to expand access to health care and health information, especially for medically underserved populations. Focused programs include community-based health (health management and providers in essential capacity-building), maternal and child health, women's health and health communications technology.

In the area of international health, Pfizer Inc. is collaborating with EMCF, WHO, the Ministry of Public Health of the Kingdom of Morocco and HKI, to support Morocco's longer-term goal of eliminating blinding trachoma by the end of the year 2000. Specifically, Pfizer is supporting a large-scale community trial of azithromycin in trachoma control in the provinces of Ouarzazate and Erachidia. The purpose of the trial is to determine the appropriate dosing interval, as well as the sensibility of using azithromycin in a large-scale trachoma control program. Pfizer has also made a grant available to HKI to work with the Ministry of Public Health to develop and implement an information, education and communications programme as well as model environmental sanitation programmes. HKI will also monitor/evaluate the Morocco programme. Finally, Pfizer is keenly interested in supporting the WHO/PBD's efforts to stimulate and provide technical assistance to countries, NGOs and other parties interested in developing/expanding trachoma control efforts, and to coordinate the new WHO Alliance for the Global Elimination of Trachoma.

- **The World Health Organization (WHO), Switzerland**
(*Dr B. Thylefors, Director, Programme for the Prevention of Blindness & Deafness*)

WHO is working for the control of trachoma through the specific Programme for the Prevention of Blindness and Deafness in Geneva, which is coordinating the new initiative for Global Elimination of Trachoma will be housed. In addition, the WHO Regional Offices, particularly those for Africa, Eastern Mediterranean, South-East Asia and Western Pacific will actively support work, and liaise with the endemic countries. Information and operational guidelines will be transmitted through the WHO country offices in all endemic countries, and resources will be allocated, whenever possible, in support of the new initiative. As an example, there are presently 13 countries in Africa having made allocations for blindness prevention, and all the trachoma priority countries of the Region are included amongst those. Similarly, in the Eastern Mediterranean, several of the trachoma endemic countries are initiating surveys which will facilitate further action for elimination of the disease.

The training in Primary Eye Care undertaken by a great number of countries lends itself well to the integration of trachoma elimination activities.

In South-East Asia, there is strong interest in trachoma elimination in Myanmar and Nepal, and in the Western Pacific, in China (certain provinces), Fiji and other islands, and the Laos People's Republic and Viet Nam.

- **WHO Regional Office for Africa**
(*Dr T. Ogada, Regional Officer, Noncommunicable Diseases*)

There are over 4000 health districts in the Region and the majority of them have primary health care groups.

The Regional Office is ready to work with the NGOs in the elimination of trachoma by inviting them to work with WHO country offices in the Region. The role of the national prevention of blindness committees should not be overlooked when planning the work on trachoma.

The primary health indicators developed by the Regional Office should be useful in monitoring and evaluation of trachoma elimination.

Trachoma control activities exist in Botswana, Burkina Faso, Ethiopia, The Gambia, Ghana, Kenya, Mali, Niger, South Africa, Tanzania and Zimbabwe.

The ongoing programmes in water and sanitation and guinea worm eradication are convenient for linkages with trachoma elimination.

- **WHO Regional Office for the Eastern Mediterranean**
(*Dr A. Verster, Regional Adviser, Nutrition, Food Security & Safety*)

Work is starting in the Eastern Mediterranean Region which comprises 23 countries, for survey activities, including trachoma; this refers at present to Egypt, Jordan, Morocco, Oman, Sudan and Yemen.

Prevention of blindness programmes with WHO collaborative funding are ongoing 13 out of 23 countries, namely Afghanistan, Bahrain, Djibouti, Iraq, Jordan, Morocco,

Oman, Palestine, Pakistan, Sudan, Tunisia and Yemen. Training in primary eye care is the main activity undertaken.

3.2 GLOBAL COORDINATION GROUP

After review of the terms of reference drafted at the Global Scientific Meeting, the group agreed that additional terms would be required to promote the **SAFE** strategy, address the issues of operational research, and mobilize resources to achieve control. The amended terms of reference, as adopted, are given in Annex 3.

The group, being coordinated by WHO, will be called the **World Health Organization Alliance for the Global Elimination of Trachoma**. The Alliance would meet, initially, twice a year, and could also include organizations outside prevention of blindness efforts, such as those involved in maternal and child health, women's health and water and sanitation. The goal of the Alliance would be to facilitate efforts to expand the control of blinding trachoma, using the **SAFE** strategy, within the context of primary health care, to attain GET 2020. The following mission statement was adopted by the Alliance:

"The World Health Organization (WHO) Alliance for the Global Elimination of Trachoma is a working group of nongovernmental development organizations, foundation and other interested parties, with the aim of fostering planning, advocacy, research and programme coordination toward the goal of eliminating trachoma as a public health problem by the year 2020."

While embracing the broad goal of GET 2020 and acknowledging the need for intermediate benchmarks, both in terms of process and impact, the group agreed to table the adoption of formal intermediate indices or milestones until the next meeting.

The participants then proceeded to the election of Officers for the Alliance; Mr Richard Porter, Executive Director of Sight Savers International, was elected Chairman, and Dr Louis Pizzarello, Medical Director of Helen Keller International, was elected Vice-Chairman, both with acclamation. The terms of office would be one year, renewable as appropriate by the Alliance.

3.3 FUTURE MEMBERSHIP OF THE ALLIANCE

It was agreed that for the next meeting of the Alliance, invitations would be sent to the European Community, UNICEF, Oxfam, Save the Children, and the World Bank. Efforts should be made to increase the membership of the Alliance to also include organizations or parties dealing with community development, including water and sanitation.

4. TRACHOMA RAPID ASSESSMENT METHODOLOGY: ONGOING DEVELOPMENT

4.1 VALIDATION

The resource constraints, both financial and human, faced by many trachoma-endemic countries caused the Scientific Meeting to define the need to develop a rapid assessment methodology for getting a handle on the distribution of trachoma at the national, regional, district and community levels and, as an entrée into community control of disease. After a review, the potential utility of developing an additional set of indices based on community risk factor studies was discussed. These indices could be used on an observational basis in communities where trachoma is a priority as a means for developing appropriate health education messages.

Validation of the rapid assessment methodology is important since a proven methodology would enable countries to target scarce resources to control disease. The report of the Global Scientific Meeting held in June 1996 presents a schematic of the proposed rapid assessment, as applied to identifying communities at high risk of trachoma.

The methodology proposed needs to be evaluated in detail from at least three countries. The study would test the power of the sample (50 children aged 5-7, and 30 women over the age of 30) and, possibly, measure the potential of risk factors (known to be important for that community, i.e., living near cattle or lack of latrines) to predict communities at high risk for trachoma.

Probability models, using existing prevalence and incidence data to simulate the proposed study sample size, could be constructed to estimate the power of the sample size to predict trachoma prevalence and thereby inform the design of the validation study. Finally, issues concerning ways in which communities can support and find resources for trachoma control need to be pursued.

The group agreed that movement in trachoma control overall was important in the short term if any larger momentum is to be attained. Toward the end, a sub-committee was established to refine a protocol for evaluating the methodology in at least three countries with the mandate of reporting back to the group on their findings by the next Alliance meeting.

4.2 GEOGRAPHIC INFORMATION SYSTEMS (GIS)

Dr M. Karam and Ms K. O'Neill of the Joint WHO/UNICEF Health Map Programme based in CTD, presented an overview of the Geographic Information Systems (GIS) in the control of other diseases. The GIS provides an opportunity to integrate a complex array of geographic, infrastructure, health and other data to present information useful for program management and advocacy purposes. The primary impetus for the development of the digitized maps that provide the backdrop for the GIS was the effort led by UNICEF to eradicate dracunculiasis and by OCP/APOC to target onchocerciasis control efforts. In several priority countries of the GET 2020 initiative (Burkina Faso, Gambia, Mali, and Niger), village-level digitized maps have been generated. GIS will be applied to the control of trachoma in Morocco, Gambia and Mali over the next six months.

Within the context of the countries identified for priority action, there was agreement about the potential value of linking the rapid assessment approach to GIS. In addition to Morocco, Gambia and Mali, Kenya and Tanzania were suggested as possibilities for this approach. It was

agreed that rapid assessment and GIS mapping should not be done in isolation, but rather should be closely linked to the implementation of control activities where appropriate.

5. ASSESSMENT AND MANAGEMENT OF TRACHOMA IN INTEGRATED DISTRICT HEALTH-CARE PROGRAMME

5.1 TRACHOMA CONTROL PROGRAMME IN THE NORTHERN REGION OF GHANA

In 1995, Christoffel-Blindenmission (CBM) with the Eye Care Secretariat in Ghana, analyzed the statistical report from the various eye units throughout the country. These hospital records revealed that cases of trichiasis were seen in the Upper West, Northern and Accra regions of Ghana but were uncommon in the other seven regions. The ratio of trichiasis operations to cataract operations was the highest for the Northern Region.

Based on this information, three villages in Daboya sub-district of Damongo District (one of the thirteen districts in the Northern region, chosen for its central location) were selected for a baseline survey of trachoma. All inhabitants of these three villages were examined. The survey confirmed that the overall prevalence of active inflammatory trachoma (TF/TI) in children aged 1-10 years was greater than 20% (approximately 26%), and that the prevalence of trichiasis (TT) in adults was greater than 1% (approximately 3%).

Having confirmed that active trachoma infection and trichiasis were prevalent in communities within Daboya sub-district, a trachoma control programme was established in 1996 in the 53 villages. The programme is using the **SAFE** strategy. Two eye nurses from Damongo district eye hospital visit Daboya Health Centre once a month to perform trichiasis surgery. The government health worker responsible for communicable disease control in Daboya sub-district has been appointed the Trachoma Coordinator. He supervises 15 community health workers who each have three to four villages to cover. Each community health workers is responsible for examining all individuals within his community for active trachoma disease and trichiasis. Individuals with active disease are treated with tetracycline eye ointment and people with trichiasis referred to the trichiasis surgical clinic held once a month. All families/households with active trachoma infection are given education regarding face washing and sanitation.

A District Trachoma Committee has been formed consisting of the district medical officer, eye nurses and trachoma coordinator for Daboya sub-district who are all Government salaried health workers. The community health workers are volunteers who were previously trained for the Guinea Worm Eradication Programme. An incentive scheme has been developed for the referral of trichiasis patients for surgery.

The eye care outreach team from Bawku Hospital in Upper East Region has been responsible for this initiative and has given the training to the District Officials including surgical training to the eye nurses and training in trachoma grading and control to the community health workers.

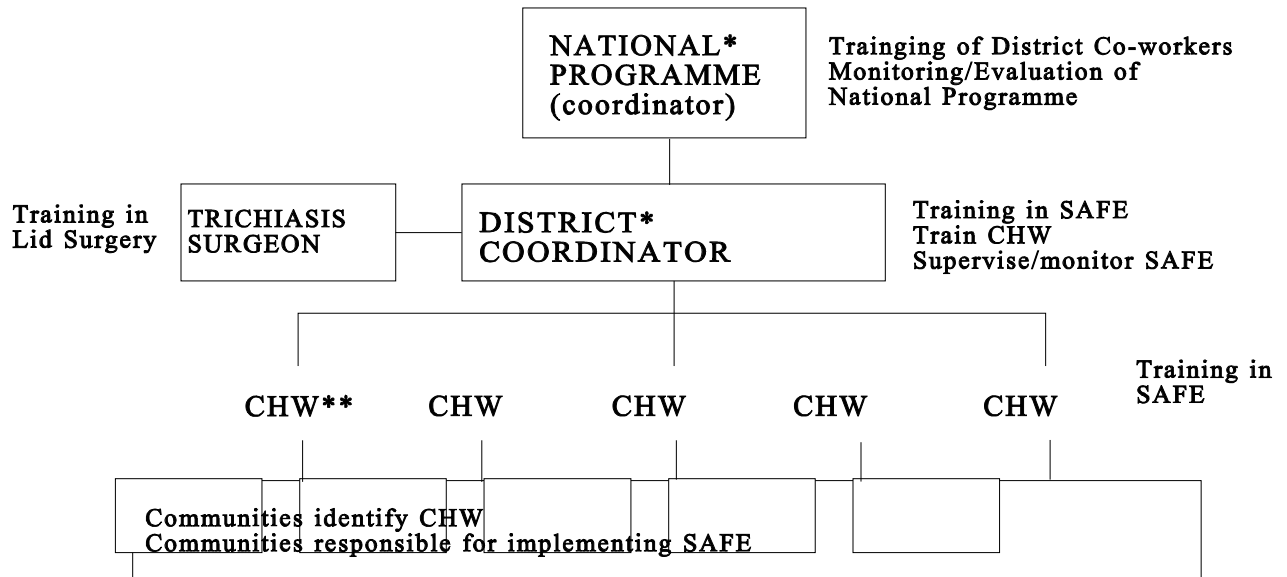
This pilot programme is still in its infancy. It is anticipated that the lessons learned can be used to develop a larger control programme for Damongo District and the Northern region.

5.2 A SUGGESTED STRATEGY FOR IMPLEMENTING A TRACHOMA CONTROL PROGRAMME THROUGH THE DISTRICT HEALTH CARE SYSTEM

- Identification of a district likely to have endemic trachoma using rapid assessment techniques.
- Dialogue with the District Health Officer regarding trachoma control.
- Identification of a district-level worker who would be responsible for the trachoma control programme (District Trachoma Coordinator). (This may be an ophthalmologist, a doctor, an ophthalmic assistant/nurse, or a public-health worker, depending on the situation.)
- Training of the District Trachoma Coordinator in assessment and clinical grading of trachoma, and the **SAFE** strategy.
- Identification of one or more eye workers (assistants/nurses) for training in trichiasis surgery (this may or may not include the coordinator).
- Mapping of the district, using rapid assessment and clinical grading, to identify those communities with severe trachoma.
- The trachoma coordinator should discuss the problem of trachoma with endemic trachoma communities and ask the communities to identify one or more individuals from the community to be responsible for trachoma control in the village. (Where there is a good primary health care system, hopefully, the primary health care worker will be identified.)
- Training of the community health workers in trachoma control including antibiotic treatment, face washing, and environmental improvement.
- Implementation of the **SAFE** strategy in trachoma endemic villages (**T**richiasis surgery, **A**ntibiotic treatment, **F**ace-washing, and **E**nvironmental improvement).
- Ongoing monitoring/evaluation of the impact of **SAFE** by the District Coordinator, through visits, reports from the community workers, and district seminars.

The participants agreed that there was a need to develop this model further with a view to its possible application in different settings.

It was therefore agreed that CBM would reconsider this matter together with WHO/PBD.



**The National/District and Community levels of action should be integrated into the Health System as far as possible.*

***Community Health Worker*

6. NEWSLETTER ON "GLOBAL ELIMINATION OF TRACHOMA"

Discussions turned to the issues of a biannual newsletter to share the work of the Alliance. The group endorsed the notion of developing a publication that would serve the needs of groups and individuals interested in trachoma control, and that it would fill a niche currently unfilled. Primary support to publish and distribute the newsletter would come from the Edna McConnell Clark Foundation, and the newsletter, *Tracking Trachoma*, would be published in French as well as English. WHO would approach the EMRO office and the Al Noor Foundation in Saudi Arabia, about securing possible support for translation and distribution in Arabic.

Editorial support would be expected from the participating organizations, as there were several individuals who had shown interest in and had previous experiences of such work. Furthermore, a generous offer was made by Professor G. Coscas to publish any particular material on trachoma elimination in the journal *Revue internationale du Trachome*, which reaches a very wide audience of scientists and field workers dealing with trachoma control.

7. OUTLINE OF FUTURE PLAN OF WORK

7.1 PRIORITY ACTIONS OVER THE NEXT SIX MONTHS

The group turned to plans for the next six months, before the first Alliance meeting tentatively scheduled for June 1997. A central priority will be to validate the rapid assessment methodology and to begin to look at how one would catalogue behavioral and social risk factors and use that information for developing health education messages related to the **S** and **E** of **SAFE**. Similarly, attention was placed on developing an approach for using the **SAFE** strategy in practice at the district level. The areas necessary to refine the **SAFE** strategy requiring such research are outlined in Annex 3. Other points included further consideration of the dosing schedule and targeting of azithromycin, the seasonality of treatment and timing of face washing, and the possibility of getting the distribution of tetracycline eye ointment supported by the private sector.

7.2 OPERATIONAL RESEARCH

The participants agreed on the need for operations research as one of the priority areas for action in the early phase of work for the Global Elimination of Trachoma. The main items for research over the coming 1-2 years, would include the following:

- Geographic Information System (GIS)
- Rapid assessment
- Measures of national programme success
- Cost of disease: benefits of control
- Dose interval of azithromycin under different circumstances
- Obstacles to access to surgery
- Obstacles to compliance/topical treatment
- Evaluation/quality control for lid surgery
- Surveillance and monitoring
- Implementation of "*Achieving Community Support for Trachoma Control*"

- Community-directed approach (credit, incentives, etc.)

7.3 PLAN OF ACTION FOR 1997

GET 2020 PLAN OF ACTION FOR 1997	RESPONSIBLE BODIES																												
<p>ASSESSMENT ACTIVITIES</p> <ul style="list-style-type: none"> • Validation of the epidemiological disease approach of rapid assessment • Production of manual for district health workers • Mapping of trachoma with Geographic Information System (GIS) . • Development of indicators for F & E interventions (sociocultural aspects) 	<ul style="list-style-type: none"> ☞ HKI Task Force ☞ WHO/PBD ☞ WHO/PBD ☞ HKI Task Force 																												
<p>PROGRAMME DEVELOPMENT ACTIVITIES</p> <ul style="list-style-type: none"> • 16 priority countries ¹ Countries selected for immediate intervention ² Countries with ongoing activities <table border="0" data-bbox="240 982 909 1203"> <tr> <td>Gambia¹</td> <td>Algeria²</td> <td>Chad</td> <td>Ethiopia</td> </tr> <tr> <td>Morocco¹</td> <td>Ghana²</td> <td></td> <td>Myanmar</td> </tr> <tr> <td>Mali¹</td> <td>Guinea Bissau²</td> <td></td> <td>Oman</td> </tr> <tr> <td></td> <td>Nepal²</td> <td></td> <td>Pakistan</td> </tr> <tr> <td></td> <td>Niger²</td> <td></td> <td>Yemen</td> </tr> <tr> <td></td> <td>Tanzania²</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Viet Nam²</td> <td></td> <td></td> </tr> </table> <ul style="list-style-type: none"> • Development of an integrated and community-based implementation model 	Gambia ¹	Algeria ²	Chad	Ethiopia	Morocco ¹	Ghana ²		Myanmar	Mali ¹	Guinea Bissau ²		Oman		Nepal ²		Pakistan		Niger ²		Yemen		Tanzania ²				Viet Nam ²			<ul style="list-style-type: none"> ☞ Countries & interested NGDOs to start or further develop activities in accordance with SAFE strategy ☞ CBM & WHO/PBD
Gambia ¹	Algeria ²	Chad	Ethiopia																										
Morocco ¹	Ghana ²		Myanmar																										
Mali ¹	Guinea Bissau ²		Oman																										
	Nepal ²		Pakistan																										
	Niger ²		Yemen																										
	Tanzania ²																												
	Viet Nam ²																												
<p>SAFE STRATEGY ACTIVITIES</p> <ul style="list-style-type: none"> • Surgery kits • Alternative topical antibiotics • Azithromycin (dosing interval) 	<ul style="list-style-type: none"> ☞ WHO/PBD ☞ Dr Dawson & WHO/PBD ☞ Morocco programme 																												
<p>GROUP ACTIVITIES</p> <ul style="list-style-type: none"> • Future invitations for Membership • Newsletter • World Wide Web site 	<ul style="list-style-type: none"> ☞ WHO/PBD ☞ WHO/PBD ☞ WHO/PBD 																												

8. OTHER MATTERS

Dr E. El Arab spoke of the development of training materials in Egypt. Dr El Arab outlined the process of curriculum development including task analysis, highlighting the value of improving the communication skills of health worker staff. In addition to training *per se*, Dr El Arab noted how responsibility-defined checklists were used to evaluate worker performance and provide feedback on how it might be improved.

CONCLUSIONS AND RECOMMENDATIONS

Trachoma is still the major global cause of avoidable blindness with some 146 million cases of active disease, and close to 6 million blind. A global scientific meeting convened by the WHO Programme for the Prevention of Blindness and Deafness in June 1996 defined future approaches to trachoma control, and highlighted the unique opportunity for global elimination of the disease as a public health problem in remaining endemic countries.

The participants in the present planning meeting, convened on 25 and 26 November 1996 to bring about the follow-up needed for the overall goal of **"Global Elimination of Trachoma by the Year 2020"**, made the following recommendations for future action:

1. To establish an international alliance for the global elimination of trachoma by the Year 2020, consisting of nongovernmental developmental organizations and other interested parties, which will support and collaborate with WHO and its Programme for the Prevention of Blindness and Deafness, for global coordination of work.

2. The mission statement of the Alliance was adopted as follows:

"The World Health Organization (WHO) Alliance for the Global Elimination of Trachoma is a working group of nongovernmental development organizations, foundations and other interested parties, with the aim of fostering planning, advocacy, research and programme coordination toward the goal of eliminating trachoma as a public health problem by the year 2020."

The terms of reference adopted are given in Annex 3.

3. The Alliance will be coordinated by WHO/PBD and will meet twice a year, at a location determined by the Members.; a Chairman and Vice-Chairman will be elected by the Members. The reports of the Alliance will be prepared and disseminated by WHO.
4. The Alliance should develop its own visibility and profile; a newsletter should be elaborated to this effect with input from the Member Organizations as needed.
5. The Alliance will develop its own work plan on a consensus basis between the Members and WHO; the allocation of specific tasks to Members may be undertaken, as appropriate.
6. The **SAFE** strategy will form the basis for support to trachoma control in endemic countries by the Alliance and its Members. Priority areas for trachoma assessment interventions have been defined by the participants in the present meeting, and are included in the Plan of Action for 1997 for GET 2020.
7. It was decided that the next meeting of the Alliance to the Global Elimination of Trachoma would take place in Geneva on 30 June and 1 July 1997, hosted by WHO.

ANNEX 1**ELIMINATION OF TRACHOMA****Geneva, 25-26 November 1996****AGENDA**

Opening of the meeting
Introduction of participants
Election of officers
Adoption of Agenda
Administrative announcements

1. Review of follow-up action after the Global Scientific Meeting on Future Approaches to Trachoma Control:
 - documentation
 - mobilization of resources
 - coordination
2. Update on the use of azithromycin against trachoma
3. International coordination body for the global elimination of trachoma:
 - proposed terms of reference
 - meetings
4. Trachoma rapid assessment methodology: ongoing developments
5. Assessment and management of trachoma in integrated district health-care programme model
6. Newsletter on "Global Elimination of Trachoma"
7. Outline of future plan of work (1997)
8. Any other matter

Conclusions and recommendations
Date and place of next meeting

ANNEX 2**ELIMINATION OF TRACHOMA****Geneva, 25-26 November 1996****FINAL LIST OF PARTICIPATING PARTIES**

Ms Annie Alexander, Programme Officer for Africa, Sight Savers International, Grosvenor Hall, Bolnore Road, Haywards Heath, West Sussex RH16 4BX, United Kingdom

Dr Marcel Chovet, Médecin Général Inspecteur, Organisation pour la Prévention de la Cécité, 9 rue Mathurin Régnier, 75015 Paris, France

Dr Joseph A. Cook, Director, Program in Tropical Disease Research, The Edna McConnell Clark Foundation, 250 Park Avenue, New York, NY 10177-0026, USA

Professor Gabriel Coscas, Président, Organisation internationale contre le Trachome (International Organization Against Trachoma), Chef de Service, Clinique Ophtalmologique Universitaire, Centre Hospitalier Intercommunal, Université de Paris - Val de Marne, 40 Avenue de Verdun, 94010 Créteil, France

Dr Chandler R. Dawson, Director, Francis I. Proctor Foundation for Research in Ophthalmology, University of California, San Francisco, California 94143-0412, USA

Dr Pierre Eozenou, Sous-Direction de la Santé et du Développement social, Ministère de la Coopération, 1 bis avenue de Villars, 75700 Paris, France

Dr Allen Foster, Medical Director, Christoffel-Blindenmission, Senior Lecturer, International Centre for Eye Health, Institute of Ophthalmology, Bath Street, London EC1V 9EL, United Kingdom
(Chairman)

Mr Christian Garms, Executive Director, Christoffel-Blindenmission e.V., Nibelungenstrasse 124, D-64625 Bensheim, Germany

Mr Michael S. Gerber, Director General, African Medical and Research Foundation (AMREF), P.O. Box 30125, Wilson Airport, Langata Road, Nairobi, Kenya

Ms Paula Luff, International Pharmaceuticals Group, Pfizer Inc., 235 East 42nd Street, New York, N.Y., 10017-5755, USA **(Observer)**

Mr Jeffrey W. Mecaskey, Associate, Program in Tropical Disease Research, The Edna McConnell Clark Foundation, 250 Park Avenue, New York, New York 10177-0026, USA **(Rapporteur)**

Mr Michael Pajonk, Manager, SightFirst Department, Lions Clubs International Foundation, 300 22nd Street, Oak Brook, Illinois 60521-8842, USA

Mr John M. Palmer, Executive Director, Helen Keller International, 90 Washington Street, New York, NY 10006, USA

Dr Louis Pizzarello, Medical Director, Helen Keller International, 90 Washington Street, New York, NY 10006, USA

Mr Richard Porter, Executive Director, Sight Savers International, Grosvenor Hall, Bolnore Road, Haywards Heath, West Sussex RH16 4BX, United Kingdom

Ms Victoria Sheffield, Executive Director, International Eye Foundation, 7801 Norfolk Avenue, Bethesda, Maryland 20814, USA

Dr Virginia Turner, Trachoma Task Force, Helen Keller International, 14 Churchill Terrace, Newtonville, MA 02160, USA (**Vice-Chairman**)

WHO

Dr M. R. Couper, Division of Drug Management and Policies, World Health Organization, 1211 Geneva 27, Switzerland

Dr Ezz El Arab, World Health Organization, Regional Office for the Eastern Mediterranean, P.O. Box 1517, Alexandria 21511, Egypt

Dr R. H. Henderson, Assistant Director-General, World Health Organization, 1211 Geneva 27, Switzerland

Dr Hans Hogerzeil, Action Programme on Essential Drugs, World Health Organization, 1211 Geneva 27, Switzerland

Dr Marc V. Karam, Division of Control of Tropical Diseases, World Health Organization, 1211 Geneva 27, Switzerland

Dr Silvio P. Mariotti, Prevention of Blindness, Programme for the Prevention of Blindness and Deafness, World Health Organization, 1211 Geneva 27, Switzerland

Dr E. K. Mulholland, Division of Child Health and Development, World Health Organization, 1211 Geneva 27, Switzerland

Dr André-Dominique Négrel, Prevention of Blindness, Programme for the Prevention of Blindness and Deafness, World Health Organization, 1211 Geneva 27, Switzerland

Dr T. Ogada, Regional Officer, Noncommunicable Diseases, World Health Organization, Regional Office for Africa, P.O. Box No.6, Brazzaville, Congo

Dr Ramachandra Pararajasegaram, Programme for the Prevention of Blindness and Deafness, World Health Organization, 1211 Geneva 27, Switzerland

Dr Serge Resnikoff, Prevention of Blindness, Programme for the Prevention of Blindness and Deafness, World Health Organization, 1211 Geneva 27, Switzerland

Dr Björn Thylefors, Director, Programme for the Prevention of Blindness and Deafness, World Health Organization, 1211 Geneva 27, Switzerland (**Secretary**)

Dr Anna Verster, Regional Adviser, Nutrition, Food Security & Safety, World Health Organization, Regional Office for the Eastern Mediterranean, P.O. Box 1517, Alexandria 21511, Egypt



ANNEX 3

ELIMINATION OF TRACHOMA

Geneva, 25-26 November 1996

**PROPOSED TERMS OF REFERENCE FOR THE
WHO ALLIANCE FOR GLOBAL ELIMINATION OF TRACHOMA**

1. To identify geographical areas of blinding endemic trachoma and prioritize these for intervention.
2. To advise and provide technical assistance to those countries and parties seeking to establish or strengthen intervention programmes based upon the **SAFE** strategy.
3. To develop strategies and mechanisms for the promotion of sustainable improvements in personal and environmental hygiene.
4. To recommend and monitor specific intervention programmes, especially those utilizing azithromycin.
5. To establish guidelines for community-based trachoma control, including the possible delivery of azithromycin to the target population.
6. To foster the integration of trachoma elimination within primary health care.
7. To identify and support needed operational research areas of relevance to the elimination of blinding trachoma in the communities concerned.
8. To monitor, on a global level, the success of the programme to eliminate trachoma as a cause of blindness.
9. To mobilize resources, as needed, for support to the implementation of intervention programmes in selected countries.

ANNEX 4

ELIMINATION OF TRACHOMA

Geneva, 25-26 November 1996

**PRELIMINARY TARGETS FOR FURTHER CONSIDERATION
WITH THE ALLIANCE**

**GLOBAL TRACHOMA TARGETS FOR CASES OF TRICHIASIS
AND ACTIVE INFECTION (1995-2020)**

--	--	--	--

Year	Total population (in millions)	Number with trichiasis (TT) (in millions)	Number with active disease (TF) (in millions)
1995	5400	10.0	146.0
2000	6000	10.0	120.0
2010	6800	5.0	60.0
2020	7800	0	8.0*

* This is equivalent to a prevalence of TF of 5% in the at risk population of 800 million with 160 million being children aged 0-10 years.

**TARGETS FOR IMPLEMENTATION OF THE SAFE STRATEGY IN 49 COUNTRIES
WITH BLINDING TRACHOMA (1995-2020)**

Year	WHO Region			
	Eastern Mediterranean	Africa	South-East Asia & Western Pacific	Americas
1995	0	0	0	0
2000	5	10	3	1
2010	7	20	5	2
2020	10	30	7	2

