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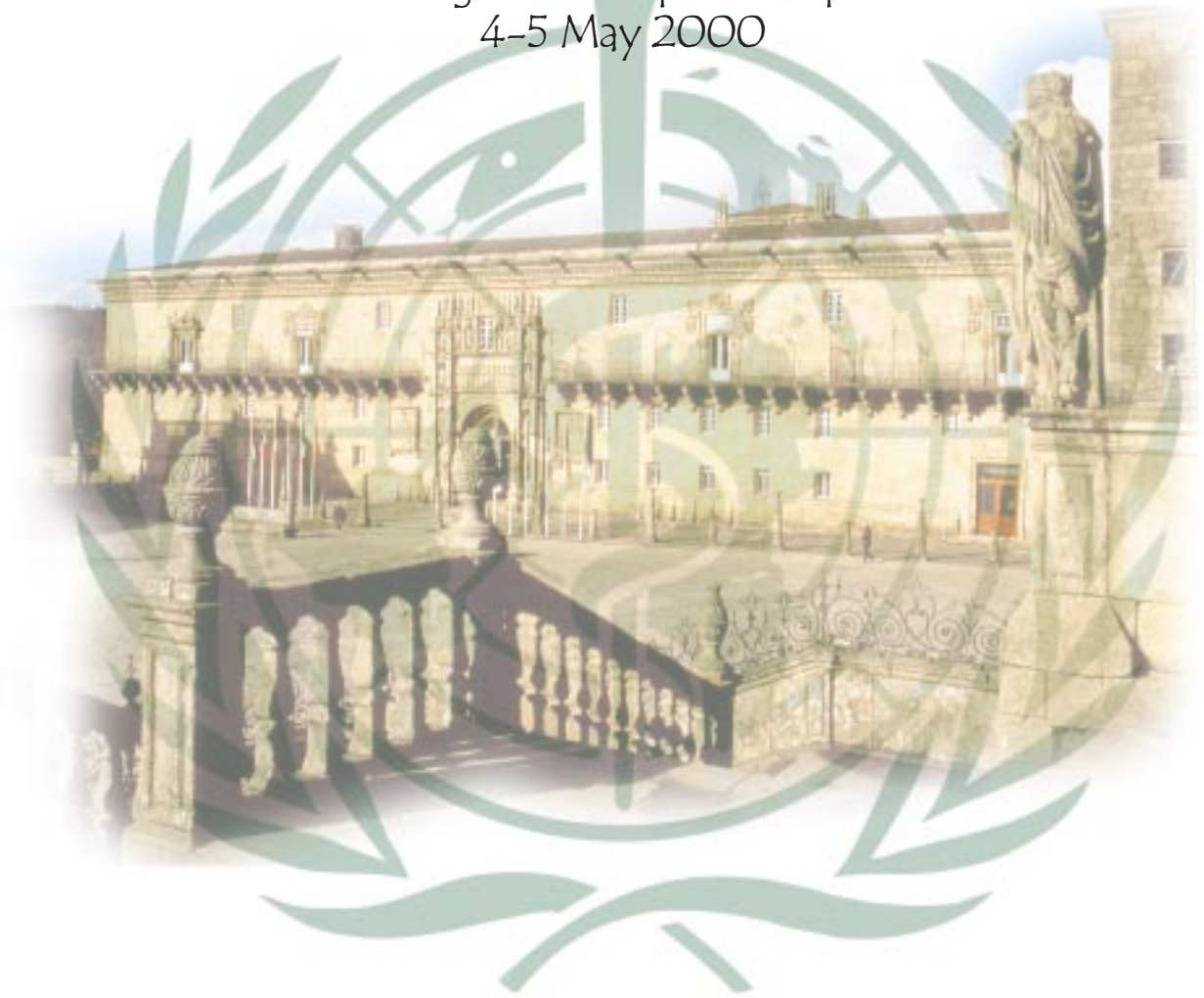
Eliminate Filariasis: Attack poverty

The Global Alliance to Eliminate Lymphatic Filariasis
Proceedings of the First Meeting

Santiago de Compostela, Spain
4–5 May 2000



A GreenLight from the Global Alliance

World Health Organization, Geneva, 2000

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Report prepared by the
Department of Communicable Diseases Control,
Prevention and Eradication, World Health Organization
Geneva, 2000

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Cover Picture: photograph of Hostal de los Reyes Católicos, Santiago de Compostela, Spain.

Contents*

* The table of contents reflects the agreed-upon agenda of the Santiago meeting.

List of Acronyms

ADL	Acute adenolymphangitis
APOC/OCP	African Programme for Onchocerciasis Control/Onchoceciaisis Control Programme.
CDC	US Centers for Disease Control and Prevention
CEE	Control, Eradication and Elimination
CFF	confirmed filariasis free
DEC	Diethylcarbamazine (one of the drugs used against lymphatic filariasis)
DFID	Department for International Development, United Kingdom
DOH	Department of Health
HDI	Health and Development International
ICT	immunochromatographic test
IEC	information, education, communication
IMA	Interchurch Medical Association
LCS	large country strategy for elimination of filariasis (countries with populations greater than 500 000)
LF	lymphatic filariasis
MDP	Mectizan® Donation Program (which oversees the donation of Mectizan® (ivermectin) for use in onchocerciasis and lymphatic filariasis programmes on behalf of Merck & Co., Inc.)
MML	Misima Mines Ltd.
MoH	(national) ministry of health
NFCP	National Filiarisis Control Programme
NGDO	Non-governmental development organization
PacELF	Pacific Countries Elimination of Lymphatic Filariasis
PHC	primary health care
PIS	Pacific Island strategy for elimination of filariasis (countries with populations less than 500 000)
SB	SmithKline Beecham, plc. (the pharmaceutical company donating albendazole for use towards the elimination of lymphatic filariasis)
SPC	Pacific Commission
TCC	Technical Coordination Committee
TDR	Tropical Disease Research
UN	United Nations
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization

Message from the Director-General

The world has committed to halving the number of people living in poverty by 2015. To succeed, we must strengthen our focus on how health actions can help reduce poverty. Bad health is an important factor in keeping people locked in poverty. But health is, at the same time, part of the solution – a new and potentially powerful exit route out of poverty. The elimination of lymphatic filariasis is one good example.

Of all the partners in the Global Alliance, none can eliminate lymphatic filariasis on its own. When we met in October 1999 in Geneva at WHO for the dedication of the onchocerciasis statue, many recalled the difficult times experienced in setting up the onchocerciasis partnership. I am confident, however, that in the LF Global Alliance each organization has a special strength and each has a special role. We complement each other and that is the basis for a sound partnership. Together we will succeed.

The tasks ahead are clear: the programmes in the countries will be integrated with other disease control activities of the Ministries of Health. For example, the lymphatic filariasis elimination programme may be joined with leprosy activities in some countries. It may be joined with intestinal parasite control in others. And it may be joined with onchocerciasis activities in yet others. Millions of people will need medication to interrupt transmission of the disease; and millions more, already infected, will need help to alleviate their pain and suffering.

By focusing our activities on the most essential and the most effective interventions, we can reach our common goal of interrupting transmission. At the same time we will make a large and most immediate impact on poverty.

In 1998, SmithKline Beecham agreed to donate its drug albendazole free-of-charge until the disease is eliminated. This is likely to be a donation of between 4-6 billion tablets over a 20-year period. Merck & Co., Inc. also pledged to expand its Mectizan® Donation Program for onchocerciasis to cover the treatment of lymphatic filariasis in all areas where the two diseases occur together.

Some people have suggested that Industry-WHO partnerships such as these represent a conflict of interest. On the contrary, we believe such collaboration, which provides drugs for periods long enough to reach the target, are an exemplary commitment to public health in the 21st century.

There are several other contributors. The Arab Fund for Economic and Social Development was among the first. The Governments of Belgium, Italy, Japan, the Netherlands, Spain, and the United Kingdom are now generous supporters of the global programme. We are working to widen these partnerships further.

For the commitment of these partners, and to all the equally important organizations that have committed their technical skills to this cause, I would like to express my sincere gratitude. The Global Alliance has the will to eliminate lymphatic filariasis and we all know the way. Let us focus on the highest priority actions for elimination and we will surely make an impact on the lives of the poorest.

Dr Gro Harlem Brundtland
Director-General
World Health Organization

Executive Summary

Green Light for the Global Alliance to Eliminate Filariasis, Attack Poverty

By all accounts, the first meeting of the Global Alliance to Eliminate Lymphatic Filariasis convened in Santiago de Compostela, Spain on 4-5 May 2000, was a success. It more than fulfilled its stated goals to review progress in the 18 months since the previous Partners' Meeting in October 1998, to strengthen the existing Alliance, to seek creative ways to stimulate financial and other support in order to "reach the first 200 million people at risk by the end of 2004."

Overall, more than 25 presentations were made to some 70 participants at the meeting (see list of participants in the Annex). Following the welcoming ceremony and completion of organizational matters, a global overview of the disease and its links to poverty was presented, followed by reports and recommendations from the first meeting of the Technical Advisory Group on the Global Elimination of Lymphatic Filariasis (2-3 May 2000) and the Programme Review Group.

In phase two of the meeting, regional and country presentations were made by 11 delegates, reviewing progress and contributions made to LF elimination among people in affected areas through mapping, strategic research and the development of new cost-effective interventions. The importance of interruption of transmission and alleviation of suffering were repeatedly stressed, as was the need for mapping and programme integration. It was recognized that no one agency could achieve success alone but that partnerships were imperative, as were the development of advocacy and resource mobilization campaigns. This session concluded with a "Targeting LF" video produced by SmithKline Beecham.

Phase three featured interactive dialogue as participants divided into six working groups to discuss strategic issues on themes ranging from 1) communication and information to 2) creative support and funding to 3) the role of NGDOs to 4) effective country action to 5) critical elements for successful LF programmes to 6) maximizing regional coordination. The final day was devoted to presentation and discussion of the informal recommendations of each of the discussion groups.

The meeting concluded with closing statements by the major partners: SmithKline Beecham, Merck & Co., Inc., the World Bank, the NGDO spokesperson, WHO, the meeting Rapporteur, and the chairperson. The upshot was that "an enormous amount of activity" had occurred in the short space of the last two years to position the new Global Alliance favourably for success in reaching its goal of eliminating lymphatic filariasis as a public health problem by the year 2020. Participants were agreed that this meeting, too, had been a success and that the strengthening of partnerships between the public, private and non-profit sectors was crucial to this endeavour. There were two press conferences and favourable media coverage, especially in Spain.

At the conclusion of the meeting, the chairperson representing India announced that his country, with the active support of WHO and SmithKline Beecham, would launch a major LF elimination campaign, starting with a 40 million-person pilot programme. As one WHO participant put it, "This is a major breakthrough; it will change the entire nature of our work." Or, as the Rapporteur said in his closing remarks, "The most important thing to communicate is that this campaign to eliminate lymphatic filariasis is a "first" – and that it is going to succeed. In Santiago, the Global Alliance moved from being an idea with a name – to a concrete reality."

Mounting a massive effort against a disease of poverty

Opening ceremony

The beginning of this two-day conference featured statements by WHO and its Spanish Government counterparts, highlights of which are found below.

WHO Welcome Address

Dr Maria P. Neira, WHO Director of the Department of Control, Prevention and Eradication in the cluster for Communicable Diseases, opened the meeting by thanking the City of Santiago de Compostela, the Province of Galicia, and the Government of Spain for linking itself so prominently with WHO's worldwide effort to eliminate lymphatic filariasis as a public health problem.

Infectious diseases killed 14 million people each year, she said, and exacerbated this personal trauma by undermining national social and economic development.

The graphic (below) presented by Dr Neira illustrated the four main categories of communicable disease in the world: the big killers like HIV/AIDS, TB and malaria; the recurrent threats (e.g. yellow fever, cholera, meningitis), the emerging and re-emerging marauders (e.g. Ebola, hepatitis C); the **diseases targeted for elimination** as public health problems: polio, onchocerciasis (river blindness), leprosy, guinea worm disease, Chagas' disease, schistosomiasis — and **lymphatic filariasis. It can be done by 2020.**

Infectious diseases: fatal, recurrent, (re-)emerging and eradicable

Obstacles to social and economic development

Fatal disease	To be eradicated or eliminated	Emerging diseases	Recurring diseases
AIDS	Polio	Rift Valley Fever	West Nile Fever
Tuberculosis	Leprosy	Creutzfeldt-Jakob	Monkeypox
Malaria	Guinea worm	Disease (CJD)	Plague
Measles	**Filariasis**	Ebola	Cholera
Diarrhoeal disease	Onchocerciasis	Nipah	Meningitis
Pneumonia	Measles	Lassa Fever	Cholera
	Chagas' Disease		Yellow Fever

Lymphatic filariasis, though not usually deadly, is a prime disabler – both of people and of progress. Yet it is a disease that is "effortlessly curable" with the right resources and political will.

Counter-intuitive though it might seem in this age of unprecedented progress and high technology, communicable diseases still accounted for 45% of all deaths in least developed countries and 48% of all premature deaths worldwide, she said, including all of the social and economic losses that went with them. In this day and age, this is *unacceptable*. Together we must do something about it, Dr Neira stressed.

Dr Neira described lymphatic filariasis (LF) as an infectious disease transmitted by mosquitos. It affected 120 million people in more than 80 countries, she said, thriving in impoverished urban and rural communities in tropical developing countries. The parasites (larvae and worms) lodged in human lymphatic systems and, over the years, caused permanent disability through swelling in reproductive organs and lower physical extremities. Equally devastating were the psychological stigma and adverse social consequences caused by this debilitating and disfiguring disease.

"Clearly, we must mount a massive effort against such diseases of poverty. Lymphatic filariasis is one of them – and we can eliminate it," Dr Neira asserted. "To do so, the paradigm must be broadened from vaccines to drugs and other products. Collaboration must also be broadened to a wider range of committed partners."

"We must mount a massive effort against diseases of poverty."

"Lymphatic filariasis is one of them – and we can eliminate it."

Today's green light for the Global Alliance was very important, she said. "We have the means, the mechanics and the will. We must follow with action. Former American First Lady, Eleanor Roosevelt once said, 'The future belongs to those who believe in the beauty of their dreams.' The 'dream' of this Global Alliance is to eliminate lymphatic filariasis once and for all from the earth. With 'a little help from our friends', we will do it, too, in the short space of only twenty years."

Address by His Excellency D. Fernando Riquelme Lidon, Spanish Secretary of State and Ambassador on Special Mission, Ministry of External Affairs

Ambassador Riquelme Lidon singled out the importance of eradicating poverty which he called an "aggression against human dignity" and both a cause and consequence of ill health. He cited Spain's ongoing collaboration in the Americas and said that the current focus on lymphatic filariasis would reduce its "intolerable damage".

Video Welcome: WHO Director-General Dr Gro Harlem Brundtland

An extract from the message from the Director-General is given on page 4.

Address by Mr Enrique Castellon Leal, Spanish Vice-Minister of Health

Mr Castellon Leal cited LF's heavy global disease burden – 120 million people in 80 countries, 700 000 of them in South America alone. He also referred to the goal set to eliminate LF as a public health problem by 2020 through stopping transmission and reducing morbidity.

Address by Mr Manuel Fraga Iribarne, the President of the Galician Government

In declaring the meeting opened, Mr Fraga Iribarne highlighted health improvement as a primary objective of social and economic development in the 21st century. Referring to Santiago's history as a place of pilgrimage since the 12th century with a long tradition of concerns about illness and water-borne diseases affecting many pilgrims, he said that the scientific community must remain on the alert for re-emerging diseases. He also focused on the "moral link", bolstered by a decade of close cooperation, between the Spanish Government and PAHO. "Only one illness – smallpox – has ever been eradicated in the whole history of health," he said. "Now lymphatic filariasis is one of seven slated for elimination within the coming decades." He expressed the hope that this Santiago-hosted meeting would prove useful in developing the Global Alliance to fight LF.

Comments

Dr Neira commented on the importance of financial support by the Spanish Government and the high-level political commitment to action against LF in the Americas.

Appointments

Mr Javid A. Chowdhury, Secretary, Indian Ministry of Health and Family Welfare, was elected Chairperson of the meeting by consensus, and Dr Bernhard Liese, Senior Adviser, Human Development, African Region, the World Bank, was appointed as meeting Rapporteur.

Address by the representative of the Government of the United Kingdom's Department for International Development: Eliminating World Poverty: A Strategy for the 21st Century

The presentation delivered by Mr Phil Mason, Deputy Head, Health and Population Division, of the United Kingdom's Department for International Development (DFID), focused on the links between poverty and ill health and strategies to eliminate them in the new millennium.

A White Paper published by the British Government in November 1997[1] re-defined Britain's international development approach with the overarching goal of contributing to *halving the number of people living in poverty by 2015.* No one underestimated the challenge, Mr Mason said, quoting American poet James Russell Lowell who wrote that "Not failure, but low aim is the crime".

Britain allied itself firmly to the bold aspirations of International Development Targets – a world free of abject poverty; a world in which *all* children are educated; where health care removes the shadow of illness and disability; an environmentally sustainable world in which each generation hands on to the next what is needed for living fulfilling and productive lives.

> Not failure,
> but low aim is the crime.
> – James Russell Lowell

These International Development Targets – "the bedrock of the UK's international development strategy"– represent key aspirations in human development: reducing child and maternal mortality; making reproductive health care accessible for all; providing universal primary education; eliminating gender imbalances in education – all by 2015; and implementing national strategies for sustainable development in all countries within the next five years.

Mr Mason said he liked to think of these targets as "aiming for the stars...they may always be out of reach, but like the maritime explorers of old, we can chart our course by them". He also pointed to six reasons why these human development targets were different – and feasible:

- **Consensus:** They are shared targets, endorsed by the big UN conferences of the 1990s, giving them the legitimacy of being owned by all, not imposed by the few. "For the first time in living memory, perhaps ever, there has materialized a global consensus about the important things we need to do."
- **United Nations Reform:** The UN, emerging from a period of Cold War sterility, is reforming and re-engineering itself as a far greater contributor to international development than it was in the past. The Development Assistance Framework at country level means UN agencies work much more closely together. Reforms at headquarters level with results-based budgeting in UNICEF, UNFPA and UNDP are making progress. The trend is in the right direction.
- **WHO Revitalization:** Considering how many of the Targets are health-related, the reforms introduced by WHO Director-General, Dr Gro Harlem Brundtland, are widely regarded as re-energizing, empowering WHO to recapture the lead in international health.
- **Performance Measurement:** To match its aspirations, the international community has agreed on 21 indicators to monitor global progress which will complement develop-ment targets set by national governments.
- **Globalization:** Increasing awareness of the disparities between rich and poor assail our consciences daily. Rapid communication links mean that business happens very differently. Suddenly there is a shared interest in the health of people thousands of miles away. HIV/AIDS and tuberculosis serve as a stark reminder that the threat of transmission is now global.
- **New Opportunities:** Finally, Mr Mason said, there had never been a more fertile moment for directing new energy at the problem. Despite fluctuating official government development assistance levels, big philanthropic foundations now offered vast new opportunities. "I was told recently that the top six US Foundations now out-spend the US Agency for International Development. This is a window of opportunity that behoves us all to respond," he concluded.

"That is our vision…but we need more than lofty ideas. Enthusiasm is no substitute for capacity; willingness no substitute for experience," Mr Mason said, explaining why DFID attached so

[1] *Eliminating Poverty: A Challenge for the 21st Century*, DFID, United Kingdom, November 1997.

much importance to building new partnerships, such as the current one with the Lymphatic Filariasis initiative.

Mr Mason said that DFID had reaffirmed its long-term support for this initiative in January with the Liverpool School of Tropical Medicine LF Support Centre formally coming into existence in April 2000.

The task is enormous, he said; in many ways, a microcosm of the challenge DFID set itself in redefining its approach to international development. "We are learning more all the time from attempting to change the way we support development. I know the LF initiative is well-equipped to do the same."

Mr Mason concluded by saying that "We in the UK are proud to be associated with the initiative. It is concrete action to match the aspiration of eliminating poverty. It builds on partnership and a sharing of effort. It will rely on trust and transparency. We hope to continue to play whatever role the initiative asks of us to contribute to the success of this great endeavour."

Criteria: The New Vision for Development

This LF initiative "brings together all the elements that the new vision of development demands:

- **a true partnership**, of different players all with strengths harmonized to a common purpose;
- **strategic soundness**, but embracing flexibility and pragmatism;
- **commitments to lesson-learning** and ownership by national governments, and
- **strengthening of health systems** generally rather than a narrow disease-specific intervention".

The Programme to Eliminate Lymphatic Filariasis

Lymphatic Filariasis: A Global Overview[2]

Dr Eric Ottesen, Project Leader, Lymphatic Filariasis Elimination (WHO), Department of Control, Prevention and Eradication, Communicable Diseases, WHO

Dr Ottesen started his presentation with the observation that, even though "the excitement is really what happens on the ground – at the country and community level," it was vital to the worldwide elimination of lymphatic filariasis to have the right programme-supporting "building blocks" in place. Therefore, his "global overview" would emphasize the contributions of many to this effort of laying "the appropriate building blocks for the programme".

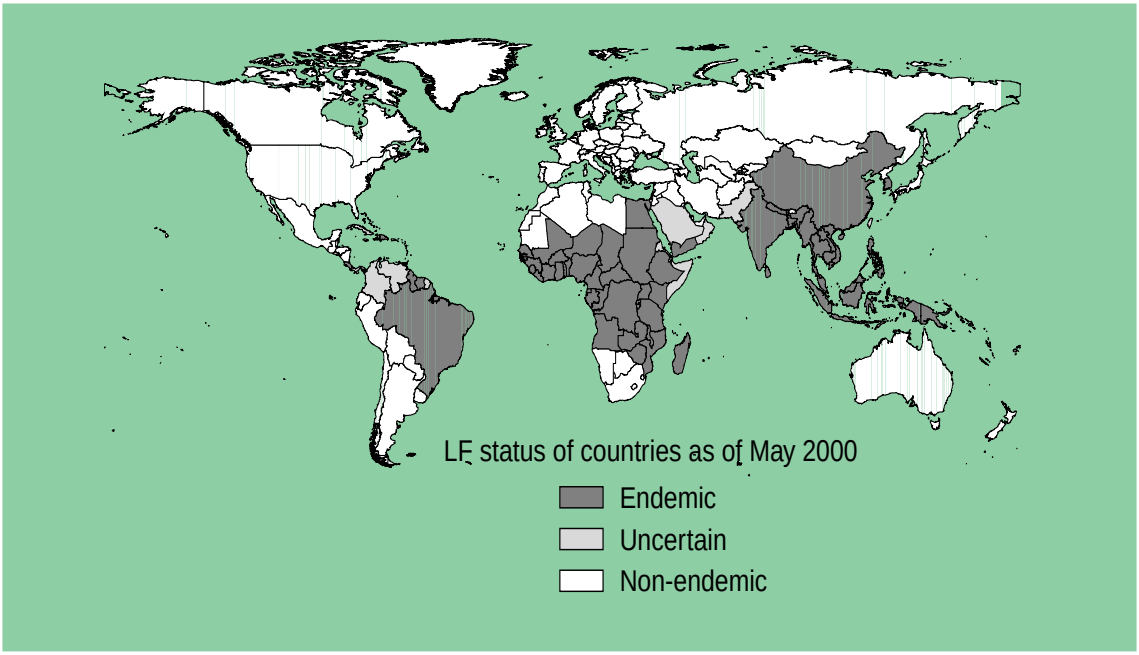
Briefly recapitulating where and how it all began, Dr Ottesen said that the Partners' Forum in October 1998 in Geneva had affirmed the overarching goals of the programme as:

- **Interrupting transmission**, primarily through mass treatment of all endemic populations with a single-dose, once-yearly, two-drug regimen – albendazole with either Mectizan® (ivermectin) or diethylcarbamazine (DEC) – for four to six years or the secondary option of DEC-fortified table/cooking salt for one year; and
- **Controlling morbidity** (i.e., alleviating suffering, preventing disability, promoting rehabilitation) through intensive local hygiene and education for patients and healthcare workers.

New hope for people with Lymphoedema

[2] For further details, see *WHO's Global Programme to Eliminate Lymphatic Filariasis: Programme Activities 1999.*

Countries where lymphatic filiarisis is endemic



LF is endemic in some 80 countries **(bold face)** and post-endemic or uncertain in more than two dozen countries and territories:

Americas: Antigua and Barbuda, Barbados, **Brazil**, Colombia, **Costa Rica,** Cuba, Dominica, **Dominican Republic**, French Guyana, Guadeloupe, **Guyana, Haiti,** Martinique, Panama, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, **Suriname, Trinidad and Tobago**, Venezuela, Virgin Islands.

Africa: **Angola, Benin, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea Bissau, Kenya, Liberia, Madagascar, Malawi, Mali, Mauritius, Mozambique, Niger, Nigeria, Reunion, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Togo, Uganda, the United Republic of Tanzania, Zambia, Zimbabwe.**

Eastern Mediterranean: Djibouti**, Egypt**, Oman, Pakistan, Saudi Arabia, Somalia, **Sudan, Yemen.**

South-East Asia: **Bangladesh, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand.**

Western Pacific: **American Samoa, Brunei Darussalam, Cambodia, China, Cook Islands,** Guam**, Micronesia, Fiji, French Polynesia, Kiribati, Lao People's Democratic Republic, Malaysia,** Marshall Islands, Nauru, **New Caledonia, Niue,** Northern Marianas, Palau, **Papua New Guinea, Philippines, Samoa, Solomon Islands, Republic of Korea,** Tokelau**, Tonga,** Tuvalu**, Vanuatu, Viet Nam, Wallis and Futuna.**

1) Strategic plan

The Forum had identified two major needs of the nascent Programme to Eliminate Lymphatic Filariasis, the first of which was a defined, comprehensive strategic plan. Therefore, during the past one and a half years these needs received priority attention. Indeed, a strategic plan was developed and agreed to by all parties; the published document[3] identified the partners and their activities, and set yearly targets for achieving all the programme goals by the year 2020.

2) LF disease mapping

Dr Ottesen said that the second major need of the programme was (and remains) a clearer delineation of exactly where the infection was endemic in the affected countries. The map above shows where LF is found: it is endemic in some 80 countries, being most prevalent in India and throughout tropical, sub-Saharan Africa. Standardized techniques for defining the exact distribution of LF in these endemic countries have been set forth in a technical manual[4]. The more precise the mapping, the better the basis for control. "Africa may be the toughest challenge".

[3] See *Building Partnerships for Lymphatic Filariasis: Strategic Plan, September 1999*, WHO/FIL/99.198 and *Global Programme to Eliminate Lymphatic Filariasis: Programme Activities 1999* – An informal report.

[4] *Preparing and Implementing a National Plan to Eliminate Lymphatic Filariasis: A Guideline for Programme Managers.*

3) Antigen Detection Card Testing

"A simple finger prick at any time of day" is all it takes now, said Dr Ottesen, to quickly and accurately diagnose bancroftian filariasis (90% of all LF) through the Circulating Filarial Antigen (CFA) test. This was an incredible improvement over the previous "costly, awkward and unpopular" late-night blood samplings, necessitated by the fact that microfilariae usually circulate only around midnight. This method ensures high sensitivity and specificity, is field-user-friendly and is available at cost from AMRAD-ICT, a Global Alliance partner, for only about US$ 1 per test, he said.[5]

4) Drug Supplies to Interrupt Transmission

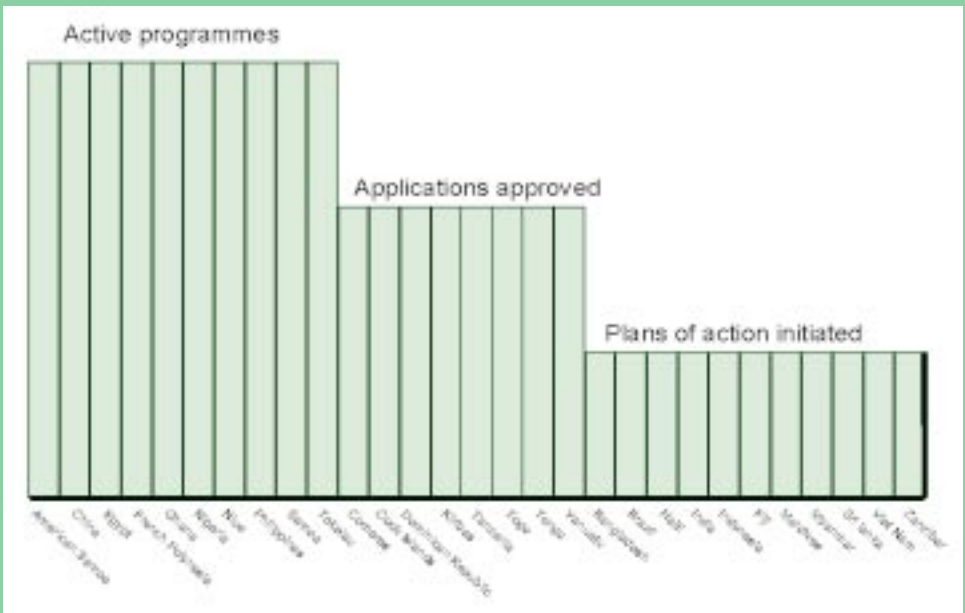
The drugs are available. The challenge lies in harmonizing the logistics. The three drugs currently employed are:

- **Albendazole**: SmithKline Beecham's production and supply will increase from current levels for five countries to 35 countries by the end of 2001. India, which has just committed to launching a pilot project involving up to 40 million people will be scheduled to begin in late 2000 or early 2001; drug supplies for the programme will present a formidable challenge.
- **Mectizan®** (Ivermectin): Merck & Co Inc. already supplies 29 countries in connection with the highly successful onchocerciasis control programmes in Africa and the Americas; it provided 92 million tablets in 1999 alone. The application process for donation of these two drugs, by SmithKline Beecham and Merck & Co., Inc, for use in Africa will be coordinated by WHO and the Mectizan® Donation Program.
- **Diethylcarbamazine (DEC)**: Although the "cornerstone of filariasis treatment for decades", its production and supply have been both regional and uncoordinated, making its coordinated supply "a high priority". Quality standards and compliance are crucial issues that have been addressed during the past year, and an effective mechanism for setting standards of quality and production is now in place.

5) Safety Assessment and Documentation

Detailed safety analysis of the two-drug treatment regimens have been carried out in a collaborative effort by SmithKline Beecham, Merck & Co., Inc., WHO, and an independent consultant. In-hospital, field-site and larger-scale programmes have reported "no serious adverse events or specific safety concerns". Dr Ottesen indicated that national programmes to eliminate LF are free to begin, but there is a recommendation for active surveillance/ monitoring of the first 1000-2000 patients/country as these country programmes are launched; this

Country readiness for filariasis elimination – May 2000 – 30 out of 82 endemic countries (37%)



and other safety documentation will be reviewed at 6- or 12-month intervals for the first 5 years of the global programme.

6) Decentralization

The trend towards regionalization of all programmatic aspects of the Initiative should be continued. (See presentation of Working Group 4 on this topic.)

7) Training: A Critical Issue

Human resources and capacity development form a three-pronged initiative involving:

- **Training Centres**: The Recife (Brazil) Center has been established as the principal site for training in morbidity control and clinical research; other training centers will be established in Africa and Malaysia.
- **Course Materials**: A 'Guidelines for project managers' has been developed in collaboration with the Centres for Disease Control and Prevention (CDC), SB and WHO. A *Lymphoedema Staff Manual* focusing on alleviating and preventing suffering and on rehabilitation has already been completed by the Recife Center in collaboration with CDC and WHO.
- **Training Courses**: Recife was again leading the way with a "Training of Trainers" course for 16 students from 10 countries; it is being held in May 2000 and should serve as a model for subsequent training efforts.

8) Strengthening the Science

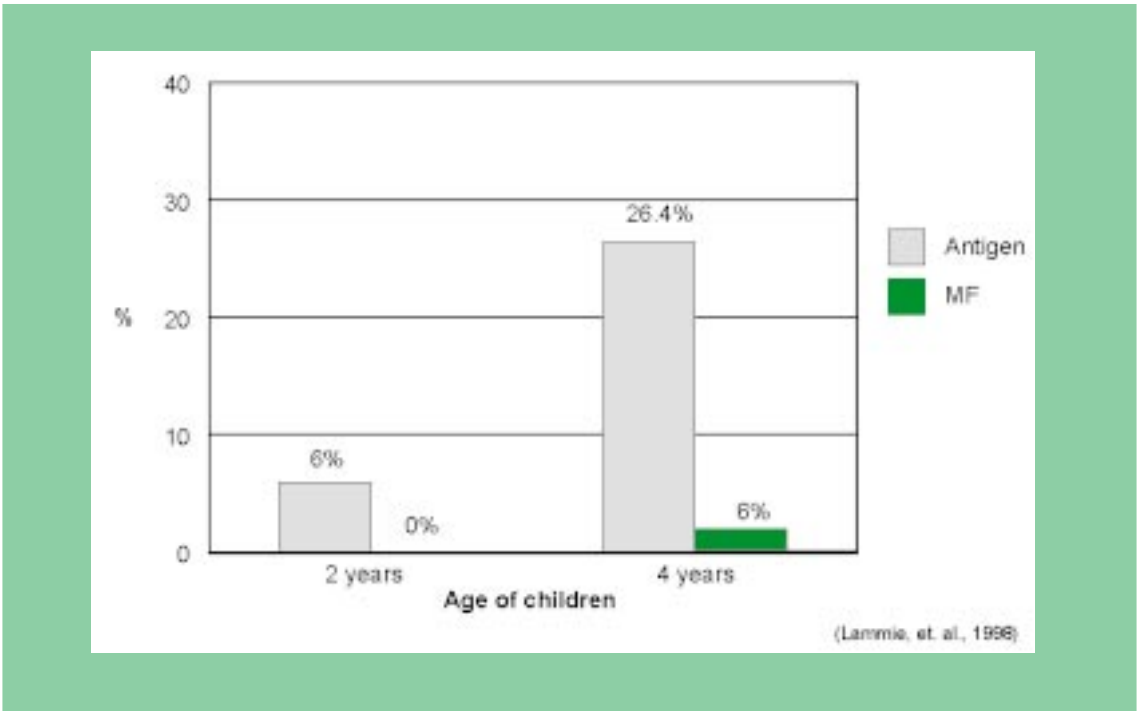
Dr Ottesen highlighted the need being met by the Programme for analytical reviews of existing scientific data (e.g. to assess and document the safety of the two-drug co-administration treatment regimens), for support of new research, and for clearly defined research needs that will be crucial to the long-term success of the programme.

9) LF in Children

In the past, Dr Ottesen said, LF in children had been "under-appreciated and incompletely documented". Children had been under-represented in surveys and, because of the long latency period before the disease presented with visible symptoms, this population group had been frequently overlooked.

In an evocative digression, Dr Ottesen shared some recent study results and literature-review findings on LF in children. He said that newly available antigen detection techniques helped enormously to diagnose the infection, even in very young children who often acquire the infection before four years of age. "Does the disease really hurt these kids?" some people ask. The answer, said Dr Ottesen, "is clearly yes. Infection comes early, pathology develops slowly and, finally, overt

Lymphatic filariasis in children – early Incidence – as determined by MF assay and antigen assay



LF in children has been inadequately documented to date.

Lymphatic filariasis in children

New recognition of:

- high prevalence of infection, especially in highly endemic areas;
- early onset of infection;
- disease develops at early ages:
  - first, subclinical damage,
  - later, overt clinical disease.

Thus, children will be the group to benefit most from:

- 'mass drug administration' programmes which:
  - interrupt transmission of LF and prevent infections,
  - deworming effects of albendazole;
- improved diagnosis by antigen detection or ultra-sound;
- treatment to prevent disease progression.

disease is expressed – usually in the teen or early-adult years."

But now at least, new and better tools, like the antigen detection cards and ultra-sound techniques to detect the "filarial dance" sign, were being developed. "Of all LF sufferers, children stand to benefit most from the LF elimination programmes," Dr Ottesen concluded. "They have their whole lives ahead of them."

10) The Need for Communication and Advocacy

Significant progress had already been made over the past year, Dr Ottesen said, pointing, for example, to the development of the internet website – www.filariasis.org – where "everything WHO produces about the disease can be found", as well as the intranet domains of this site for special focus groups. With its LF partners, WHO has also produced a number of important advocacy documents[6].

WHO Collaborating Centres at James Cook University and the US Centers for Disease Control and Prevention, the Emory University Support Center for Lymphatic Filariasis, Health and Development International have produced important advocacy documents as well.

In conclusion, Dr Ottesen said, "Our goal is clear: eliminate lymphatic filariasis by 2020. The structure is in place. The partners are on board. We have a Global Alliance – an alliance that is a 'free, non-restrictive partnership forum for the exchange of ideas and coordination of activities' – backed up by an expert Technical Advisory Group and WHO serving as the partnership's secretariat. These partnerships are what will make it *work."*

Check our website:
www.filariasis.org

Report from the Technical Advisory Group[7]

Dr K. Y. Dadzie (Ghana) reported on the activities of the LF Technical Advisory Group which had just concluded its 2-3 May meeting. The four primary issues for consideration and recom-mendation were:

- **Monitoring and informa-tion**: The need to build a global information system, starting at the grassroots village/urban locality level.

[6] *Building Partnerships for Lymphatic Filariasis: Strategic Plan, 1999, Reasons for Hope, 1998/99, Ready for Elimination, 2000*, Facts sheets: *Lymphatic Filariasis* (Update 1999) and *Global Programme to Eliminate LF*, December 1999, and *LF Elimination Programme* brochure (2000); all available upon request from WHO.

[7] Members of the LF Technical Advisory Group as of May 2000 are: Dr K.Y. Dadzie, Chairperson (Ghana), Dr K.K. Datta (India), Dr Gerusa Dreyer (Brazil), Dr Guillermo Gonzalvez (Dominican Republic), Dr John Gyapong (Ghana), Dr J. Habbema (Netherlands), Dr Joe Koroivueta (Fiji), Dr Ashok Kumar (India), Dr Mwele Malecela (United Republic of Tanzania), Prof. Jens S. Schou (Denmark) and Dr G.B White (UK).

Recommendation: Upgrade this process to a formal study; produce LF morbidity monitoring indicators and use results as interpretation models.

- **Ensuring supplies of quality DEC Drugs:** Steps for manufacturing to ensure quality products (e.g. new chromatography assay).

  Recommendations: 1) Order DEC through WHO to achieve economies of scale; 2) launch studies on the development of chewable tablets to preclude difficulties with inadequate or contaminated water supplies; 3) appoint a small group to study the use of standardized tablet strengths/colours.

- **Morbidity control**: Development and dissemination of the strategy.

  Recommendations: 1) Define disability prevention and rehabilitation terminology in terms of its components (e.g. management of lymphoedema/elephantiasis, cure of hydrocele); 2) strengthen morbidity control through targeted resource mobilization efforts, such as NGDO inventory and training, documentation of needs, etc.; 3) monitor follow-up activities through development of regional LF collaborating centers, support for hydrocelectomy and IEC to advocate for morbidity control.

- **LF as a childhood disease:** Unrecognized and under-reported in the past, studies now reveal that LF disease starts in childhood and that proper treatment can prevent it.

  Recommendations: 1) Mobilize partners, such as UNICEF, interested in disease/disability prevention in children; ensure treatment and support for children undergoing ADL attacks; 2) develop advocacy packages; 3) conduct studies on effective macrofilaricidal treatment with DEC and albendazole; investigate effectiveness of various regimens on treating and preventing the disease in children.

Summing up the reflections of the Technical Advisory Group, Dr Dadzie highlighted the importance of this programme to combat "the world's second largest cause of permanently disabling disease". He reminded his audience that LF was assessed to be eradicable and that the intervention tools were available. The Technical Advisory Group members were satisfied, he reported, that the programme was off to a good start, had strong operational research components and a sound plan for "learning through doing".

Dr Dadzie expressed the view that the next 20 years for LF would resemble the last 20 years for the onchocerciasis programme and that it would be a similar success story. He stressed the need to mobilize partners to fight this disabling disease.

Report from the Programme Review Group[8]

Dr Barnett Cline (USA), Professor Emeritus, Tulane University School of Public Health and Tropical Medicine, New Orleans, USA, began the presentation by identifying the members of the Programme Review Group: Dr P.K. Das (India), Dr Jaime Z. Galvez Tan (Philippines), Dr Peter Kilima (United Republic of Tanzania), Prof Isao Tada (Japan), Dr J. Williams (New Zealand) and himself. The Programme Review group was an independent body with members were appointed for a three-year term.

Dr Cline said that there had been four meetings to date, initially focused on developing criteria for the review and application process. The review criteria were as follows:

- Ministerial commitment to the elimination of lymphatic filariasis;
- Sufficient epidemiological and parasitological data to begin operations, and provision to expand that data progressively as needed to support the requirements of a full national

[8] On 5-6 May 2000 immediately following the First Meeting of the Global Alliance, an *ad hoc* meeting of the Programme Review Group was held at which: 1) The Dominican Republic's plan of action was reviewed and release of 200 000 albendazole tablets for the first year approved; 2) The national LF plan of the Federal Islamic Republic of Comoros was reviewed and their request for albendazole approved; 3) The plan resubmitted by Kiribati was reviewed and conditionally approved for release of albendazole subject to completion of administrative formalities; 4) The meeting received a new application from the Government of Bangladesh to initiate mass drug administration as of January 2001; this would be reviewed in the next meeting in September 2000; 5) There was discussion of issues around harmonization of the application form for requests for both albendazole and Mectizan® (ivermectin) by countries in Africa where onchocerciasis co-exists with LF, with the objective of keeping the entire application process as simple as possible for endemic countries; 6) A preliminary plan for Guyana was also discussed.

programme (a phased approach) generally anticipated for larger countries);

- Potential to integrate with other public health services/programmes;
- Existence of a national coordination committee or similar body;
- Clear identification of resource requirements needed to implement the intervention programme;

for applications requiring expansion of initial operations, the provision of evidence that:

  - the targets of the initial operations are being met,
  - the epidemiological data are available to justify the expansion,
  - the resources for that expansion are adequate;

- Technical capacity present already or a clear statement of how such capacity will be created;
- Guaranteed exemption from fees or counter-part payments to cover customs duties, acceptance and clearance; evidence of mechanisms in place for appropriate drug handling and warehousing;
- A plan for impact assessment on transmission in a subset or sentinel group of the treated population;
- The capacity to adequately identify, manage, report and monitor serious adverse experiences with the drugs being used.

The Programme Review Group could play "a key role in the process of decentralization," Dr Cline said, emphasizing that problem-solving should occur at the country and regional level.

Dr Jaime Z. Galvez Tan (Philippines), Professor, Department of Family and Community Medicine, University of the Philippines, then presented a status report, saying that a total of 44 out of 80 LF endemic countries were in various stages of readiness for LF elimination. Eight countries had already begun multi-drug administration: one in The African Region (Nigeria); one in the Eastern Mediterranean Region (Egypt); and five in the Western Pacific region (American Samoa, French Polynesia, Niue, Philippines, and Western Samoa).

> Our future is to devolve into the regions – where the real problem-solving takes place.

Six additional countries' applications had been approved: three from the African region (Ghana, Tanzania and Togo), one from the Americas (Dominican Republic) and two from the Western Pacific (Cook Islands and Vanuatu). Another six had almost completed the application process: two from the African Region (Zanzibar and the Comoros), one from the Americas (Haiti) and two from the Western Pacific (Fiji and Kiribati). Applications were being prepared by seven other countries: Bangladesh, India, Indonesia, Maldives, Myanmar, Sri Lanka and Thailand.

Three additional countries had almost completed their plans of action: Brazil, China and Viet Nam. Fourteen other countries had already expressed interest in the programme: Benin, Burkina Faso, Côte d'Ivoire, Guyana, Nepal, Malaysia, Papua New Guinea, Solomon Islands, Sudan, Tuvalu, Uganda, Wallis and Futuna, Yemen and Zambia.

In response to a comment about the future of the Programme Review Group, Dr Cline said, "Our future is to 'devolve' into the regions – where the real problem-solving takes place."

Regional and Country Reports

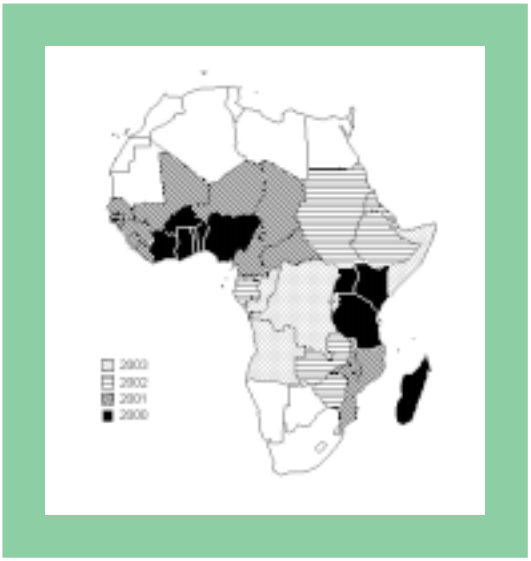
African Region

Dr J. B. Roungou presented the first regional status report, saying that 39 of the 46 countries in the African Region[9] were LF endemic (see map, page 12) and 420 million people were considered at risk for LF. Monitoring and mapping was a top priority for the region; a workshop had already been held (Ouagadougou from 8-12 March) for 23 nationals from 7 countries; over 106 000 ICT tests have been ordered by WHO.

Priority activities, according to Dr Roungou, centred around mapping the distribution of the disease, which he estimated would require about US$ 305 000 to cover mapping field expenses. Mass treatment using the two-drug regimen would also be needed to interrupt transmission. In addition, both regional and national plans were needed as only Ghana, Togo and Tanzania already had national LF plans approved.

[9] Of the 51 countries on/adjacent to the African continent, 46 belong to WHO's African Region while three (i.e., Egypt, Sudan and Yemen) belong to the Eastern Mediterranean Region.

Phases of the mapping of LF distribution



Looking forward, Dr Roungou said it would be crucial to strengthen WHO's Regional Office for Africa and get partners involved. DFID had been the main contributor to date. A major constraint had been "delayed funding".

Ghana

Dr John Gyapong, Acting Director, Health Research Unit, Ministry of Health, Ghana, began by saying that Nigeria should actually be presenting since it had already launched its programme and Ghana was still gearing up. He presented facts and figures on:

- **The extent of the problem:** LF was concentrated in the north and in the southern coastal belt; there was no adequate explanation of why the central regions of Ghana appeared to have a much lower endemnicity.
- **Control measures to date**: Mapping of endemic regions.
- **Future plans:** The goal set was to attain 80% treatment coverage and reduce ADL incidence by 50%.
- **Constraints and challenges**: Lack of a sense of urgency, vertical vs. horizontal, control vs. elimination. "We worry about how to go the extra mile towards elimination. Then resource mobilization becomes crucial," Dr Gyapong said. "The drug donation programme is excellent – but much more is required. We need resources at the right place at the right time (that is, not during the rainy season)."

The region's partners included:

- The Carter Center which was supporting activities in Nigeria;
- DFID which, through the Liverpool School of Tropical Medicine LF Support Centre, had funded the Ouagadougou workshop and activities in Benin, Burkina Faso and Côte d'Ivoire;
- HDI which was funding activities in Ghana and Togo;
- Merck & Co, Inc.;
- SmithKline Beecham;
- WHO; and
- The World Bank.

The drug donation programme is excellent – but much more is required.

In the open discussion period following the presentation, the Director of the Mectizan® Donation Program, Dr Stefanie Meredith, said that a "sustainable long-term cash flow" would be needed to truly eliminate filariasis. Dr Anne Haddix, economist from Emory's Support Center at the Rollins School of Public Health, introduced a funding study[10]. Comments were also made on the vertical vs. horizontal issue, pointing out the difficulty of achieving 80% coverage as a horizontal programme when in competition with other priorities; also that vertical programmes were not very cost-effective. It was also pointed out that in Nigeria the onchocerciasis and LF programmes overlap – for example, 12 million people had already been treated for "river blindness" – and that the APOC/OCP institutional memory could also be used for LF. Finally, the Rapporteur Dr Bernhard Liese (World Bank) said that the onchocerciasis programme, which had already been in operation for 13 years, should be able to show what Mectizan® (ivermectin) had done for LF as well during that time but the response was that no LF data had been collected.

Region of the Americas

Dr John Ehrenberg, Regional Advisor in Communicable Diseases at WHO for the Americas presented an overview of LF in the Americas, noting the endemic countries as Brazil, Costa Rica, the Dominican Republic, Haiti, Guyana, Suriname, and Trinidad and Tobago. All told, WHO estimated that

[10] The Cost of the Global Programme to Eliminate Lymphatic Filariasis: Years 2000 – 2004. The LF Support Center of Emory University, USA, Spring 2000.

there were about 420 000 infected persons with the greatest numbers in Haiti (200 000) and the Dominican Republic (100 000). Of Brazil's total population of 165,5 million, 3 million (1.8%) were considered at risk. Although the numbers were far smaller, in terms of percentage of at risk population, Suriname topped the list with 90%, followed by Guyana with 8 %.

"The good news", he said, was that:

- Lymphatic filariasis was focalized in the Americas;
- The number of cases is relatively small compared to other WHO regions;
- Tools to eliminate LF as a public health problem in the region were all available; and
- Several groups in the Americas had made significant contributions to further LF knowledge.

Challenges which needed to be met included the following:

- **Update information** on the current status of lymphatic filariasis in the Americas;
- **Raise the profile**: until recently, LF had not been perceived as a high priority by most of the health authorities throughout the region;
- **Increase IEC**: MoH authorities had had little to no access to updated information (e.g. scientific publications, reports, theses, etc.) on lymphatic filariasis or the feasibility of its elimination; and
- **Build capacity**: national programmes were technically weak, understaffed under-funded and/or absent in most of the seven endemic countries.

Dr Ehrenberg listed the regional priorities (Phase 1 of the regional plan of action) as follows:

- National focal points would need to be designated;
- Plans of actions would have to be written or modified;
- Financial resources would need to be mobilized;
- National task forces would have to be formed; and
- Albendazole applications would need to be completed and submitted.

Major constraints, in Dr Ehrenberg's view, included:

- Delays in strengthening the regional office;
- Insufficient and delayed funding; and
- Unclearly defined mechanisms for funding field activities.

Dominican Republic

Dr Guillermo Gonzalvez, National Center for Tropical Disease Control, Santo Domingo, presented the Dominican Republic Filariasis Elimination Program. Beginning with country statistics, he said that the Dominican Republic occupied two-thirds of the island of Hispañola (located west of Puerto Rico in the Caribbean) which it shared with Haiti.

Demographically a young country, 35% of the population of 8.3 million was under 15 years of age and life expectancy had grown from 44 to 71 years in the short space of 18 years (1980-1998). About 65% of the population were urban dwellers, many of them immigrants. It was estimated that over 30% of the population could be at risk of the infection although the real prevalence of the disease is still unknown.

> ... over 30% of the population (of the Dominican Republic) could be at risk of the infection.

To address this situation, a pilot project focusing on elementary school students was introduced in March 1998: in the capital city of Santo Domingo, 13% of samples were LF-positive; in the smaller city and Barahona, it was only 4%. By extrapolation, it is estimated that the number of LF cases for the entire country may number around 100 000.

In February 1999 national mapping activities started to ascertain which regions and municipalities were affected. By April 2000 prevalence studies had been concluded in 51 municipalites (out of 154). Eleven of these municipalities (21%) were found to be positive with at least 1% prevalence with *W. bancrofti* antigen.

Dr Gonzalvez concluded by saying that the LF elimination programme was integrated with the programme for the control of intestinal parasites, malaria and dengue.

Eastern Mediterranean Region

Dr Nikolai Neouimine, CEE Regional Adviser, WHO Eastern Mediterranean, said that the status of lymphatic filariasis in the WHO Eastern Mediterranean Region was "not exactly defined" in some parts of the region due to scarce information and the absence of systematic collection and reporting.

Countries in the region with ongoing transmission included Egypt, Sudan and Yemen, which would be priority countries for mass drug administration, while those with a past history of transmission included Djibouti, Iran, Oman, Pakistan, Saudi Arabia and Somalia. Dr Neouimine said that countries needed to devote more efforts to verifying the status of LF; to this end, activities had already been initiated in Egypt, the Syrian Arab Republic and Yemen.

Regarding progress to date, Dr Neouimine said that

- A regional plan for LF elimination had been prepared;
- A regional workshop had been organized on LF elimination for national programme managers;
- LF elimination would be an agenda item at the Regional Committee for the Eastern Mediterranean in October 2000;
- A national plan for LF elimination had been prepared in Egypt;
- An assessment plan of LF status in Yemen had been prepared and ICT cards supplied;
- Verification of LF-free status had been initiated in Syria;
- A pilot project on mass drug administration had been completed in Egypt;
- Albendazole had been provided for mass drug administration in Egypt; and
- WHO documents on LF elimination had been distributed.

Dr Neouimine stressed that LF elimination should be integrated with other programmes; for example:

- In Egypt, with primary health care and schistosomiasis control;
- In Sudan, with onchocerciasis control; and
- In Yemen, with primary health care, leprosy control and schistosomiasis control.

The region's main partners in LF elimination were the Arab Fund for Economic and Social Development, SmithKline Beecham and Merck & Co. Inc. The main constraints were identified as:

- Lack of financial resources for LF elimination;
- Weak social mobilization and community participation;
- Insufficient surveillance systems;
- A need for ICT cards.

Egypt

Dr Khaled Gado, Director of Filariasis Control in the Egyptian Ministry of Health, outlined the situation in his country. It was pointed out that bancroftian filariasis has been endemic in Egypt, mainly in the eastern Nile Delta and manifesting itself as clinical elephantiasis, since the times of the pharaohs. Today 10 of the country's 26 governorates were LF-endemic, the population at risk was approximately 2 million and the estimated number of infected people 150 000.

Launching of the Egyptian programme will take place in the third quarter of 2000.

Efforts at LF control started as long ago as 1910, based first on water management and later on detection through night-blood sampling and treatment with DEC. Egypt was among the first endemic countries in the world to embrace the concept of lymphatic filariasis elimination; it had developed a plan of action in 1996 and begun its implementation with WHO assistance.

As a result, Egypt would be one of the first countries in the world to initiate a national programme to eliminate LF within the framework of the WHO global programme. It had already completed a pilot project of mass drug administration (albendazole and DEC) in two villages.

Launching of the overall programme would take place in the third quarter of 2000. The plan of action foresaw interruption of transmission through annual mass chemotherapy plus palliative treatment of clinical cases; health education and staff training. Two post-treatment assessments would be performed to evaluate the efficacy of the programme.

South-East Asia Region

Dr Chusak Prasittisuk, Regional Advisor, Vector-Borne Disease Control, South-East Asia Region, reported on the current situation in the ten South-East Asia countries with a collective population of 1.46 billion or 25% of the global total. He referred to the region's strategic plan which noted that an estimated 600 million of them – 60% of the global LF burden – were living in endemic areas. About 60 million persons – or half the global figure of 120 million – either harboured microfilaraemia or suffered from clinical manifestations. All the three lymphatic filaria parasites were prevalent in the region[11], bancroftian filariasis constituting "the most predominant infection in continental Asia".

The eight known endemic countries in the Region were: India (which alone accounted for 44% of all infections), Bangladesh, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka and Thailand. Formal filariasis control programmes already exist in five of the eight countries: India, Indonesia, Myanmar, Sri Lanka and Thailand.

Despite this challenging situation, there were a number of favourable factors for LF elimination:

- **Biological:** Humans are almost the only reservoir host for lymphatic filariasis in the region; prolonged exposure with multiple infective mosquito bites was required to establish infection in a new human host; the parasite did not multiply in intermediate mosquito hosts; the infective larvae were not inoculated into the human host directly but deposited on the skin where the majority of them did not survive; and the incubation interval was prolonged to many months and would take many years to establish active transmission in a new area.
- **Available tools:** Low cost, safe and very effective drugs were available for prevention of infection and treatment of clinical cases; diagnostic kits and monitoring tools were available within the reach of endemic countries to detect infection in man and mosquito; and cost-effective control technology had been developed for LF elimination in many endemic countries.
- **Feasible operations:** Many countries had acquired valuable experience in the time-bound successful elimination of lymphatic filariasis; community cooperation was very encouraging when the LF elimination programme was integrated with the control of intestinal helminthic infections; infrastructure for implementation of the programme was available in all endemic countries in the South-East Asia Region.
- **Partners:** As elsewhere, SmithKline Beecham supported the programme in South-East Asia with a free and adequate supply of albendazole; and other UN system agencies (e.g. the World Bank) and bilateral agencies were actively involved.

The region's targets by the end of the year 2000 included *inter alia* the following:

- Holding informal consultations with programme managers of all the Region's endemic countries;
- Finalizing the Region's strategic plan;
- Developing advocacy materials/activities for the elimination of LF from the region; and
- Establishing national task forces in all endemic countries.

Comments: The meeting's chairperson, Mr Javid Chowdhury (India) remarked that, "although the LF elimination goal of 2020 is fine, we must see some dramatic results within the next *five* years if we are to maintain momentum."

India

Dr Ashok Kumar, Director of India's National Anti-Malaria Programme, gave a presentation entitled *Lymphatic Filariasis In India: Steps Towards Elimination,* which began with a clinical and parasitological description of the disease. Turning to the magnitude of the problem and its control strategy in India, Dr Kumar said that LF was one of the major public health problems in his country where 18 states and union territories were LF-endemic. India's National Filaria Control Programme (NFCP) had been launched in 1955 and evaluated in 1960, 1971, 1982 and 1995. Present estimates indicated that about *454 million people* were at risk, 113 million of them in urban areas where most NFCP activities were focused, although more recent attempts had been made to expand the programme to rural areas as well.

Present estimates indicate that about 454 million people in India are at risk.

[11] *Wuchereria bancrofti, Brugia malayi* and *B. timori*

Dr Kumar said that the main control strategy included:

- Recurrent anti-larval measures at weekly intervals with larvicides;
- Environmental methods to control mosquito breeding (e.g. filling ditches, pits, low-lying areas, de-weeding, de-silting and trimming of drains, water disposal and sanitation);
- Community observance of weekly 'dry days' (e.g. emptying of water containers once a week);
- Biological control of mosquito breeding through larvivorous fish;
- Anti-parasitic measures and DEC treatment;
- IEC for community awareness and involvement.

As a result, LF in urban areas was decreasing, he said. Funds for these activities (combined with the urban anti-malarial scheme) for 2000-2001 amounted to Rs.10.25 crores (Rs. 102.5 million), equivalent to US$ 2.4 million.

Following the 1997 WHO resolution that "elimination of filariasis as a public health problem should be considered a priority by Member States", a project was initiated in 13 districts of 7 Indian states[12] covering about 40 million population. Mass administration of DEC was being observed as a 'Filaria Day' in these districts.

A mid-term assessment of this pilot project in January 2000 recommended that:

- The pilot project should run for five years as the impact could be seen only after at least three years of DEC consumption; it should be supervised and tablet strength increased to reduce total number of tablets for consumption; DEC syrup for children under four years of age should be provided;
- Proper monitoring, supervision and timely review at all levels should be conducted;
- Funding and development of site-specific IEC materials and sensitization of people for community awareness through campaigns, meetings, discussion and personal contacts should be undertaken;
- Pre- and post-assessment surveys should be carried out; and
- Orientation of medical and para-medical officials for the management of side reactions should be provided.

Based on a multi-centric DEC delivery study carried out with WHO/TDR support in 1998-1999, it was recommended that there be greater political commitment and stronger health sector involvement with comprehensive training of health workers and communities involved in drug delivery.

As for next steps, Dr Kumar said that India, as a partner of the Global Alliance, was committed to eliminating lymphatic filariasis by 2020 in accordance with WHO's 1997 resolution. The Indian initiative to eliminate LF was envisaged in two stages:

- **Phase One**: The pilot project in 13 districts with 40 million population would be expanded from the single dose, mass annual administration of DEC to add albendazole to the regimen: 40 million albendazole tablets would be required annually.
- **Phase Two**: 261 endemic districts would be brought under the mass administration of DEC and albendazole so that India could keep pace with the other endemic countries in achieving LF elimination by 2020. This would require ICT card mapping and active involvement at all levels of society.

Concerning financial implications, keeping in mind that albendazole would be supplied free of charge by SB through WHO, funding projections for Phase Two indicated that total costs for IEC and treatment of about 440 million adults, training for approximately 10 000 primary health care (PHC) medical officers, 120 000 paramedics and 30 000 health workers, annual independent assessments and mapping of endemic areas would amount to US$ 24 million.

Western Pacific Region

Dr Kazuyo Ichimori, WHO scientist in the Country Liaison Office in Vanuatu, made a presentation on behalf of the Western Pacific Region where the LF distribution pattern showed the Philippines (33% of the people at risk in the region) to be first, followed by China and Malaysia (22%), Cambodia (20)%, Viet Nam (20%) and the Pacific Island countries (5%).

PacELF, she explained, was a regional collaborative approach to eliminating LF in 22 Pacific Island countries with a total population of 7 million (350 000 affected by the disease) by 2010, ten years ahead of the global elimination target date. Such a coordinated approach was needed in the Pacific because these island countries were small and had

[12] Bihar, Uttar Pradesh, West Bengal, Orissa, Andhra Pradesh, Tamil Nadu and Kerala.

limited resources and there was a great deal of inter-island travel. Therefore, working together, sharing resources and helping one another to implement a comprehensive regional strategy would be necessary.

The progressive targets for PacELF were to certify LF-free status for individual countries by 2005, followed by declaration of region-wide elimination by 2010. The strategy involved mass treatment with annual single dose combination drugs (albendazole and DEC), repeated three to five times.

Group 1 (low or non-endemic countries) included Guam, Kiribati, the Marianas, Marshall Islands, Nauru, Palau, Pitcairn and Tokelau.

Group 2 (endemic island countries with populations under 500 000) included American Samoa, Cook Islands, French Polynesia, Micronesia, New Caledonia, Niue, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, and Wallis and Futuna.

Group 3 (LF-endemic large countries with population of over half a million) included Fiji and Papua New Guinea.

There would be an integrated programme combining blood survey and follow-up, mass drug administration, mosquito control, morbidity control and an IEC awareness-raising campaign. American Samoa, with its high LF incidence but also 96% drug coverage rate, would serve as a model. PacELF's main partners were WHO and the Secretariat of the Pacific Community (SPC).

The Philippines

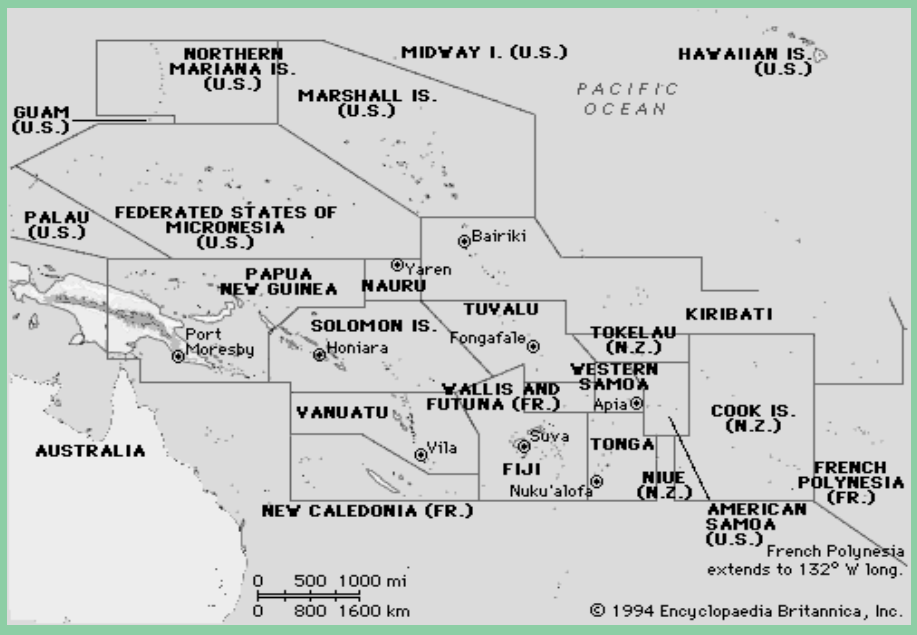
Dr Leda Hernandez, NFEP's Programme Coordinator, Department of Health, Philippines, introduced the Philippines as a tropical developing country with a dominant agricultural sector and a population of over 70 million people scattered on about 7000 islands in WHO's Western Pacific Region.

Filariasis was first identified there in 1907. By 1998 endemic areas were spread throughout the archipelago with a prevalence rate of 9.7% cases per 1000 population. New endemic areas recently registered some of the highest recorded infection rates.

With WHO's declaration of "Filariasis Elimination as a Priority" in 1997, the programme began work with its filariasis control units on a plan to eliminate the disease in the Philippines. The first step was mapping of endemic areas, disease rates and other epidemiological data. (See *Filariasis in the Philippines, A Compilation of DOH Data, 1960-1998* for details*)*.

After WHO's global call for Elimination of Filariasis in 1998, the programme shifted its strategy from control to elimination. Today, Dr Hernandez said, the main goal is to reduce the LF prevalence rate in endemic areas to less than 1 per 1000 population. The objectives are to:

Pacific Island members stretching from Palau in the west to the Pitcairn Island in the east



Timeframe for elimination of LF in the Western Pacific

<table>
<tr><th></th><th></th><th colspan="2">Pacific Region</th><th></th></tr>
<tr><th>Step</th><th>Year</th><th>Group 1 (CFF)</th><th>Group 2 (PIS)</th><th>Group 3 (LCS)</th></tr>
<tr><td rowspan="7">Step 1</td><td>1999</td><td rowspan="2">Planning</td><td>Planning</td><td>Planning</td></tr>
<tr><td>2000</td><td rowspan="3">Intervention</td><td rowspan="6">Intervention</td></tr>
<tr><td>2001</td><td rowspan="3">Evaluating</td></tr>
<tr><td>2002</td><td rowspan="3">Evaluating</td></tr>
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<tr><td>2004</td></tr>
<tr><td>2005</td><td colspan="2">Country elimination: Certificate</td></tr>
<tr><td rowspan="5">Step 2</td><td>2006</td><td colspan="2">Planning</td></tr>
<tr><td>2007</td><td colspan="2" rowspan="3">Follow-up and confirmation</td></tr>
<tr><td>2008</td><td rowspan="2">Evaluating</td></tr>
<tr><td>2009</td></tr>
<tr><td>2010</td><td colspan="3">Regional elimination: Declaration</td></tr>
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1) Identify all endemic municipalities within the next two years;
2) Provide mass treatment in established endemic municipalities; and
3) Continue surveillance of endemic areas for five years after completion of mass treatment.

Dr Hernandez highlighted major components of the NFCP as:

- Mapping of endemic areas using ICT and deformity surveys;
- Capability building through advocacy for participation;
- Training of health workers and community organizers;
- Annual mass treatment for a minimum of four years using the combination drug regimen of DEC-albendazole for all persons older than two years in established endemic municipalities;
- Morbidity control with municipal self-help support groups and surgical referral centres for hydrocoele cases;
- Integration with other public health programmes;
- Monitoring, evaluation and post-intervention surveillance .

Dr Hernandez cited the following indicators for progress to date in the Philippines:

1) **Diagnosis**: Rapid assessment methods used in endemic mapping.
2) **Treatment:** Mass treatment in three pilot sites. Results showed no significant barrier to proceeding with national implementation.
3) **Research:** A research agenda was prepared and disseminated to other health partners; rapid assessment studies conducted on ICT; ongoing health systems research.
4) **Database Development**: Recording/reporting forms; EPI-INFO FL database; publication of DOH Filariasis Data(1960-1998).
5) **IEC Plan**: Brochure entitled *Wipe Out Filariasis in the Philippines,* flipchart, posters and leaflets to advocate for support from local officials and endemic communities.
6) **Advisory Group**: Creation of a *National Advisory Group for Filariasis* composed of LF experts, academics, medical societies, etc.
7) **Human Resources Development**: Training of Trainers workshops in all endemic regions.

The challenge, said Dr Hernandez, is to start developing an efficient NFEP system, a feat in itself for a developing country. The task at hand will be to launch a high-profile activity to catch the attention of national political leaders and health managers, to institutionalize a "Filariasis Health Week" in endemic communities, to ensure funds, procurement and delivery of ICT cards, DEC and albendazole; to develop a module on morbidity

control; and to generate funds for information systems that would facilitate coordination and tracking of the programme's long-term effects.

"We need to remind ourselves once again of the need to eliminate this disease so that every child, present and future, in endemic areas can be free from the scourge of filariasis," she concluded.

Private Sector Partners: LF and the Case of a Gold Mine Manager in Papua New Guinea (PNG)

Presented by Mr James Cheyne (WHO) on behalf of Mr Arthur Hood, Misima Mines Ltd.

Mr Cheyne introduced this case study on behalf of Mr Arthur Hood, Misima Mines Ltd. in Papua New Guinea, with the purpose of providing a model for the role a private sector company could play in the delivery of public health sector programmes and show how it could support government priorities and capacity-building for mutual benefit.

Leave behind a better future!

Misima Mines Ltd. (MML), Mr Cheyne explained, was situated 600 kilometres south-east of Papua New Guinea's capital Port Moresby, on a small island in the Solomon Sea. In operation since 1990, it was 80% owned by the Placer Dome mining conglomerate and employed about 800 local residents out of a total population of 13 000 on the island.

Over the past decade, due to a continuous decline in Papua New Guinea's Government service delivery capability, the private sector resource developers have found themselves filling the vacuum. After being approached by the WHO Collaborating Centre at James Cook University in 1995, MML was asked to provide support for a trial programme of work to test the effectiveness of three means of LF drug delivery.

Beginning on Misima Island, the programme expanded gradually throughout the district over three years to cover a population of some 40 000 distributed among many islands spread over some 80 000 square kilometres. The bottom line: the total cost turned out to be only US$ 0.30 per person treated. Drugs cost only US$ 0.04 per person per year meaning that it cost less than US$ 500 to treat the whole island. In future MML hopes to expand its health care initiative to include HIV/AIDS, immunization programmes, directly observed treatment, and a short-course against TB. MML would also like to see the LF programme expanded throughout the Province, a population of some 300 000 and is encouraging the Provincial Department of Health to do this.

This effort was all part of a broader Placer Dome corporate social-responsibility strategy to "Leave Behind a Better Future" and brought the parent

Regional location

company in as a founding member of the World Alliance for Community Health.

While the LF programme had been a joint effort between MML and the Papua New Guinea Department of Health, MML provided the leadership and initial medical staff. Over time, the process shifted from "top down to bottom up" and was integrated horizontally under a delivery protocol entitled, "Educate – Delegate – Regulate – Motivate".

Now a WHO-approved project, MML's "enlightened self-interest" demonstrated what could be accomplished with a committed private sector partner whose motto is to "Just do it!", Mr Cheyne concluded.

Message from Misima Mines Limited

Video Synopsis of SmithKline Beecham video

Target LF: For a Future without Lymphatic Filariasis

Action began in Samoa on the eve of the new millennium and with the start of a new programme to eliminate LF there. The narrative then referred to the global situation – 120 million people in at least 80 countries affected, another billion at risk, especially children.

Private-sector support was highlighted, focusing on SmithKline Beecham's 1998 commitment to provide free drugs (albendazole) and Merck & Co., Inc.'s promise to extend its 13-year drug donation programme of Mectizan® (ivermectin) to combat LF as well in African countries where LF and onchocerciasis co-existed. Both commitments were open-ended – that is, for as long as was needed to eliminate LF from the world. The output in terms of drugs was described as "enormous".

The video made three "clincher" points:

- Donating drugs was by no means the end of the story;
- Distribution – getting the drugs to the people who needed them – was a real challenge; and
- Samoa, which had reached 94% of its population, should be considered a model in terms of information, drug supply and monitoring. The needs were exponentially greater in countries like Brazil, India and Nigeria.

"This is the way partnerships should work – beating back the diseases of poverty," said Dr David Heymann, WHO Executive Director for Communicable Diseases, commenting on the fragility of lives lived "on the margins of help."

Target LF:
For a Future without Lymphatic Filariasis

This 7-minute video presented by SmithKline Beecham provided an example of the sort of simple but effective media-marketing tools which could be used to help the Global Alliance raise both awareness and resources.

The video may be seen on the SmithKline Beecham website:
www.sb.com/lf/index3.htm

Copies of the video are available from SmithKline Beecham
(e-mail:brian.bagnall@sb.com)
by quoting either PAL or NTSC video formats.

Working Groups' Discussions

Participants divided into working groups focused on the following six themes: communication and information, creative ways of seeking LF support (including funding), the role of NGDOs, meeting country needs, critical elements for a successful LF programme, and maximizing regional coordination. This part of the agenda was a demonstration of the Global Alliance's principal function to *"...provide a free non-restrictive partnership forum for the exchange of ideas and coordination of activities"*[13].

Working Group 1: Addressing Global Alliance Communications and Information Needs

Discussion leader: *Ms Brenda Colatrella, Merck & Co., Inc.*

Presenter: *Dr Philip Coyne, World Bank*

In identifying the Alliance's communication and information needs and assessing how they could best be addressed, the group began with some key messages:

- Communications were essential and could "make or break" the programme;
- Effective communications were a huge challenge; and
- Communications activities needed higher prioritization.

There seems to be no clear, effective LF communications strategy in place.

The group then presented some questions and observations:

- Where did the communications responsibility reside – with WHO or with the Alliance itself?
- There seemed to be no clear, effective LF communications strategy in place;
- The lack of definition and basic programme knowledge were causing confusion;
- Communications were not received by all partners in timely manner; no "filtering down";
- It was not feasible to have a "flexible, open structure" and, at the same time, committees with authority determined by only one partner;
- The lack of effective, ongoing communications resulted in increased costs and inefficiencies.

The following suggestions were then presented:

- A focal point should be designated/hired to manage effective and efficient communications for the Global Alliance;
- Funding for this function and person should be cost-shared by Alliance partners;
- A representative of each partner should be designated to solicit feedback and provide input;
- An Alliance website in addition to WHO's www.filariasis.org should be created;
- Communications should be regionalized/decentralized wherever possible;
- A Global Alliance 'bulletin' should be instituted and discussions held on which partners should produce and disseminate it.

[13] Terms of Reference of the Global Alliance to Eliminate Lymphatic filariasis – Meeting report, 2 December 1999, London.

Working Group 2: Seeking Support (including funding)

Discussion leader: *Dr Brian Bagnall, SmithKline Beecham*

Presenter: *Dr David Molyneux, Liverpool School of Tropical Medicine LF Support Centre.*

It was suggested that the Alliance create a Development Task Force to undertake an assessment to analyse the needs of the Alliance, sources of support, needs of supporters, trends in philanthropy, the competition and the Global Alliance's market position.

This Task Force would then use the information gleaned to develop marketing plans which could include:

- Exploiting LF imagery;
- Establishing a brand image;
- Creating a global LF non-governmental organization to address the funding needs of *all* partners;
- Weaving human rights and social exclusion issues into the LF campaign;
- Recruiting prominent spokespersons;
- Implementing lessons learned from other programmes (e.g. polio, leprosy);
- Emphasizing the childhood and reproductive health aspects (i.e., LF as a disease which begins in childhood and is later an impediment to sexual and reproductive health); and
- Exploring opportunities to link up with major service organizations (e.g. Rotary International, Lions Club).

It was suggested that the task force, created by WHO acting as the Alliance's Secretariat, coordinate with LF support centres and report back within a year after wide-ranging consultation with Alliance members. Where appropriate, the Task Force would also use consultants in philanthropy, finance, public relations, and marketing.

Working Group 3: Defining the Role of Non-Governmental Development Organizations (NGDOs) in National Programmes to Eliminate LF

Discussion leader: *Dr Nevio Zagaria, WHO*

Presenter: *Dr Frank Richards, Carter Center Global 2000*

The group began by asking positioning questions for NGDOs (i.e., who, what, where, when, why and how they could contribute) and supplying the following answers:

Who **are the NGDOs relevant to the elimination of LF?** They consist of not-for-profits, private voluntary organizations (PVOs), special interest groups, lobbying/political action groups, international development, humanitarian and emergency relief agencies, international agencies, national and sub-national groups and local/community organizations.

What can the NGDOs do for LF?

What **can these NGDOs do for LF?** For the NGDOs involved in the LF elimination programme, a broad spectrum of attributes were identified, including:

- Demonstrated skills in facilitation, promotion and rapid response;
- "On the ground", community-based presence (often the only means of delivering services in remote areas or during periods of civil unrest);
- Role as providers of essential resources (e.g. financial, material, human, infrastructure);
- Status as a neutral (i.e., non political) party which remains relatively stable despite changes in the government and politically-driven MoH structure;
- Advocacy efficacy at all levels from community to business to national government to global governance;
- Focus on non-fatal diseases despite other health emergencies;
- Consistency, loyalty to the cause and sustainability;
- Crucial intermediary role in mass drug administration campaigns;
- Involvement in patient care, morbidity control, hygiene, surgery;

- Contribution to legal drug importation, tracking and accountability, inventory control (e.g. parallel use issue);
- Bridging function in communications between diverse partners;
- Technical expertise in areas such as planning, training, monitoring and evaluation.

***Where* could NGDOs work for LF?** Virtually all levels, from the broadest international level (e.g. governance) to regional and national coalitions to the state, district and community level ("grassroots"), as well as in cyberspace.

***When* should NGDOs be involved in the LF initiative?** At all stages, starting now, at the beginning of this new initiative. NGDOs should contribute to the MoH's planning of national task force structures, to the execution of programmes and to the monitoring and evaluation phase.

***Why* would NGDOs want to be involved in the LF initiative?** For a number of reasons; inter alia, because the LF initiative is:

- A "good fit" with their mandate (e.g. disease burden and geographic area);
- A "good programme" deserving of support;
- Compatible with other activities or strategies (e.g. community development, child survival, onchocerciasis, intestinal parasites, schistosomiasis, malaria, vitamin A).

***How* would NGDOs become involved in the LF initiative?** In their individual capacities or through coalitions. NGDOs need to feel that they are 'welcomed' at the table and are regarded as full partners in the programme. In this capacity, they can contribute substantially to LF advocacy. It is suggested that the Global Alliance advise the NGDO community that:

- There is an open invitation for their participation, that there are opportunities, roles and responsibilities in under-served endemic areas;
- There are resources or good 'prospects' to implement the NGDO programmes;
- They must conform to certain criteria (board structure, fiscal management, track record, etc.).

To maximize communications, a list of all potential partners should be developed.

Suggestions of the working group regarding NGDOs:

- In keeping with the LF Strategic Plan (September 1999) which asserts that "NGDOs are key partners" who "will play a critical role in LF elimination" and "given adequate funding, are likely to embrace the challenge of LF elimination with enthusiasm", it is suggested that this programme be developed as a "true" partnership; that is, that both WHO and relevant MoHs demonstrate the will to provide a welcome "place at the table", in full partnership status.
- In keeping with the LF Strategic Plan's objective 3.6.4.1 that "NGDOs in the LF endemic countries be made aware and be convinced of the importance of mobilizing and supporting local community activities for LF", it is suggested that the following targets be endorsed and promoted throughout the relevant NGDO community:
  - **By the end of 2000:** Development of information packages and promotional material in the appropriate languages for NGDOs working in LF countries; establishment of a formal network of NGDOs active in LF elimination to share experiences and exchange ideas.
  - **By the end of 2001:** Recruitment of increasing numbers of NGDOs .

Working Group 4: Meeting the Needs of Countries: How the Alliance can best support more effective country action

Discussion leader: *Dr J. Gyapong, Ministry of Health, Ghana*

Presenter: *Dr Patrick Lammie, Centers for Disease Control and Prevention, USA*

Advocacy: Help build a sense of urgency for LF programmes in countries, supported by WHO-Geneva, WHO regional offices, collaborating centres, and focusing on potentially endemic areas (which need to be convinced that LF is a problem). Provide leadership by collecting background disease-specific information and providing technical expertise. The Alliance should coordinate with its regional/country members and drive Global Alliance support down to country level.

Regionalization: An LF focal point at WHO regional/country level was needed as people currently have so many responsibilities that LF priority is low. Funds should be provided for country start-up activities (mapping, training). For this, technical expertise was needed to provide, *inter alia*, assistance with the drug application process, identify training needs, etc. A regional synchronization of activities should be promoted with regional meetings organized and funded:

- **Strengthen regionalization:** NGOs, regional or country partners should create decentralized Allliance groups convened by WHO, the province, the country or the region. A list should be developed of all potential partners to maximize communications between local partners and MoHs; partners should be involved in country planning to build ownership.
- **Partner recruitment:** There must be a coordinated message, partner recognition, invitations and involvement and improved communications.
- **Regional meetings:** These should promote coordination and synchronization of activities, high coverage and uniform ramp-up of activities, mutual country motivation and friendly competition. They should also coordinate mapping, train countries on how to begin activities and implement the application process, etc., foster social mobilization strategies and coordinate communication (health reviews, newsletter, website).

Application process: The requirements should be simplified and streamlined, all the while fulfilling the requirements of the Programme Review Group, SmithKline Beecham, the Mectizan® Donation Program, and Merck & Co., Inc.

Country-specific activities:

- **Funding:** There was a strong need for specific LF funding in addition to "basket" funding of health needs (LF might not be high enough priority at MoH to get funds), as well as a need to develop expertise, to find specialty funds (mapping, personnel, training, development and production of IEC material); to provide disability prevention and rehabilitation funds and coordination; to fund drug costs, infrastructure and personnel; to ensure recurrent programme funds from year to year and to coordinate the roles of the private sector (e.g., Misima Mines).

There is a strong need for specific LF funding in addition to "basket" funding

- **Partner recruitment:** There should be a coordinated message, partner recognition/ invitations/ involvement and improved communications.
- **Multi-sector approach:** There was a need to integrate health activities, sharing costs, enhancing efficiency (monitoring, surveillance) and improving integration with other ministries, with research institutes and with other academic institutions. The Global Alliance could promote such integration.
- **Translation/interpretation:** There was a need to ensure that non-English-speaking countries were regarded as full partners in meetings, training opportunities, etc. through appropriate bi-/multi-lingual translation and interpretation services.

Working Group 5: Identifying Critical Elements for Successful LF Programmes

Discussion leader: *Dr Leda Hernandez, Ministry of Health, Philippines*

Presenter: *Dr Maged El-Setouhy, Ain Shams University, Cairo, Egypt*

The following eight elements were identified:

- **Political advocacy and commitment** from the international to the local level (trickle-down);
- **Baseline data:** Endemic mapping, prevalence, etc.;
- **Strengthening operational capacity:** Capacity-building through training of health personnel, long term funding, logistics (e.g. systematic inventory and distribution/quality assurance of drugs, laboratory and IEC supplies, systematic data information systems, programme monitoring and surveillance, develop-ment of materials for community mobilization, and inte-gration with other existing public health programmes);
- **Institutional frame-work:** Formal collaboration amongst government officials, expert groups, etc., including the Technical Advisory Group, expert groups at the international, regional and national levels, non-governmental organiza-tions, ministries and inter- and intra-sectoral coordination;

- **Community mobilization**
- **Morbidity control:** IEC on morbidity (e.g. effective hygiene programmes), support groups;
- **Evaluation**
- **Sustainability** (five years minimum).

Working Group 6: Maximizing Regional Coordination

Discussion leaders: *Dr K. Ichimori, WPRO and Dr J. Ehrenberg, PAHO*

Presenter: *Prof. Charles Mackenzie, Mectizan® Donation Program*

The group began by defining a Regional Coordinating Group as "a free affiliation of countries, a non-legal body", established to 1) review national plans and recommend on albendazole donation applications; 2) foster links through communication, coordination, advocacy and sharing of resources and, 3) interact with existing structures, such as WHO Regional Offices, TCC of APOC, and the SPC in Western Pacific, to their evolving needs.

The case for regionalization was then examined and a number of arguments set forth. The following responses were given to the question, "Why regionalize?":

- Closer to the problems; more insight into the viability of potential solutions;
- Able to respond more efficiently to local issues; more effectively to cross-border issues;
- Speedier drug application process;
- Easier to share experiences through regionalization;
- Already have the appropriate technical resources and facilities for sharing;
- Better positioned to deal with regional shipping issues;
- Well-placed to deal with accountability issues between drug companies and recipients;
- Able to capitalize on cultural similarities (e.g. language);
- Easier to mobilize regional funding sources;
- More readily able to cope with the financial aspects related to drug tariffs, etc.

The functions of a Regional Coordinating Group were perceived as follows:

- To recommend approval of drug applications;
- To coordinate information activities (e.g., communication, advocacy, information exchange through direct dialogue and electronic networks);
- To assist with the development of national plans;
- To organize and report on regional meetings, review progress and provide technical support;
- To mobilize resources (in cash and/or in kind);
- To facilitates supplies to countries (e.g. DEC, ICT cards);
- To activate political support for health-related legislation;
- To facilitate NGDO involvement.

In response to the question of how such a regionalization process would occur, the group found that a useful sequencing of approach would be to:

- Begin by devolving the decision-making for national drug approval applications for albendazole to the regional group;
- Then develop other functions (e.g. communication, information, resource mobilization) which would be specific to the needs, situations and circumstances within the region;
- Actively involve countries in the decision-making process;
- Enlist a member of the coordination group initially to facilitate idea flow and continuity;
- Suggest a framework to be presented at regional programme managers' meetings for which the country focal point solicits national opinion and reports back to the group.

The proposed membership of such a regional body would be comprised initially of:

- Representatives from countries within the region;
- A member of the existing Programme Review Group;
- Partners and potential donor-partners;
- WHO.

WHO, Geneva has an important role in fostering, facilitating and supporting regional groups.

Closing Statements

SmithKline Beecham

Dr Brian Bagnall, Director, Project Management, Lymphatic Filariasis Corporate Affairs, expressed SB's satisfaction with the rapid progress made since signing the Memorandum of Understanding with WHO only two-and-a-half years ago, setting the stage for other public/private sectors partners to create a broad alliance to eliminate LF. Now the Global Alliance was a reality and the first countries were already launching their programmes. Now, with the "massive new numbers" of tablets required to supply really large initiatives (e.g. the 40-million-person pilot project in India), he pleaded for advance planning – and patience as the company gears up production in the coming months..

Mr Fettig received a standing ovation in recognition of his long years' service to the onchocerciasis and LF initiatives.

SB was committed not only to supplying albendazole, he said, but also to other aspects of the initiative, such as company support staff and grants to support start-up projects. Finally, he announced that – although an imminent merger would transform SmithKline Beecham into Glaxo SmithKline within the coming months – the new corporate management would be equally committed to the LF Global Alliance.

Merck & Co., Inc.

The closing remarks were delivered by **Mr Charles Fettig**, Senior Director, Worldwide Human Health Marketing, who said he hoped that the LF programme would enjoy the same success as the onchocerciasis programme before it, one with which he had long been involved. He said that the donation of Mectizan® for the onchocerciasis programme over the past 13 years had opened his eyes to the medical needs of the less fortunate in developing countries. In October 1998, Merck & Co., Inc. also committed to extend this donation programme to LF in African countries where the two diseases (LF and onchocerciasis) co-existed. The significant lesson learned, Fettig said, was "the importance of partnerships in addressing public health problems in the developing world". The Global Alliance must include the participation of health authorities and governments, and should welcome, even seek, participation by NGDOs, the private sector, international organiza-tions and others. We must strive to improve com-munication," he said, "build trust, put aside our personal agendas and accept one another as full and equal partners in this LF alliance."

Although he would be retiring on 1 June 2000, Mr Fettig said he was sure that Merck & Co., Inc.'s participation, with Ms Colatrella representing the company and Dr Meredith representing the Mectizan® Donation Program, would be "in good hands". Mr Fettig received a standing ovation in recognition of his long years' service to the onchocerciasis and LF initiatives.

The World Bank

Dr Bernhard Liese, Senior Advisor, Human Development, Africa Region, gave the closing statement on behalf of the World Bank, saying that in order to deal seriously with poverty, the world's second largest disabling disease – namely, lymphatic filariasis – could not be ignored. He said it would be an uphill battle to build a constituency – a battle which would require stamina, strength and endurance.

Despite these challenges – and the clamouring of other urgent issues like HIV/AIDS, malaria and health sector development, the World Bank was committed to eliminating LF as a public health problem within the year 2020 target timeframe. "We must bring the human dimension to the forefront," said Dr Liese, pointing to the eagerness of the

onchocerciasis team to take on this related disease and give the LF programme the benefit of their experience. "It will be an endurance test," Dr Liese reiterated, "but, practically speaking, country financing is not a problem if the governments make LF a high enough priority."

The way ahead lies in partnerships, he continued, and building a broad constituency. Now the Global Alliance has been created. The World Bank stands firmly behind it.

Department for International Development, United Kingdom

Mr Phil Mason, representing the United Kingdom as a donor-partner, said that he had been impressed and "genuinely surprised by how much is already going on. I want to record our positive views on the progress being made, particularity since the Partners' Forum in Geneva in October 1998. We have really come a long way". Noting that "great ideas need landing gear as well as wings", he felt that the Alliance's inaugural meeting showed that the wings were in good order and landing gear being defined with help from the working groups.

Mr Mason mentioned four messages he had gleaned from the meeting:

- **Sector-wide approaches:** He had often considered them as donor-created solutions to donor-created problems and recommended "thinking this through very carefully";
- **Value-added meetings:** The value and collegiality generated by forums like this was "vital and essential," he said, "the glue… that allows dialogue… and holds us accountable to each other";
- **Needs analysis:** The UK/DFID was still the only donor government attending the meeting. In order to encourage the active involvement of other donors agencies, there must be a clear 'product' to buy into. Mr Mason urged endorsement of the recommendation to conduct a needs analysis for the Alliance, and use the Liverpool School of Tropical Medicine LF Support Centre to do this quickly and at no extra cost to the Alliance. He hoped that, in approving the final report of the meeting, there would be agreement on "some clear steps forward".
- **LF's economic argument:** In 'selling' the LF initiative, Mr Mason agreed that "we need to make more of the powerful economic arguments…which show the economic and social benefits of people living LF- free lives, as well as the poverty angle" which positions LF as a disease which both causes, and is a consequence of, poverty. Both these points underpin why this initiative matters.

Mr Mason said that he had often seen the genesis of programmes and that they moved through three stages:

- someone dreams that it should happen;
- someone believes that it could happen;
- and someone wills that it must happen.

"We are at that third stage of genesis now," he said, having gotten there through the generosity of SmithKline Beecham. Now that there was a coherent, organized framework, "our task is to *will* that it must happen". After two years of hard work, Mr Mason concluded that "when the history comes to be written, this meeting may be seen as the real starting point for actually getting down to business."

Interchurch Medical Assistance (representing NGDOs)

Speaking as Vice-Chair of the NGDO Coordination Group for Mectizan® Distribution on behalf of the NGDOs, **Mr Paul Derstine,** IMA President, expressed appreciation for the tone of the Global Alliance meeting and for the dialoguing opportunities it had provided for more clearly defining the role of NGDOs in the LF elimination programme. In addition to the points raised by Working Group 3, he put forth some related thoughts: firstly, the Global Alliance as "a three-legged stool" composed of public, private and non-profit partners, the latter needing a stronger presence in the LF programme. "During the course of the past two years, NGDOs have been shown a new world of opportunity with new tools to tackle an old health problem which has caused suffering and disability to millions of people," Mr Derstine said.

"Great ideas need landing gear as well as wings."

Although the NGDOs road had been "littered with unclear road signs", now with the creation of the Global Alliance, there would be better opportunities for meaningful involvement. He expressed the hope that WHO would assume a "more active role as a broker of intellectual capital" and rallying point for all partners. In conclusion, he said he hoped that the NGDO Coordination Group for Mectizan®

Distribution could use its good offices to expand the alliance through a workshop during the group's next bi-annual meeting 13-14 September 2000 at WHO headquarters in Geneva. Mr Derstine concluded by saying that the NGDO community was eager to be involved as an active partner and he urged the Alliance to follow the roles for NGDOs outlined in the LF Strategic Plan.

World Health Organization

Dr Maria Neira, Director, WHO Department of Control, Prevention and Eradication, began her closing statement in French to underscore the need for bi/multi-lingual communications. She highlighted the Alliance's public/private sector partnership as something "really unique – two very important pharmaceutical companies 'holding hands', along with the NGDOs".

She pointed to the need to focus resources on LF endemic countries and the people who would be the ultimate beneficiaries, saying that WHO's role was to act as a "platform, a facilitator to circulate ideas and generate energy".

SmithKline Beecham's pledge to donate drugs "shook the sleepy area of LF like an earthquake".

Turning to government supporters, Dr Neira again thanked the Spanish Government for its generosity and said that Spain and the UK should "compete to see who could help the most." She hoped that, by this time next year, all of the targets set (e.g. WHO's commitment to cover 15 million people at risk with LF programmes) would have been met. "I hope we shall be able to say, 'For once, we were *too* successful!'"

Rapporteur's Round-up

Dr Bernhard Liese (World Bank), the meeting's Rapporteur, began by pointing out that "this is a first" – the first meeting of the Global Alliance to Eliminate Lymphatic Filariasis – and thus a crucial first step which was felt by participants to have been a success.

Recapping the events that preceded it, Dr Liese highlighted the "constellation of factors" that paved the way for the formation of this alliance, in particular SmithKline Beecham's pledge to donate drugs that "shook the sleepy area of LF like an earthquake", the development of ICT cards to facilitate evidence-based disease mapping, and ground-breaking work to reduce morbidity and alleviate suffering.

"In two short years, a lot has happened," Dr Liese noted, highlighting comments by the meeting's opening speakers. First there was the "re-discovery of communicable diseases" and recognition of the fact that, even in this day and age, they accounted for 45% of global mortality.

Then there was the realization of the links between disease and poverty, especially "those at the end of the road, the rural poor" who constitute the majority of LF's victims. Finally, there was the growing appreciation by bilateral donors of a need for "new development paradigms" and a move from aid to partnerships. Important components of these included flexibility, an empirical approach and ownership by all participants.

The meeting's chairperson had "focused on what really matters", describing LF as a truly debilitating disease characterized not only by economic losses but also by social stigma. He equated disability with "denied opportunities" which limited life, lowered self esteem and were traumatic for those living with LF.

The global LF overview presentation stressed the importance of "walking on two legs," Dr Liese said – both the interruption of transmission and morbidity control. In the first area, substantial progress has been made in a short period of time, especially through the safety of drug combinations; in the second, a lot of work remained to be done. He singled out the comments on LF in children as "striking", saying that this had implications for new intervention channels.

Dr Liese then went on to recap the presentations of the Technical Advisory Group which focused on indicators for quality monitoring, DEC drug supply, morbidity and LF in children, and of the Programme Review Group which had encouraged the devolution of drug distribution to the regional level in future.

Highlights were selected from the second phase of the meeting which centered around regional and country overviews, singling out the need for more work in locating the disease as shown in Egypt. "Mapping is a first priority; partnerships are another," Dr Liese said, pointing out that virtually all regions and countries had underscored their importance.

On the challenges ahead, he singled out improvements in the weak infrastructures of ministries of health, especially in the largest and poorest LF-endemic countries; the importance of integrating disease treatment, the difficulties of social mobilization exacerbated by distance and illiteracy; and the importance of seeing LF control as "more than just drug distribution". The future will demand a "huge operational research agenda", he said.

The working groups were described as having featured "rich, engaged debate" after which there would be a need to consolidate the messages, highlighting the importance of mapping and epidemiology, morbidity control and integration of LF treatment with that of other diseases.

Two issues stood out for Dr Liese: firstly, the social impact of LF and the fact that it had so long been "a neglected disease"; secondly, his perception that LF control was less a matter of funding than of public health administration.

Looking to the future, he pointed to the need for broad-based partnerships, rapid progress to ensure on-site drug supplies, a strong continued commitment by pharmaceutical partners, in particular from Smith-Kline Beecham and Merck & Co., Inc., a more clearly defined role for NGDOs, a stronger regional focus, and the need to bring new partners on board. DFID's crucial early support was recognized, as was that of the Liverpool School of Tropical Medicine LF Support Centre.

"To sum up," Dr Liese said, "the first big step has been made. The Global Alliance has moved from infancy to being a toddler – one with many parents, all of whom share commitment to a common cause." All these partners had committed to dealing with this disabling disease, to putting its elimination higher on the world's development agenda, and to restoring dignity, respect and health to its victims.

"This is the way partnerships should work – beating back the diseases of poverty."

– Dr David Heymann, Executive Director for Communicable Diseases, World Health Organization. (Extracted from the video presentation "Target LF: for a future without lymphatic filariasis")

Dr Liese concluded by saying that "In Santiago, the Global Alliance has been transformed from being an idea with a name – to a concrete reality."

Meeting Chairperson

Mr Javid A. Chowdhury (India) claimed "the last word", saying that appointing him chairperson had "nudged India into making LF a central programme to be monitored and administered,." He was heartened by this evidence of solidarity and cross-sectoral cooperation towards a humanitarian cause, especially SB's generosity and commitment to the programme.

"This disease is effortlessly curable," Mr Chowdhury said. With the help of NGDOs, "we must convince the people, the rural peasants, to access treatment. However, he said, it would be "a long haul" for India and that interim target dates would be necessary between now and the year 2020.

Then Mr Chowdhury made a formal commitment on behalf of the Indian Government to launch "a pilot project with 40 million people and to achieve compliance with WHO's 2020 targets", starting with 20 million people already this year. "A major government effort will be crucial – it takes a massive build up in a country like India," he said, "but, in the end , we are dependent on our partners in the pharmaceutical industry; we will be helpless if the drugs don't arrive – and also on the quality of the NGOs."

"Our greatest anxiety is funding," he said, "and yet our needs are very modest – only about US$ 50 million – and here we have the World Bank, the most resourceful funder on earth, sitting right next to me."

He said that India would "contribute to the Global Alliance in a substantive way" and concluded by issuing an invitation on behalf of the Indian Government to host the second meeting of the alliance.

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The lymphatic filariasis disease burden

In 1997 WHO passed a resolution urging Member States "to improve... activities directed toward eliminating lymphatic filariasis as a public health problem…" and requested the Director-General to mobilize support for global and national elimination activities.

What: Lymphatic filariasis (LF) — sometimes called elephantiasis — said to be the second largest cause of disability in the world, is caused by parasitic worms and is transmitted by the mosquito. Painful and disfiguring, it undermines health, economic opportunity and social interaction.

Where: Five endemic regions: South-East Asia, Africa, the Eastern Mediterranean, the Western Pacific and the Americas.

Who: LF affects over 120 million people — men, women and children of all ages — in more than 80 countries. Its most frequent victims are the rural and urban poor. Over a billion people are at risk.

Why: LF is "a disease of poverty". Although one of the most prevalent tropical diseases, the fact that it is rarely fatal has caused it to be overshadowed by the "big killers" like HIV/AIDS, tuberculosis and malaria.

What to do about it?

LF can be eliminated relatively simply and cheaply. Banishing it will reduce untold suffering and disability and could have a significant positive impact on the local economies of the poorest peoples of the world.

- Interrupt transmission: first, with drugs supplied free-of-charge by SmithKline Beecham and Merck & Co., Inc., the spread of infection can be stopped by treating affected people with a single-dose, two-drug treatment once yearly for four to six years. Alternatively, DEC-fortified salt can be used for a shorter period.
- Alleviate and prevent suffering: physical, social and economic disability is caused by the disease. Regular hygiene using soap and water, with other simple activities that can be easily carried out in the home, have a dramatic effect in preventing painful, debilitating and damaging episodes of swollen limbs and reverses much of the damage already sustained.

Copies of this report may be requested from the:

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