Towards the Global Elimination of Lymphatic Filariasis: Successes and Challenges

Fourth Meeting of the Global Alliance to Eliminate Lymphatic Filariasis

29 - 31 March 2006 Warwick Fiji
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ACKNOWLEDGEMENTS

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The organization and efficient management of the meeting was possible only through the assistance, dedication and hard work of:

- The Hon. Minister of Health, Mr Solomoni Naivalu
- The Executive Group, GAELF
- The Local Organizing Committee – Dr Lepani Waqatakirewa (CEO, Ministry of Health and Chair), Dr Josefa Koroivueta, Dr Chen Ken (WHO South Pacific Representative), Dr Kazuyo Ichimori, Mrs Maca Colata, Ms Sera Vada (WHO) and Mr Sitiveni Yaqona.
  Co-opted members: Mr Idrish Khan, Mr Akash Roy, Alisi Davila, Mr Atama Nawaciono, Ms Grace Williams, Mr Sevanaia Ratunaceva, Mr Petero Manufolau and Mr Ravinesh Chand.
- Rapporteur – Ms Ana Laqeretabua
- Secretariat of the Pacific Community team, Mr Larry Thomas, Mr Jason Chute, Ms Matelita Ragogo and Mrs Emily Nadike - CD Rom/DVD.
- Students of the Fiji School of Medicine.
- Lymphatic Filariasis Support Centre, Liverpool School of Tropical Medicine – Professor David Molyneux, Mrs Joan Fahy, Miss Lisa Bluett, Miss Sara Holmes and Dr. Kath Taylor.
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OVERVIEW

This report provides the highlights from the 4th meeting of the Global Alliance to Eliminate Lymphatic Filariasis (GAELF).

The report follows the agenda of the meeting and provides an overview of the successes of the elimination programme on a global level, followed by updates from the six major regions.

It reviews lymphatic filariasis in relation to the Millennium Development Goals and recommends the way forward in solving the problems of resource limitations currently encountered by countries fighting to eliminate LF by the year 2020.

As highlighted in the report, the need for integration at all levels and advocacy is of paramount importance for the Global Alliance. The meeting report summarises the discussions at GAELF4 and outlines the recommendations made in the Final Communiqué.

A more comprehensive review can be found on www.filariasis.org.
BACKGROUND

More than 1 billion people are threatened by lymphatic filariasis (LF), a devastating parasitic infection spread by mosquitoes. LF - caused by thread-like parasitic worms that damage the human lymphatic system - is usually contracted in childhood, often earlier than 5 years of age. One of the world's most disabling and disfiguring diseases, LF afflicts the poorest of the poor. LF is currently endemic in over 80 countries, in the tropics and sub tropics and affects over 120 million people, leaving more than 40 million incapacitated or disfigured with swollen limbs and/or breasts (lymphoedema) and genitals (hydrocele), or swollen limbs with dramatically thickened, hard, rough and fissured skin (elephantiasis). Because of frequent debilitation and the stigma it causes, LF prevents afflicted individuals from experiencing a normal working and social life, furthering the cycle of poverty.

The Global Programme to Eliminate Lymphatic Filariasis (GPELF) was established in 1998 under the leadership of the World Health Organisation (WHO), following a landmark resolution by the 50th World Health Assembly to eliminate LF as a public health problem by 2020. In 1998, SmithKlineBeecham (now GlaxoSmithKline) and Merck & Co. Inc. each announced their commitment to donate drugs – albendazole and Mectizan respectively for as long as necessary to eliminate LF as a public health problem.

The Global Alliance to Eliminate Lymphatic Filariasis (GAELF) is a public-private partnership created to assist the GPELF in advocacy, resource mobilisation, and programme implementation. Created in 2000, it brings together national Ministries of Health, the World Health Organization and other UN agencies, the two pharmaceutical companies and other companies within the private sector, international development agencies and foundations, non-governmental organisations, research and academic institutions, and local communities. GlaxoSmithKline and Merck & Co. Inc., have pledged albendazole and Mectizan® respectively to achieve elimination - the largest drug donations in history, valued at more than US$1 billion.

Six years after the formation of the Global Alliance, the fourth biennial meeting of GAELF was held in Fiji to review the progress and the success of the programme to date and to discuss the challenges associated with achieving the elimination of LF by the year 2020. The meeting brought together representatives from 53 countries, the World Health Organisation, the World Bank, pharmaceutical companies, donor representatives, academics/research institutions, non-governmental organisations and other interested parties.
GLOBAL ALLIANCE STRUCTURE

At the third meeting of the GAELF held in Cairo in March 2004, a new structure was approved for the Global Alliance - a Representative Contact Group (RCG) which comprised of country representatives from each region and representatives from the pharmaceutical companies, academic/research institutions, donors, non-governmental organizations, the World Health Organization and the World Bank.

The RCG elected an Executive Group of six members who were required to carry out the recommendations made at the GAELF3 meeting. According to their Terms of Reference, the mission of the Executive Group was to “Support the Global Programme by enhancing the effectiveness of national, regional and global fundraising, advocacy, communication and planning for the Programme.”

The third GAELF meeting appointed Dr Joe Koroivueta of Fiji as President of the Global Alliance. Dr Koroivueta was responsible for the organization of GAELF 4 with the assistance of a Local Organising Committee.

The Liverpool School of Tropical Medicine serves as the Secretariat for the Global Alliance.
INTRODUCTION

Meeting Objectives

The key objectives of the fourth meeting of the Global Alliance were as follows:

- To demonstrate the progress and success of the elimination programme throughout the world, with a specific focus on countries near completion.

- To discuss the challenges faced in the move towards the elimination of lymphatic filariasis by 2020.

- To raise the level of commitment from the Ministries of Health, and increase advocacy and support for the efforts to eliminate LF.

- To discuss the relationship of the LF Programme to the Millennium Development Goals – the real cost of LF to poor people and why the Global Programme is an excellent, cost-effective investment in the health of our people and future generations.
OFFICIAL STATEMENTS

**Dr Shigeru Omi – WHO Regional Director, Western Pacific Region.**

Dr Omi commended the hard work and dedication of health workers and communities towards the elimination of lymphatic filariasis. Special appreciation was accorded to China for having successfully eliminated LF during a programme extending over the past 50 years and the Pacific region for having already succeeded in completing the initial Mass Drug Administration (MDA) phase of its elimination programme in all but 2 of its 22 member states.

“The one critical obstacle facing most countries engaged in filariasis elimination is the lack of adequate funding. We need to raise the funds for countries to continue with their programmes of mass drug administration and for others to scale up their programmes to cover their total at-risk population. If we are to meet the global target of elimination by 2020, we need to take account of where we are and determine whether the available funding is sufficient to realistically meet that target.”

**His Excellency Ratu Joni Madraiwiwi, Vice President of the Republic of Fiji Islands** delivered the keynote address and officially opened the meeting.

“GAELF is a public-private partnership that was established in 2000 to assist in advocacy, resource mobilization and programme implementation in the war against the elimination of lymphatic filariasis. It involves national Ministries of Health, the World Health Organization (WHO), companies within the private sector, international development agencies and foundations, non-governmental organizations, research and academic institutions and local communities. It is a wonderful tribute to the capacity of humankind to at times rise above their differences to co-operate for a worthy cause. The challenge lies in shaping our different agendas to accommodate a common good: the worldwide elimination of lymphatic filariasis by 2020. This requires engagement, commitment, discipline and above all, humility.”

**Honorable Dr Terepai Maoate, Deputy Prime Minister and Minister for Health, Cook Islands** welcomed the fourth Global Alliance meeting to Fiji and the Pacific Islands.

Dr. Maoate thanked the Government of Fiji for hosting the very important and auspicious occasion of the Fourth Meeting of the Global Alliance to Eliminate Lymphatic Filariasis on behalf of all the 22 PacELF countries.

“We share the same pride and honour for hosting this meeting and we look forward to sharing with other endemic countries and regions under the Global Programme what we, in the Pacific, have achieved through the uniqueness of the PacELF way, the Pacific way, the collaborative approach and unity in spirit amongst our island countries.”
Justine Frain, Vice President, Global Community Partnerships, GlaxoSmithKline reaffirmed GSK’s commitment to the elimination of LF and outlined the importance of partnership.

“We value our partnership in the Global Alliance. Private-public partnerships are essential to bring the complementary skills and resources necessary to combat diseases that will otherwise not command the resources and profile they need. Sustainable and lasting change can only be secured through partnership and collaboration, so we are encouraging other companies, donors and partners to step up to the plate and become involved.”

Ken Gustavsen, Manager, Global Product Donations for Merck & Co. Inc., also spoke on the need for broader partnerships and new opportunities in the fight to eliminate LF.

We must pursue broader partnerships to unlock the management, advocacy and operational potential they offer. The recent formation of a new partnership – The LF NGDO Network – another initiative receiving Merck support – offers an exciting opportunity to replicate the tremendous success that NGDOs have brought to the fight against onchocerciasis. The LF Alliance also needs to seek out new and innovative opportunities to move from a vertical, single disease program, to a horizontal, integrated program. In today’s world of competing resources and multiple pressing health care needs, it is only through careful and thoughtful integration with other health initiatives that sustainability – and eventual success – will be achieved.”

Dr. Yankum Dadzie – Chair, Executive Group of the Global Alliance described the meeting as a celebration of the success achieved by the Global Programme in the six years of existence of GAELF and the challenges to be faced.

“As the great Chinese saying goes- “Every long and arduous journey begins with the first step” – which in our case can be likened to the birth of GAELF in May 2000 in Santiago de Compostela in Spain. Now, we have to ask ourselves, is our Programme on course? What is its developmental level today, is it childhood or adolescence, or at college, about to graduate? What do we seek? Three things come to mind as significant:

- Proof of concept of our Global Programme
- Resources to support our Global Programme
- Strong partnership offering our comparative strengths to complement the efforts of the Global Programme.”
SUCCESSES IN PROGRAMME DEVELOPMENTS

Global aspects: GAELF Executive Group

Dr. Yankum Dadzie

Opening the presentations on the Successes in Programme Developments, the GAELF Executive Group Chair, Dr. Dadzie expressed appreciation to the participants for a record attendance. 240 delegates reflected the largest number of participants at any GAELF meeting to date and proved that the distance of the host country had not discouraged attendance and support for the Alliance.

Reviewing the operational aspects of GAELF, it was believed that the establishment of the new Global Alliance structure in 2004 had created a greater profile and presented a unified front. The new structure represented a global partnership that worked – so well it had been used by a Netherlands Research Group as a good example of a successful global synergy and one which also ensured increased support to national Programme Managers. The strengthening of its partnership with the Non-Governmental Development Organizations (NGDO) was more dynamic through the establishment of an NGDO network and the launch of the first endemic region LF Support Centre at the Noguchi Memorial Institute for Medical Research in Accra, Ghana.

The concept of an integrated approach to disease control/elimination with a common strategy of effective mass drug administration (MDA) was a significant development in the international health arena. As a result WHO had been restructured to create a special department to address Neglected Tropical Diseases (NTD) and the move had received tremendous support including endorsement from the Gates Foundation and the Global Health Council. The change reaffirmed the concept behind the Global Programme which was designed to be implemented within the health systems and to link with other programmes for synergy.

An update on the Plan of Action developed by the Executive Group following the Business Session of GAELF3, in Cairo included.

Communications. Various target audiences were identified and different strategies used for the dissemination of LF information. As a result, coverage was obtained in popular and other media, in scientific journals and at scientific meetings. A quarterly Executive Group Update and four issues of LF News were produced and circulated to over 500 partners.

Advocacy and Mobilization of Resources. Donor friendly materials were developed and diverse methods were applied with different levels of success achieved with foundations and corporate donors at both international and national level. Huge challenges remained which indicated a pressing need to increase advocacy to the donor community through

- targeted press conferences on the publication of specific scientific papers
- addressing LF implementation under the umbrella of Neglected Tropical Diseases
Global aspects: World Health Organization

*Dr Gautam Biswas*

In providing an overview from the World Health Organization, Dr Biswas commended the scaling up of the Mass Drug Administration (MDA) programme as a remarkable success, despite lack of funding, with the achievements close to what had been targeted. The impact of the MDA programme on reducing transmission was achieved through a significant decline in microfiliaraemia in sentinel sites. However, in order to ensure all round success and elimination there was also a need for the implementation of disability prevention programmes with the MDA.

Huge challenges still remained in order to achieve the goal of eliminating lymphatic filariasis as a public health problem by the year 2020, with a pressing need to scale-up and achieve maximum coverage in programmes. This is considered possible with strategic direction from WHO.

**Proposed scaling-up of MDA 2006-2010**

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<tr>
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<td>200</td>
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- Strategic importance of scaling-up in India, Indonesia and Nigeria which represent 75% of global population at risk
- Ensure high drug coverage and compliance of eligible populations
- Address the issue of MDA where there is *loa loa* co-endemicity to allow LF programmes to be initiated in West and Central Africa
- Create a drug facility for DEC

**Progress at the global level**

- Commitment by Ministries of Health of the endemic countries to create budget lines for LF/NTDs
- The Commission for Africa Report indicating the importance to support for neglected diseases
- Asian Development Bank provision of US$30m for communicable diseases including NTDs in Mekong countries
- EU Parliament resolution on NTDs
- US Congressional Appropriation for NTDs which converted into a USAID grant of US$100m over 5 years for NTDs
REGIONAL ASPECTS

The Chairs of the Regional Programme Review Groups presented the progress and challenges within the six regions. Overall progress in evaluating the impact and results of the Global Programme to Eliminate Lymphatic Filariasis confirmed that

- All regions had made significant progress in up-scaling MDA in endemic countries, despite the limitations in resources;
- Significant reduction in microfilaria prevalence rates and intensity of microfilarial loads after MDA was observed;
- Significant need for resources to up-scale implementation;
- More attention needed to be focused on disability management;
- More commitment and political will needed to maintain/increase operations;
- Country ownership and partnership building at all levels to be encouraged as well as creating synergies between disease control programmes.

AFRICA REGION

Dr Johnny Gyapong

Overview
At least 38% of the global burden of LF is found in Africa with 480 million people at risk and 43 million already infected; 4.6 million have lymphoedema and an additional 10 million have hydrocele. Of the 38 endemic countries in Africa only 10 countries have ongoing programmes with the demand for assistance from endemic countries outweighing the available resources. This has resulted in:

- Prolonged period of disease mapping, including countries already implementing MDA.
- Slow rate of scaling up of national programmes to cover all the at-risk populations and
- Stagnation in the number of active programmes.

Huge challenges remain with 28 countries still to start programmes in order to reach the target of elimination by 2020.
Progress:
Mapping: Completed in eight countries in 2005.

Mass Drug Administration: Approximately 10 million people have been treated

Challenges:
- Insufficient funding remains the major constraining factor
- In the active programmes greater effort needs to be put on achieving and sustaining high population and geographical coverage rates
- A critical need for good evaluation data
- Country ownership and partnership building at local, regional and global levels
- Creation of synergies between disease control programmes

AMERICAS REGION

Dr João Batista Furtado Vieira

Overview
With an estimated population of 854 million people, the total population at risk of LF in the Americas is estimated in 8.9 million, with 2.8 million people estimated to be infected with LF. This is estimated to be <1% of the world population at risk.

Progress
As a result of epidemiological evaluations, only 4 of 7 original endemic countries have active foci: Haiti, Dominican Republic, Guyana, and Brazil. In comparison to other regions, the LF problem in the Americas region is relatively limited in geographic extent whilst there are satisfactory health structures and organization. Despite problems, MDA is being up-scaled and morbidity care increased with special recognition of the progress in the programme in Haiti. Of the seven countries in the region, Haiti has the population most at risk.

Verification: Three countries have received letters of acknowledgement for their extraordinary efforts towards the elimination of LF: Costa Rica, Trinidad & Tobago and Suriname. Guyana could eliminate LF in the near future, provided the DEC salt strategy can be expanded and maintained.

Challenges
- Political will needed to maintain/increase/improve control operations in Haiti, Dominican Republic, Guyana and Brazil;
- Improve and stabilize political situations, guarantee budget and financial support in Haiti;
- Guarantee DEC salt supply in Guyana;
- Strengthen integration and sustain MDA in the Dominican Republic;
- Up-scale MDA with adequate coverage in Brazil
EASTERN MEDITERRANEAN REGION

Professor Maged el- Setouhy

Overview
In the Eastern Mediterranean region the known endemic countries are Egypt, Yemen and Sudan. In Yemen and Sudan the disease is co-endemic with onchocerciasis. Oman has proved to be free of LF with transmission uncertain in Saudi Arabia, Pakistan, Somalia and Djibouti.

Progress
A recent Lancet paper on the progress of MDA in Egypt confirmed the effectiveness of the Global Programme strategy of Mass Drug Administration.

- Egypt had completed 5 rounds of MDA with the evaluation of the villages which included microfilaremia (MF) assessment in all sentinel villages; and antigenemia assessment in areas proven MF negative.
- In Yemen 8 of the 28 states have been mapped. House to house MDA started in all endemic districts with the 5th round expected to be finished during 2006.

Challenges
- The need to obtain renewed funding as previous support from the Arab Fund for Social and Economic Development expired in 2005
- The need for integration with other programmes
- Systematic non-compliers represented a threat of future resurgence

MEKONG-PLUS REGION

Professor Dato CP Ramachandran

Overview
The Mekong-Plus region includes 12 countries of which 8 are endemic (Brunei, Cambodia, China, Lao PDR, the Republic of Korea, Malaysia, the Philippines and Vietnam).

Progress
Verification of interruption of transmission: During the meeting China made an application to WHO for the verification of interruption of transmission with the Republic of Korea in the process of implementing the last survey for the same verification. Brunei still needed to verify if the previously known foci of transmission were active before the verification process could be started.
Mass Drug Administration: Malaysia & Vietnam commenced their MDAs in 2003 and have carried out mid-term evaluations; The Philippines have the highest burden of the disease in the Region affecting 39/79 provinces with 11 million people covered by MDA during 2005. Plans were in place to scale-up to cover all the 21 million endemic population if funds were secured; Cambodia initiated their first round of MDA in 2005.

Mapping: Laos PDR: completed mapping surveys with no positive cases.

Challenges

- In the Philippines lack of funds hinders the scaling-up of the MDA to the entire endemic population of 21 million
- In Vietnam a change in the political commitment may prevent Vietnam from accessing funds from the Asian Development Bank grant for PELF among the countries in the Great Mekong Sub-region.
- Lack of attention to disability management.

PacELF REGION

Dr Jean Francois Yvon/Dr. Kazuyo Ichimori

Overview
The Pacific Programme to Eliminate Lymphatic Filariasis (PacELF) was the first regional elimination programme to be established. PacELF works with the 22 Pacific island countries and territories to rid the Pacific region of the disease. The programme was launched in 1999 and aims to eliminate LF from the region by 2010. LF is endemic in 11 of the 22 Pacific Island countries and partially endemic in 5 countries.

Progress

Mass Drug Administration: All of the 11 endemic countries and 1 where filariasis is partially endemic have started MDA programmes with five completing five rounds by 2004. By the end of the programme 6.2 million will have received five rounds of MDA. MDA coverage in the last five years has ranged between 69% and 75%.

The prevalence of filariasis antigen was dramatically reduced after five rounds of MDA, by an average of 85% in two PacELF countries. Six other countries had their antigen prevalence reduced between the initial survey and the follow up survey after MDA in sentinel sites.
Challenges

- Sustaining MDA programmes especially in Papua New Guinea;
- Identification of the remaining “hot spots” of filariasis in remote island communities;
- Expand efforts to:
  - Treat lymphoedema and hydrocele;
  - Integrate with other public health programmes;
  - Decide on when to stop programme of elimination.

SOUTH EAST ASIA REGION

*Professor Mahroof Ismail*

Overview

The South East Asia region accounts for the highest burden of LF with 700 million of the 1.2 billion people globally at risk of infection and 60 million of the 120 million clinical LF cases residing in this region. In India 450 million people are at risk of LF, followed by Bangladesh (49.9 million), Nepal (13.9 million), Sri Lanka (9.8 million) and Maldives (8 of the 200 islands are endemic).

Mapping: Seven of the 9 endemic countries had completed mapping.

**Mass Drug Administration:** All endemic countries are conducting MDA. In 2005, 82.5 million received MDA. The Maldives, Sri Lanka, Thailand and Timor Leste are targeting the entire endemic population. Sri Lanka is expected to complete five rounds of MDA in all implementation units in 2006.

Coverage levels were high with greater than 80% coverage levels achieved in most Implementation Units (IU). All sentinel sites show a decline in microfilaria levels after 1-2 rounds of MDA.

In terms of disability alleviation India had completed orientation on community based disability alleviation of all State level staff and teaching staff of Medical Colleges and funds had been allocated for all states to commence hydrocele surgery by 2006. A comprehensive pilot project conducted in Sri Lanka is being scaled-up following its successful implementation.

Issues and Challenges

- Severe resource constraints are affecting scale-up of elimination activities;
- Except in 7 pilot districts, India is yet to adopt combination drugs for MDA\(^1\);
- Sentinel surveillance and assessing elimination status as recommended before stoppage of MDA in IUs completing five rounds;
- Scale-up of disability alleviation;
- Integrated approach for the control of tropical disease to enhance cost effectiveness.

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\(^1\) Since the meeting there has been a policy change to adopt the combination drugs.
CHALLENGES ENCOUNTERED AND THE FUTURE
Chair: Professor Dato CP Ramachandran

Professor Ramachandran commended the successes of the regions in the global fight to eliminate LF and opened discussions on the way forward in order to meet the elimination target by the year 2020. Particular mention was made of the limitations in resources which were clear from all the regions with the need for technical assistance and resources prominent in many countries.

Successes, Challenges and Way Forward
Dr Eric Ottesen

The successes so far in the elimination of LF were reviewed emphasizing the importance of past research and highlighting the significance of GAELF4 in being able to celebrate successes of the largest, the smallest, the oldest and the newest countries in the fight to eliminate LF, all celebrating success stories.

Dr. Ottesen promoted what was termed a second major paradigm shift in the move to eliminate LF, by introducing an integrated approach through advocating for LF as part of a broader Neglected Tropical Diseases (NTD) initiative. It was suggested that the energy currently being channeled into the LF programmes alone should now be used to fuel this second major paradigm shift which provided a comprehensive and logical way to move the fight forward.

The global effort against LF had made significant progress since the introduction of the first major paradigm shift, which was the move away from treating the individual to treating the entire at risk population with the MDA programme. The programme is extremely successful and has gained momentum in most countries, though some country programmes were still starved for funds. In recognizing the achievements of the LF programme, it was noted that it was

- extremely well organized and run
- highly popular with communities
- successful in achieving targets

However, Dr Ottesen said it was now time to introduce a second major paradigm shift, the strategy of implementing and advocating for LF elimination in the context of other NTD programmes since it has proven to be a major challenge to market LF alone. This new package exploiting programme synergies for both implementation and fundraising could arguably be the “best global buy in global health today”. The core package of NTDs could include:

- Lymphatic filariasis
- Onchocerciasis
- Schistosomiasis
- Soil transmitted helminthiasis (STH)
- Trachoma

To achieve success however this new approach will require flexibility, changing old habits, creating new partnerships and developing new coalitions of coalitions.
Neglected Tropical Disease Control – a new WHO integrated approach
Dr Gautam Biswas

Dr. Biswas spoke of the importance WHO accorded to the group of neglected tropical diseases (NTD) which have until now mostly remained neglected as far as control was concerned even though cost-effective tools were available for the control of many. The processes leading up to the establishment of the Department for the Control of Neglected Tropical Diseases in 2005 were outlined and a three pronged response against NTDs was initiated:
- broader coverage with interventions which have a rapid impact
- strengthened vector control to reduce transmission of several vector-borne diseases
- improved surveillance and quality care

It was believed that the “neglected” diseases would have more impact when advocated as a group rather than individually as many of the intervention strategies were similar and could be integrated for a more cost-effective approach. The move towards an integrated approach to the control of NTDs recognizes that many of the parasitic diseases, albeit having a very high disease burden and loss in DALYs, remain largely neglected in terms of control. Safe and effective drugs were available for large scale preventive chemotherapy where entire at-risk populations could be covered.

Technical issues including the process and impact of multi-disease interventions on overall health and development and on disease specific parameters remain to be addressed.

Towards an integrated preventive chemotherapy against helminthiases
Effective, safe, single dose anthelminthic drugs

<table>
<thead>
<tr>
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<th>ALB 400mg</th>
<th>DEC 6mg/kg</th>
<th>PYR 10mg/kg</th>
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<td>Ascariasis</td>
<td>Lymphatic filariasis</td>
<td>Ascariasis</td>
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[Towards an integrated preventive chemotherapy against helminthiases](#)

*In combination with ivermectin or diethylcarbamazine*
UNITED NATIONS

MILLENNIUM DEVELOPMENT GOALS

1. Eradicate extreme poverty and hunger

2. Achieve universal primary education

3. Promote gender equality and empower women

4. Reduce child mortality

5. Improve maternal health

6. Combat HIV/AIDS, Malaria and other diseases

7. Ensure environmental sustainability

8. Develop a global partnership for development
LF AND THE MILLENNIUM DEVELOPMENT GOALS

Chairs: Dr. Pat Lammie and Mr Andy Wright

LF and its relationship to the Millennium Development Goals formed the basis for discussions in this session.

Filariasis – the real costs to poor people

Mrs Myrtle Perera

An Affordability Ladder Programme undertaken by the Marga Institute in Sri Lanka analysed the relationship between LF and the real costs to poor people together with the impact on households of long term chronic diseases. The analysis provided insight into health and poverty linkages at the micro level. The research broke new ground by studying poverty as it moved away from an exclusive focus on poor households in a poverty related research study.

The study of the impact on poverty focused on economic costs but also looked at social costs and indicated that together it reflected “the absolute dereliction of elephantiasis patients and their households.”

The historical profiles of patients in the study provided valuable insights from the perspective of a patient and household on income level differential and accessibility to services from a network of clinics and public health services.

The study indicated

• Differentials at the infection stage
• Differentials in adopting preventative measures
• Differentials in ability to follow treatment schedules
• Differentials in time of diagnosis – delayed diagnosis had irreversible consequence for LF.
• Differentials in management

LF significantly affected household economies with

• patients dragging households into poverty
• patients keeping households in poverty
• patients preventing a steady progress but imposing fluctuations instead.

The study indicated that LF not only affected poor people but also pushed people who are not poor into poverty. Discussing community based strategies – Mrs Perera said that in the implementation of these strategies, the “community” was invariably scaled down to mean the family and it was always the family that was left with the burden of the caring for the patient. Within the family often it was the woman who was the main carer–giver and as often this woman could be malnourished herself and bearing the burden of family care. In the health sector many care-giving tasks for chronic diseases are thrust on this “Family”. As a result the family was under siege with huge expectations to care for those suffering from all diseases. Consequently the family as a social unit is fast becoming an ‘endangered species’. A paradigm shift from such “community based” strategies to partnership and collaboration in order to relieve the family of the stress was suggested as an alternative.
Using the HIPC approach in countries

Professor Bernhard Liese

The Heavily Indebted Poor Country Relief (HIPC) was launched by the World Bank and the IMF in the late nineties, linking debt relief to poverty reduction. HIPC was the first comprehensive Global Debt reduction initiative. It had a dual objective firstly to reduce (eliminate) external debt owed by low income countries and secondly to increase Government spending on poor people particularly in the social sectors. Currently 28 countries are receiving debt relief, with 10 countries yet to benefit. A full debt relief initiative has recently been agreed upon. There is also now a Debt Sustainability Framework (DSF) for Low-Income countries, which ensures that there is sufficient fiscal space and governments do not borrow more money from various lenders than they are able to pay eventually back.

Dr. Liese outlined the benefits of HIPC and the importance of keeping its existence in mind when exploring sustainable funding for LF. The following are key arguments why the LF programs should benefit from the debt relief initiative:

- LF programmes are benefiting almost exclusively the"poor". They are thus ensuring that HIPC funds actually reach the “poor.”

- LF programmes are extraordinarily inexpensive, yet highly effective and politically popular.

- The financial resources needed to support them are insignificant from the perspective of sustainable debt and can be easily included in Governments budgets

- Generally a budgetary commitment by Government is a pre-condition for any sustainable health programme, it is a precondition as well for a sustainable LF programme

- The availability of HIPC funding renders somewhat invalid the argument that there are no Government funds for priority neglected diseases.

- However external donor commitments can greatly facilitate programme start-up and early implementation. Many ongoing large scale LF programmes show some mix of funding, between Government and external donors.
Mobilizing national resources for LF elimination

Dr. Johnny Gyapong

A regular allocation in the national health budget for LF elimination was of paramount importance as it ensured country ownership and it could be supplemented with other resources. Whilst other funding was necessary to ensure the success of LF elimination programmes it was not practical for Programme Managers to be expected to secure funding for their programmes and that other measures of securing funding should be explored.

Various approaches made in Ghana to the private sector, bilateral and multilateral partners, NGOs and national government were outlined and particularly the difficulty in obtaining funding specific to LF.

In relation to bilateral and multilateral assistance, most bilateral assistance went into a common pot, while WHO had specific budget lines for disease control. Although allocation was made in the national government budget, the regular budget was unable to meet all programme needs. HIPC funds had been approved to support health activities in a few areas but due to slow disbursement nothing had arrived for LF even though US$700,000 had been approved in April 2005.

Collaboration with major donors; current status, future opportunities

Professor David Molyneux

The current status of the Global Alliance in relation to Public-Private partnerships for health, public sector financing, the role of donations and the assistance from private foundations was outlined. Global Health Partnerships (GHP) were considered to be the best way forward due to their characteristics. The issues surrounding GHPs were discussed at length with emphasis placed on taking science into policy and practice, monitoring and evaluation to contribute to strengthening the evidence base and by WHO paying special attention to Neglected Tropical Diseases as a package.

The following conditions for support were necessary for GHPs:

- Contribution to the MDGs
- Poverty alleviation focus
- Alignment with country led processes
- Commitment to efficient governance
- Added value to existing institutions
- Reaching fragile state populations

GPELF was regional, flexible and with the potential of being embedded in the health system, particularly with the introduction of the Neglected Tropical Diseases package presenting the “best public health buy” with emphasis on:

- Multiple benefits and health targets
- Low cost - US$0.040/person/year in Africa; less than that in Asia
- Pro-poor and relevant to several of the MDGs
- High sustained coverage with community involvement
- Different strategies with countries deciding on the individual approach
- Long term country/donor/NGDO commitment

Donor agencies, JICA and DFID, commented on the collaborative effort so far which resulted in the successful implementation of the LF Elimination Programme in various parts of the world. Collaborative efforts with a move away from focusing solely on LF to integrating with other NTDs was commonly shared as the best way forward and which will also address the MDGs.

In order to be successful the responsibility at a country level was of paramount importance and called for advocacy and support at the highest levels of national government if the goal of eliminating LF by the year 2020 was to be achieved.
The Chair introduced the session focusing particularly on Non-Governmental Developmental Organization’s (NGDO) involvement in LF elimination and their supportive role played in national programmes. The creation of the NGDO Network for LF elimination in 2004 was based on collaborating with NGDOs involved in both MDA and morbidity control, and often building community networks for disability prevention. The benefits of collaboration were discussed at length with the work of NGDOs and community networks seen as an integral part of the fight to eliminate LF. It was noted that in order to meet elimination targets in all regions, more partnership and collaborative efforts needed to be put in place and there was a need for greater advocacy.

Dr. Richards discussed The Carter Center’s long standing LF collaborative work with the government of Nigeria in Plateau and Nasarawa States. He also showed how the Center was involved with both technical and financial leadership of the effort to eliminate onchocerciasis from the Americas (the OEPA program), as an example of how NGOs were capable of more than just support of ‘on ground’ activities.

Dr. Dominique Kyelem described his perspective of Burkina Faso’s LF programme collaboration with Handicap International, Helen Keller International and Fondation pour le Dévelopement Communitaire. However, although NGDO involvement was good, to cover additional districts, more NGDOs needed to be recruited.

Mr Paul Derstine of Interchurch Medical Assistance (IMA) described early NGDO experience working with LF elimination. Supported by IMA, Jonathan Rout of the Church’s Auxiliary For Social Action (CASA), reported on the Orissa State project. Based on a strategy of community based preparedness for the elimination of LF the programme had four main objectives – awareness, morbidity reduction, knowledge and skills and sustainability. The community undertook the leading role and responsibility and as a result of their involvement the programme was successful.

In the general discussion that followed several countries highlighted their positive experience of collaborating with NGDOs; it was felt there was still a great need to expand such collaboration involving both international NGDOs and those working at the national level.
ROUND TABLES AND DISCUSSIONS

ADDRESSING CRITICAL PROGRAMME NEEDS

While the Global Alliance to Eliminate LF had recorded considerable success since its inception in 2000, there were still challenges to be addressed in order to meet the target of elimination by the year 2020. The meeting conducted three round table discussions which addressed the issues around critical programme needs.

Round Table 1

The role of GAELF in integrated approaches to the control of neglected tropical diseases

Chair: Dr Kevin Palmer (WHO)

Panel: Ghana (Dr. John Gyapong), India (Dr. PL Joshi), World Bank (Dr. Ousmane Bangoura), GSK (Mr Andy Wright), Carter Center (Dr Frank Richards), CDC (Dr. Patrick Lammie)

The Global Alliance to Eliminate Lymphatic Filariasis needed to position itself as a prime mover in the NTD approach. GAELF should take advantage of its position as a prominent disease within the NTD package and provide momentum for advocacy and fundraising. GAELF needed to take ownership of the integration process and position itself appropriately for the message of elimination of LF to gain momentum in the NTD approach. The elimination focus needed to be maintained and not lost in the integration process with GAELF placed with other programmes and other global partnerships such as Partnership for Parasite Control, Roll Back Malaria, Schistosomiasis Control Initiative and other international agencies including WHO, the World Bank, Regional Development Banks and the Global Fund to create channels of communication and cooperation.

Round Table 2

Integration of LF elimination

Chair: Dr Sam Zaramba (Uganda)

Panel: Cambodia (Dr. Socheat Duong), Nigeria (Dr. Munirah Jinadu), Papua New Guinea (Dr. Leo Makita), Tanzania (Zanzibar project) (Dr. Malick Juma), Togo (Dr. Kodjo Morgah) Yemen (Dr. Abdul Al Kubati)

The integration with other programmes currently taking place in different countries at different levels needed to be encouraged. The emphasis on country ownership and direction was discussed at length as well as building on integration with existing successful programmes in order to create synergies. It was important to use multi-skilled community workers and to maintain flexibility to ensure successful integration without negatively affecting programmes. Policies and guidelines should be developed to guide the integration process at national and international levels and health systems needed to be strengthened.
Round Table 3
Future country directions for mobilization of resources

Co-Chairs: Dr Yankum Dadzie / Mr Emmanuel Lalsomde

Panel: Bangladesh (Professor Shahadat Hossain), Brazil (Dr. João Batista), Egypt (Professor Maged el Setouhy), Ghana (Dr. Agyeman Akosa), India (Dr. PL Joshi), Philippines (Dr. Nemesio Gako), Sri Lanka (Dr. Athula Kahandaliyange), Tanzania (Dr. Mwele Malecela), Vietnam (Professor Le Khanh Thuan)

Comprehensive communication and advocacy plans needed to be developed at a country level to increase the awareness of LF and engage further champions and support at the highest levels. The communication plan should consider the relevant stakeholders and departments within Governments who needed to understand the global objectives of LF in order to gain support for the programmes at national levels. In order to achieve elimination targets support was necessary from the highest political level and all national budgets needed to have a budget line for LF. More partnership and support was also necessary from NGDOs and international partners in order to obtain support and trust for the LF.
MEETING OUTCOMES AND RECOMMENDATIONS

At the invitation of the Deputy Minister for Health, the Honorable Dr. Aisha Omar Kigoda, the next (fifth) meeting of the Global Alliance to Eliminate Lymphatic Filariasis will be held in Tanzania.

The following recommendations were endorsed:

1. Encouraged by the great progress already made, the Alliance urges all endemic countries to pursue and intensify their efforts towards the elimination of lymphatic filariasis;

2. Urgently intensify efforts for resource mobilization both internationally and nationally;

3. Advocacy to be disseminated to the donor community (bilateral and multilateral, foundations, corporations etc). Communications through the media (scientific meetings, scientific journals, political champions and other forums) to be encouraged;

4. Expand the evidence base and develop appropriate advocacy material relating to the great potential for poverty alleviation as a consequence of the elimination of lymphatic filariasis;

5. A paradigm shift, advocating for the implementation of LF elimination as a key component of a neglected tropical disease (NTD) ‘package’, rather than in isolation, where appropriate. The NTDs of the most immediate relevance for such a ‘package’ include, but are not limited to lymphatic filariasis, onchocerciasis, soil transmitted helminthes, schistosomiasis and trachoma—all diseases targeted through existing large-scale preventive chemotherapy initiatives. The addition of malaria and micronutrient supplements to this package may be advantageous;

6. Partnership opportunities with NGDOs should be explored by countries, working through national task forces or committees bringing together all interested parties;

7. Experience gained so far in integrating LF elimination with other interventions be documented through continued operational research and disseminated to other interested countries and constituencies;

8. GAELF encourage efforts at programme integration and showcase this integration for advocacy purposes. However, the purpose of GAELF should remain, unquestionably, to support the Global Programme to Elimination Lymphatic Filariasis. It was anticipated that GAELF will be a key player in a broader ‘umbrella’ coalition of alliances established to target the NTDs;

9. A broader partnership be developed for NTDs both internationally and nationally taking into account donor agencies, academia, NGOs and local support groups;

10. Future joint efforts to mobilize resources for LF elimination and for control of other NTDs;

11. GAELF to revisit the issues implied in NTD integrated interventions and consider progress made at its next gathering in 2008.
Appendix A  GAELF4 Agenda
29-31 March 2006, Warwick Fiji

Wednesday, 29th March 2006 – Day 1

0900–0930  Chair: Dr. Joe Koroivueta
Welcome  Hon. Dr. Terepai Maoate
Dep. Prime Minister and Minister of Health, Cook Islands

0930-1000  Official Statements
Executive Group  Dr. Yankum Dadzie
World Health Organization  Dr. Shigeru Omi
GSK  Dr. Justine Frain
Merck & Co. Inc  Mr Ken Gustavsen

1030-1100  Chair: Dr. Lepani Waqatakirewa
Keynote address “The PacELF Way to Success” and official opening by His Excellency
Ratu Joni Madraiwiwi, Vice-President of the Republic of the Fiji Islands
Vote of thanks – Dr. Yankum Dadzie

1100-1150  Chair: Dr. Joe Koroivueta
AGENDA ITEM 1: SUCCESSES IN PROGRAMME DEVELOPMENTS
1.1  Global aspects
GAELF Executive Group  Dr. Yankum Dadzie
World Health Organization  Dr. Gautam Biswas

1150-1210  “Verification of Interruption of Transmission”
Introduction by Dr. Shigeru Omi
Representation by Dr. Hao Yang on behalf of the Chinese delegation

1210-1220  Presentation of PacELF book  Mrs Palanitina T. Toelupe

1415-1500  1.2  Regional aspects
Africa  Dr. Johnny Gyapong
Americas  Dr. João Batista
Eastern Mediterranean  Professor Maged el-Setouhy

1530-1615  Mekong +
PacELF  Professor CP Ramachandran
Dr. Jean-Francois Yvon/Dr. Kazuyo Ichimori
South East Asia  Professor Mahroof Ismail

1615-1645  Q&A
Concluding remarks - Chair

1645-1745  AGENDA ITEM 2: CHALLENGES ENCOUNTERED AND THE FUTURE
Chair: Professor Dato CP Ramachandran
2.1  Successes, Challenges, Way Forward  Dr. Eric Ottesesen
2.2  Neglected Tropical Diseases-
a new WHO integrated approach  Dr. Gautam Biswas
Thursday, 30th March 2006 – Day 2

0830-1030 AGENDA ITEM 3. LF AND THE MILLENNIUM DEVELOPMENT GOALS
Co-Chairs: Dr. Pat Lammie/Mr Andy Wright
3.1 Filariasis – the real costs to poor people  
Mrs Myrtle Perera
3.2 Using the HIPC approach in countries  
Dr. Johnny Gyapong/Prof. Bernhard Liese
3.3 Collaboration with major donors: current status, future opportunities  
Professor David Molyneux

1100-1230 AGENDA ITEM 4: PARTNERSHIP DEVELOPMENTS
Chair: Dr. Bjorn Thylefors
4.1 Collaboration with NGOs in National Programmes  
Drs. Frank Richards/Dominique Kyelem
4.2 Building community networks for disability prevention  
Mr. Paul Derstine/Mr Jonathan Rout

1400-1530 AGENDA ITEM 5: ROUND TABLE AND DISCUSSION ADDRESSING CRITICAL PROGRAMME NEEDS
Round Table 1. The role of GAELF in integrated approaches to the control of neglected tropical diseases
Chair: Dr. Kevin Palmer.
Panel: Ghana (Dr. John Gyapong), India (Dr. PL Joshi). World Bank Dr. Ousmane Bangoura. GSK (Mr Andy Wright), Carter Center (Dr Frank Richards), CDC (Dr. Patrick Lammie)

1600-1730 Round Table 2. Integration of LF Elimination
Chair: Dr. Sam Zaramba. Panel: Cambodia (Dr. Socheat Duong), Nigeria (Dr. Munirah Jinadu), Papua New Guinea (Dr. Leo Makita), Tanzania (Zanzibar project) (Dr. Malick Juma), Togo (Dr. Kodjo Morgah) Yemen (Dr. Abdul Al Kubati)

Friday, 31st March 2006– Day 3

0830-1000 Round Table 3. Future country directions for mobilization of resources
Co-Chairs: Dr. Yankum Dadzie/Mr Emmanuel Lalsomde. Panel: Bangladesh (Professor Shahadat Hossain), Brazil (Dr. João Batista), Egypt (Professor Maged el Setouhy), Ghana (Dr. Agyeman Akosa), India (Dr. PL Joshi), Philippines (Dr. Nemesio Gako), Sri Lanka (Dr. Athula Kahandaliyange), Tanzania (Dr. Mwele Malecela), Vietnam (Professor Le Khanh Thuan)

1000-1030 Summary of Round Table discussions – Chairs

1100-1200 FINAL CONCLUSIONS AND RECOMMENDATIONS
Closing addresses
Closure of meeting

1400-1700 Business meeting; election of EG and RCG members
### Agenda Chairs and Presenters

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<thead>
<tr>
<th>Name</th>
<th>Position and Affiliation</th>
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<tr>
<td>Batista, Dr. João</td>
<td>Chair, Americas Regional Programme Review Group</td>
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<tr>
<td>Biswas, Dr. Gautam</td>
<td>Medical Officer in-charge of Lymphatic Filaria elimination, Department of Control of Neglected Tropical Diseases of the World Health Organization</td>
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<tr>
<td>Dadzie, Dr. Yankum</td>
<td>Chair, Executive Group, Global Alliance to Eliminate Lymphatic Filaria</td>
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<td>Derstine, Mr. Paul</td>
<td>Executive Director, Interchurch Medical Assistance</td>
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<td>El Setouhy, Prof. Maged</td>
<td>Chair, Eastern Mediterranean Regional Programme Review Group/Department of Public Health, Ain Shams University</td>
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<tr>
<td>Fain, Dr. Justine</td>
<td>Vice-President, Global Community Partnership, GlaxoSmithKline</td>
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<td>Gustavsen, Mr Ken</td>
<td>Manager, Global Product Donations, Merck &amp; Co. Inc.</td>
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<td>Gyapong, Dr. Johnny</td>
<td>Chair, AFRO Regional Programme Review Group/Programme Manager, Ghana</td>
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<td>Ichimori, Dr. Kazuyo</td>
<td>WHO Scientist, PacELF, Fiji</td>
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<td>Ismail, Professor Mahroof</td>
<td>Chair, S.E. Asian Regional Programme Review Group</td>
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<td>Joshi, Dr. PL</td>
<td>Director and Programme Manager, National Vector Borne Disease Control Programme, Delhi, India</td>
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<td>Koroivueta, Dr. Josefa</td>
<td>GAELF President, Chief Medical Officer Ministry of Health, Suva, Fiji</td>
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<td>Kyelem, Dr. Dominique</td>
<td>Programme Manager, Burkina Faso National Programme to Eliminate Lymphatic Filaria</td>
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<td>Lalsomde, Mr Emmanuel</td>
<td>Administration and Finance Director, Ministry of Health, Burkina Faso</td>
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<tr>
<td>Lammie, Dr. Patrick</td>
<td>Executive Group member, Global Alliance to Eliminate Lymphatic Filaria, Team Leader, Division for Disease Control and Prevention, Atlanta, USA</td>
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<tr>
<td>Liese, Dr. Bernhard</td>
<td>Chair, International Health Department, Georgetown University School of Nursing and Health Studies/Public Health Advisor/Consultant to the World Bank's Africa Region</td>
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<td>Maoate, Hon. Dr. Terepai</td>
<td>Deputy Prime Minister and Minister of Health, Cook Islands</td>
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<td>Molyneux, Prof. David</td>
<td>Director, Lymphatic Filariaxis Support Centre, Liverpool School of Tropical Medicine, UK</td>
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<td>Omi, Dr. Shigeru</td>
<td>Regional Director, World Health Organization Western Pacific Region</td>
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<td>Ottesen, Dr. Eric</td>
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<td>Palmer, Dr. Kevin</td>
<td>Regional Adviser in Malaria Vector Borne Disease, WHO Regional Office for the Western Pacific</td>
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<td>Perera, Mrs Myrtle</td>
<td>Senior Research Fellow, Marga Institute, Colombo, Sri Lanka</td>
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<td>Ramachandran, Prof. Dato CP</td>
<td>Chair, Mekong Plus Regional Programme Review Group/Chair Global Programme to Eliminate Lymphatic Filariaxis Technical Advisory Group/Emeritus Professor of Medical Parasitology</td>
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<td>Richards, Dr. Frank</td>
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<td>Rout, Mr Jonathan</td>
<td>Coordinator, Orissa State Programme, Church's Auxiliary for Social Action, Orissa, India</td>
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<td>Toelupe, Mrs Palanitina</td>
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<td>Thylefors, Dr. Bjorn</td>
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<td>Waqatakirewa, Dr. Lepani</td>
<td>GAEFL Vice President, CEO, Ministry of Health, Fiji</td>
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<td>Wright, Mr Andy</td>
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<td>Yang, Dr. Hao</td>
<td>Deputy Director General, Ministry of Health, China</td>
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<td>Yvon, Dr. Jean-Francois</td>
<td>Chair, PacCARE/Programme Manager, Wallis and Futuna</td>
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<td>Zaramba, Dr. Sam</td>
<td>Director General of Health Services, Ministry of Health, Uganda</td>
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Appendix C  GAELF4 PARTICIPANTS

Note: For a complete list of individual participants by name, visit www.filariasis.org and link to Fourth Meeting of the Global Alliance to Eliminate LF

Countries
American Samoa  Bangladesh  Burkina Faso  Benin
Brazil  Brunei  Cambodia  China
Cook Islands  Comoros  Egypt  Fiji
Ghana  Guam  Indonesia  India
Japan  Korea  Kenya  Kenya
Kiribati  Laos  Mali  Myanmar
Malaysia  Marshall Islands  Nauru  Nigeria
Nepal  Niue  Northern Mariana  Philippines
Papua New Guinea  Sri Lanka  Samoa  Tanzania
Thailand  Tokelau  Tonga  Togo
Tuvalu  Uganda  Vanuatu  Vietnam
Wallis & Futuna  Yemen  Zanzibar  Zimbabwe

Vice-President of the Republic of the Fiji Islands
His Excellency Ratu Joni Madraiwiwi

Ministers
Cook Islands  Hon. Dr. Terepai Maoate
Kenya  Hon. Dr. Wilfred Machaga
Tanzania  Hon. Aisha Omar Kigoda
Vanuatu  Hon. Morking Stevens Iatika

International Organizations
  World Bank

Private Sector
  GlaxoSmithKline
  Merck & Co.Inc.

International Development Agencies
  Department for International Development (DFID), UK

International Non-Governmental Developmental Agencies (NGOs)
  The Carter Center
  Interchurch Medical Assistance
  Mectizan® Donation Program
  World Vision

Regional Programme Review Group Chairs
Technical Advisory Group Chair

Collaborating Centres
Centers for Disease Control (CDC), USA
James Cook University, Townsville, Australia

Academic and Research Organizations
Danish Bilharziasis Laboratory
LF Support Center, Atlanta, USA
LF Support Centre, Liverpool, UK
Michigan State University, USA
Notre Dame University, USA
Washington University School of Medicine, USA

World Health Organization
WHO Headquarters (HQ)
WHO Regional Office for Africa (AFRO)
WHO Regional Office for South-East Asia (SEARO)
WHO Regional Office for the Western Pacific (WPRO)
Appendix D  Representative Contact Group members  
(elected GAELF3, Cairo 2004)

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<th>CONSTITUENCY</th>
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<td>Nigeria</td>
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<td>Francesco Rio</td>
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<td>Nevio Zagaria</td>
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<td>World Bank</td>
<td>Bernhard Liese</td>
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Appendix E

Executive Group members
(elected GAELF3, Cairo April 2004)

Dr. Yankum Dadzie (Chair) former Director, Onchocerciasis Control Programme/African Programme for Onchocerciasis Control (retired)

Dr. Patrick Lammie Centers for Disease Control and Prevention (CDC) Atlanta, USA

Dr. Francesco Rio World Health Organization, Geneva, Switzerland

Dr. Yoshifumi Takeda* Jissen Women’s University, Tokyo, Japan

Dr. Bjorn Thylefors Mectizan Donation Program, Atlanta, USA

Mr Andy Wright GlaxoSmithKline, London, UK

* Resigned - July 2004

Mrs Joan Fahy Executive Group Coordinator Secretariat Liverpool School of Tropical Medicine, UK
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Prepared by the Executive Group of the
Global Alliance to Eliminate Lymphatic Filariasis

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