REPORT OF THE SECOND
INTERNATIONAL CONFERENCE ON THE ELIMINATION OF LEPROSY
AS A PUBLIC HEALTH PROBLEM

Co-sponsored by the Sasakawa Memorial Health Foundation and the Government of India

New Delhi, India, 11-13 October 1996

CONTENTS

<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY</td>
<td>2</td>
</tr>
<tr>
<td>1. OPENING CEREMONY</td>
<td>4</td>
</tr>
<tr>
<td>2. ADDRESSES BY MINISTERS AND REGIONAL DIRECTORS</td>
<td>6</td>
</tr>
<tr>
<td>3. THE GLOBAL LEPROSY SITUATION</td>
<td>9</td>
</tr>
<tr>
<td>4. PRESENTATIONS OF REGIONAL LEPROSY PROGRAMMES</td>
<td>10</td>
</tr>
<tr>
<td>5. PRESENTATIONS BY INTERNATIONAL ORGANIZATIONS</td>
<td>11</td>
</tr>
<tr>
<td>6. TECHNICAL PRESENTATIONS</td>
<td>12</td>
</tr>
<tr>
<td>7. WORKING GROUP REPORTS</td>
<td>16</td>
</tr>
<tr>
<td>RECOMMENDATIONS</td>
<td>25</td>
</tr>
</tbody>
</table>

ANNEXES

<table>
<thead>
<tr>
<th>ANNEXES</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. REPORT OF THE CONCURRENT MINISTERIAL MEETING</td>
<td>27</td>
</tr>
<tr>
<td>II. LIST OF PARTICIPANTS</td>
<td>29</td>
</tr>
<tr>
<td>III. COUNTRY PRESENTATIONS</td>
<td>36</td>
</tr>
</tbody>
</table>

© World Health Organization, 1997

This document is not a formal publication of the World Health Organization (WHO), and all rights are reserved by the Organization. The document may, however, be freely reviewed, abstracted, reproduced or translated, in part or in whole, but not for sale or use in conjunction with commercial purposes.

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

© Organisation mondiale de la Santé, 1997

Ce document n’est pas une publication officielle de l’Organisation mondiale de la Santé (OMS) et tous les droits y afférents sont réservés par l’Organisation. S’il peut être commenté, résumé ou cité sans aucune restriction, il ne saurait cependant être reproduit ni traduit, partiellement ou en totalité, pour la vente ou à des fins commerciales.

Les opinions exprimées dans les documents par des auteurs cités nommément n’engagent que lesdits auteurs.
Report of the Second International Conference on the Elimination of Leprosy
Vigyan Bhawan, New Delhi, 11-13 October 1996

SUMMARY

The Second International Conference on the Elimination of Leprosy, held in New Delhi from 11 to 13 October 1996, unanimously reaffirmed commitment to the goal of eliminating leprosy as a public health problem by the year 2000. No fewer than 14 Ministers of Health from leprosy-endemic countries attended the three-day meeting, and each gave the assurance that the political will would be forthcoming to see this goal achieved.

The Conference, with the theme of “Reaching every patient in every village,” was organized by the World Health Organization (WHO) and co-sponsored by the Sasakawa Memorial Health Foundation and the Government of India. It was formally opened by the Prime Minister of India, His Excellency Mr H. D. Deve Gowda, at the Vigyan Bhawan Conference Centre.

The Prime Minister himself renewed India’s pledge to eliminate leprosy as a public health problem by the year 2000 - a pledge first made in the Hanoi Declaration which was unanimously adopted by participants at the First International Conference on Elimination, held in Viet Nam in July 1994. Recalling the superstitious beliefs and social ostracism that are attached to the disease, the Prime Minister went on: “It is essential that the people are educated to accept the fact that leprosy is a disease like any other, entirely controllable and less contagious than many other diseases.”

Mr Yohei Sasakawa, President of the Sasakawa Memorial Health Foundation, stated that both the Nippon Foundation, founded in 1962, and the Sasakawa Memorial Health Foundation, established in 1974, have extended their active support to the global effort to control leprosy. Recalling that at the First International Conference in Hanoi, the Nippon Foundation announced its contribution of US$50 million for leprosy drugs over a period of five years, he added: “I hope to see the day soon when an uninterrupted supply of high-quality MDT drugs will be provided free of cost to all leprosy patients at every level in all affected countries.”

WHO’s Director-General, Dr Hiroshi Nakajima, said that, due primarily to the widespread use of MDT, the achievements had been truly stupendous; more than eight million patients in the world have been cured, prevalence has been reduced by about 85% from a peak of 5.4 million patients in 1985 to about 940 000 in 1996, and MDT has saved more than one million individuals from becoming crippled. He went on: “But the remaining challenge is even greater. Between now and the year 2000, in addition to the almost one million patients already under treatment, we have to reach another estimated two million patients. In other words, we have to reach every remaining patient and every village where there might be one.” The total of additional resources required until the end of the century, over and above what is already available at the national level, is estimated at about US$ 370 million.

The Indian Minister of Health and Family Welfare, His Excellency Mr Saleem I. Shervani, who was later elected as Chairman of the Conference, said that four million of the 12 million cases in the world in 1981 were in India, but this number had fallen to an estimated 680 000 in 1996. Yet India still continues to shoulder the largest disease burden, with a
registered case-load of 540,000 cases this year. To date, a total of 6.57 million patients have been cured in India. Expressing the hope that the Conference would help to further strengthen programmes and build up still better strategies, he concluded: "Smallpox has been wiped out. We can and will eliminate leprosy as well."

Each of the Ministers of Health made statements in which they reaffirmed their commitment to the elimination goal. Three WHO Regional Directors, Dr E.M. Samba of the African Region, Dr Uton Muchtar Rafei of the South-East Asia Region, and Dr S.T. Han of the Western Pacific Region, summed up the leprosy situation in their respective Regions, and Dr S.K. Noordeen, Director of WHO's Action Programme on the Elimination of Leprosy, described the progress made and the challenges that lie ahead. WHO advisers from five of the Regional Offices explained the current progress towards elimination in greater detail, and delegates from 23 leprosy-endemic countries then assessed the status of the disease and of MDT coverage in their territories. The representatives of international organizations also made their statements in support of the goal of elimination of leprosy as a public health problem.

A Ministerial Meeting held on the first day of the Conference brought together the 14 Ministers of Health, the three WHO Regional Directors, the Director-General of WHO, Director LEP and representatives of the Sasakawa Memorial Health Foundation. All concerned again seized the opportunity to commit their respective governments and Member States strongly to the goal of eliminating leprosy as a public health problem.

The second day of the Conference was devoted to presentations on five major themes: monitoring and evaluation, quality patient care in leprosy elimination, community action for leprosy elimination and rehabilitation, drug supply management, and research issues in leprosy.

Participants were divided into four Working Groups whose subjects were based on the above themes, namely: accelerating the leprosy elimination efforts at the country level (including the updated Global Plan of Action); initiatives for reaching every patient in need, e.g. Special Action Projects (SAPEL) and Leprosy Elimination Campaigns (LEC); monitoring and evaluation of elimination; and quality patient care and community action for leprosy elimination and rehabilitation. On the final day of the Conference, participants met again in plenary session to discuss the reports from the Working Groups, and agreed a list of ten Recommendations.
1. OPENING CEREMONY

The Second International Conference on the Elimination of Leprosy was formally opened by the Prime Minister of India, His Excellency Mr H. D. Deve Gowda, at the Vigyan Bhawan Conference Centre in New Delhi on Friday, 11 October 1996. The three-day conference, with the theme of “Reaching every patient in every village,” was organized by the World Health Organization (WHO) and co-sponsored by the Sasakawa Memorial Health Foundation and the Government of India. A formal invocation and the ceremonial lighting of a lamp preceded the opening session. The 150 participants from 25 countries -- including the Health Ministers of 13 leprosy-endemic countries besides the host country -- heard addresses by the Minister of Health of India, His Excellency Mr Saleem I. Shervani, Dr Hiroshi Nakajima, Director-General of WHO, Mr Yohei Sasakawa, President of the Sasakawa Memorial Health Foundation, and Mr P.P. Chauhan, Secretary to the Government of India, Ministry of Health.

The Prime Minister renewed India’s pledge to eliminate leprosy as a public health problem by the year 2000 - a pledge first made in the Hanoi Declaration which was unanimously adopted by participants at the First International Conference on Elimination, held in Viet Nam in July 1994. He quoted Mahatma Gandhi, who had said: “Leprosy work is not merely medical relief. It is transforming frustration in life into the joy of dedication, and personal ambition into selfless service.” Recalling the superstitious beliefs and social ostracism that are attached to the disease, the Prime Minister went on: “It is essential that the people are educated to accept the fact that leprosy is a disease like any other, entirely controllable and less contagious than many other diseases.”

In view of the fact that 55% of the world’s total leprosy patients are in India, “we need to make vigorous efforts to ensure that we achieve the goal of elimination as early as possible,” he said. The states of Haryana and Punjab had already crossed the threshold level of less than one case per 10,000 population, by the end of next year 10 more states should reach this level, “and we hope to achieve the same results in the rest of the country by 2000 A.D.”

The Prime Minister commended the leadership and help provided by WHO in this great effort, the Sasakawa Memorial Health Foundation’s generous offer of anti-leprosy drugs free of charge for all the world, and the assistance given by all multinational and bilateral agencies, the World Bank and the many international and national voluntary agencies.

Mr Yohei Sasakawa, President of the Sasakawa Memorial Health Foundation, said that both the Nippon Foundation, founded in 1962, and the Sasakawa Memorial Health Foundation, established in 1974, have extended their active support to the global effort to control leprosy. Recalling that at the First International Conference in Hanoi, the Nippon Foundation announced its contribution of US$50 million for leprosy drugs over a period of five years, he said: “I hope to see the day soon when an uninterrupted supply of high-quality MDT drugs will be provided free of cost to all leprosy patients at every level in all affected countries.” Mr Sasakawa compared the effort to eliminate the disease to climbing one of the loftiest peaks in the Himalayas. “The final few hundred feet of the ascent demands the greatest labour, the most innovative measures, and the strongest leadership,” he commented.

WHO’s Director-General, Dr Nakajima, said that, due primarily to the widespread use of MDT, the achievements had been truly stupendous; more than eight million patients in the world have been cured, over 90% of all registered cases are receiving MDT, thanks to the free
supply of drugs made possible by the Nippon Foundation donation, and prevalence has been reduced by about 85% from a peak of 5.4 million patients in 1985 to about 940 000 in 1996. MDT has saved more than one million individuals from becoming crippled.

He went on: “But the remaining challenge is even greater. Between now and the year 2000, in addition to the almost one million patients already under treatment, we have to reach another estimated two million patients. In other words, we have to reach every remaining patient and every village where there might be one. We are aware that, even in areas where MDT has been used for several years, some patients may have remained untreated for various reasons. It is essential to uncover this hidden backlog of cases and bring the patients in for treatment. To this end, WHO has been trying out a special approach in several parts of the world, with promising results.”

According to WHO’s estimates, he said, the total of additional resources required until the end of the century, over and above what is already available at the national level, is about US$ 370 million. While MDT is proving very effective, research continues to produce possible improvements in MDT regimens and the avoidance of any risk of drug resistance. Dr Nakajima concluded: “We must beware of any complacency that might result from the progress we have made. We now have the opportunity to rid humanity of this ancient scourge. The task is within our reach. Let us rise to the challenge and together complete our work.”

The Indian Minister of Health and Family Welfare, Mr Saleem I. Shervani, reminded the Conference of the social stigma still attached to leprosy, which many people believed to be hereditary and incurable, or even “the curse of the gods.” He said that four million of the 12 million cases in the world in 1981 were in India, but this number had fallen to an estimated 680 000 in 1996. Yet India still continues to shoulder the largest disease burden, with a registered case-load of 540 000 cases (that is, recorded as receiving MDT) this year.

India launched its National Leprosy Eradication Campaign in 1983, and by 1995 all districts in the country had been covered with MDT. He went on: “We have been able to reduce the prevalence of leprosy from 57 per 10 000 population in 1981 to 5.9 per 10 000 by 1996. To date, a total of 6.57 million patients have been cured in India.” Expressing the hope that this Conference will help to further strengthen programmes and build up still better strategies, he concluded: “Smallpox has been wiped out. We can and will eliminate leprosy as well.”

Mr P.P. Chauhan, Secretary (Health) in India’s Ministry of Health, said that the world still had to reach many thousands of cases. He went on: “This is not acceptable to a civilized society armed with the arsenal of MDT and the commitment of thousands of health professionals and selfless workers in the government and nongovernmental sector.... Let us jointly pledge to leave no stone unturned in wiping out this scourge, which has afflicted mankind from biblical times.”

Thanking the Prime Minister for his strong commitment to seeing that India joins the forefront of nations to be free from leprosy, Dr S.K. Noordeen, Director of WHO’s Action Programme for the Elimination of Leprosy (LEP), emphasized the theme of “reaching every patient in every village.” Calling on the participants to confront the challenging tasks ahead so as to ensure that the common goal of eliminating leprosy as a public health problem is realized, he said the opening ceremony of this Conference “has ensured the right start for the final lap of this historic endeavour.”
The participants approved the appointment of Mr Saleem I. Shervani, Minister of Health of India, as Chairman of the Conference and appointed as Vice-Chairpersons Mrs I. Ghabshawi, Federal Minister of Health of Sudan, and Dr José Rodríguez Domínguez, Director-General of Preventive Medicine, Mexico. Dr Fatchou Gakaitangou, Director of Chad’s National Control of Leprosy Programme, and Dr W. Cairns Smith, of the University of Aberdeen, United Kingdom, were appointed Rapporteurs to the Conference.

2. ADDRESSES BY MINISTERS AND REGIONAL DIRECTORS

The first Plenary Session included addresses by the 14 Ministers of Health who attended the Conference -- an indication of the high value placed on its deliberations and its findings -- and by three Regional Directors of WHO (AFRO, SEARO and WPRO). A Ministerial Meeting held on the first day of the Conference brought all these representatives together, along with the Director-General of WHO, Director LEP and representatives of the Sasakawa Memorial Health Foundation. The Ministers participated actively in these discussions and seized the opportunity to commit their respective governments strongly to the goal of eliminating leprosy. A report on this Concurrent Ministerial Meeting is appended to this Report.

2.1. Addresses by Ministers of Health

Chad: His Excellency Mr Kedella Younous Hamid, Minister of Health of Chad, said that his country’s participation in both the First and the Second Conference confirmed its commitment to the Elimination Programme. Thanking the Association Raoul Follereau of France as well as WHO for the assistance received, he said that Chad plans 100% coverage with MDT by the end of 1996.

Guinea: His Excellency Dr Kandjoura Drame, Minister of Health of Guinea, said: “We have set goals to achieve the elimination of leprosy and have taken action on rehabilitation and to reduce social stigma.” He added that Guinea will spare no effort to achieve the elimination goal, with assistance from WHO and from NGOs in France and Switzerland.

Madagascar: His Excellency Professor Pascal Soavelo, Minister of Health of Madagascar, said leprosy had been a major public health problem in his country but the control programme has improved the situation with help from WHO. He expressed the hope that this conference would help to overcome the remaining problems, and emphasized that the government is politically committed to the elimination target and seeks to establish international solidarity in this task.

Mali: His Excellency Mr Modibo Sidibé, Minister of Health of Mali, said that progress has been made in the struggle against leprosy since the First Conference. The development of democratic primary health care has assisted in bringing about improved coverage of MDT for leprosy and the re-integration of patients into society. The present conference marks a watershed in the battle against leprosy, he added.

Mozambique: The Minister of Health of Mozambique, His Excellency Dr Aurélio Amando Zilhao, said that, although at the time of the First Conference the country was in upheaval, yet leprosy continued to be a priority. Since then, Mozambique has improved the provision of
primary health care services, including doubling the number of health centres. He reaffirmed his country’s commitment to the elimination of leprosy by the year 2000.

**Niger:** Her Excellency Madame Sambo Abdoulaye Mariama, Minister of Health and Social Affairs of Niger, said that the national programme began in 1992 with assistance from the Association Raoul Follereau of France. Since then, the country has seen a fall in leprosy prevalence and remains committed to the elimination goal despite the financial limitations.

**Brazil:** His Excellency Dr Jose Carlos Seixas, Deputy Minister of Health of Brazil, pointed out that his country is a unique federation of states rather than a hierarchical system. The leprosy services are decentralized yet there is collaboration between the States to achieve the elimination goal. The participation of communities and the support of WHO and NGOs are essential to achieve that goal.

**Sudan:** Her Excellency Mrs I. Ghabashawi, Federal Minister of Health of Sudan, said that the goal of elimination of leprosy by the year 2000 has been given the full commitment of the Government. Sudan is faced with many health problems, including leprosy, and a special national leprosy unit was established in 1991; already 100% MDT coverage has been achieved. The country collaborates with WHO, the German Leprosy Relief Association and The Leprosy Mission International in its elimination efforts.

**Indonesia:** His Excellency Professor Sujudi, Minister of Health of Indonesia, said that the leprosy service is integrated within primary health care and the country is committed to the elimination goal. The national programme is assisted by WHO and NGOs, including the Sasakawa Memorial Health Foundation, NSL, TLMI and Ciba. He expressed optimism about achieving the goal by the year 2000.

**Myanmar:** His Excellency Colonel Than Zin, Deputy Minister of Health of Myanmar, said the leprosy programme is now integrated within primary health care, and 100% MDT coverage has been achieved. Community-based rehabilitation is also being developed to assist patients. The government supports WHO in its initiative to eliminate leprosy and reaffirms its commitment to the goal.

**Nepal:** His Excellency Mr Arjun Narasingha, Minister of Health of Nepal, pointed out that his country is a signatory to the 1991 World Health Assembly resolution calling for the elimination of leprosy. The mountainous terrain makes accessibility of services for patients a problem, and consequently collaboration with WHO and with many NGOs is required for the programme.

**China:** The Vice-Minister of Health of China, His Excellency Dr Yin Dakui, said that half a million patients have completed treatment in China and the elimination goal has been extended from the national to the municipality level. The incidence of leprosy is declining and efforts are being made to maintain early diagnosis. He added that China is increasing its efforts in preventing disability and in rehabilitation, with the assistance of ILEP associations. Dr Yin invited delegates to attend the ILA Congress in Beijing in 1998.

**Viet Nam:** His Excellency Professor Le Ngoc Trong, Vice Minister of Health of Viet Nam, reminded the participants that his country hosted the First Conference which led to the Hanoi Declaration. The government has adopted the long-term goal of elimination of leprosy by the
year 2000, as well as the short-term goals of prevention of disability and rehabilitation. NGOs and WHO are assisting the leprosy elimination programme in Viet Nam.

**India:** His Excellency Mr Saleem I. Shervani, Minister of Health of India, underlined once again the government’s commitment to leprosy elimination by the year 2000, which had been made by the Prime Minister in the opening ceremony.

> **We are determined: let us send this message to the world**

A high-level Ministerial Meeting run concurrently with the first day of the New Delhi Conference produced consensus among 14 Ministers of Health from leprosy-endemic countries that the goal of eliminating leprosy as a public health problem is achievable by the year 2000. Dr Hiroshi Nakajima, Director-General of WHO, told the assembled Ministers that, despite the impressive achievements so far, the remaining challenges are still very considerable. They involve reaching two million more patients over the next four years through various means, including SAPEL and LEC. But he stressed that there is right now an excellent opportunity to deal with the disease, and observed that elimination of leprosy would contribute to WHO’s overall goal of Health for All. The Ministers raised a number of points which gave them concern, but were very clear about committing their respective governments to the ultimate goal. The Minister of Health of India, Dr Saleem I. Shervani, spoke for them all when he insisted that the goal is achievable provided everyone makes the necessary effort. He declared: “We are determined: let us send this message to the world.”

### 2.2. Addresses by Regional Directors, WHO

**African Region:** Dr E.M. Samba, Regional Director of WHO’s African Region, said that the prevalence rate in the Region had now fallen to 1.7 per 10 000 population and MDT coverage had increased to 93%. The Regional Office was providing technical and logistical support to individual programmes and was encouraging the development of SAPEL and LEC approaches. He concluded: “We appeal to all countries in the Region to re-double their efforts to achieve the goal of elimination.”

**South-East Asia Region:** Dr Uton Muchtar Rafei, Regional Director of WHO’s South-East Asia Region, said the use of MDT since 1982 had brought about a dramatic change in the Region. Since it was extended to all countries in 1985, the estimated cases had fallen from 5.5 million in 1985 to 830 000 in 1996, while registered cases fell from 3.8 million in 1985 to 635 000 in 1996. The registered prevalence rate in 1996 varied from less than 0.5 per 10 000 population in Thailand to 6.0 in India and Nepal. By mid-1996, 7.06 million patients have been cured since MDT was introduced.

He observed that two countries in the Region, Sri Lanka and Thailand, had achieved the elimination target by 1994, and three more countries -- Bhutan, Indonesia and the Maldives -- are expected to do so by the end of 1997. On the other hand, SEAR countries still contribute 70% of the global registered cases, so a considerable task lies ahead in order to achieve the goal.
The Regional Committee which met in Chiang Mai, Thailand, in September 1996 had urged Member States to intensify surveillance of leprosy cases at all health facilities, and to encourage community participation in identifying cases.

**Western Pacific Region:** Dr S.T. Han, Regional Director of WHO’s Western Pacific Region, said that at present there are only 30,000 patients under treatment in the whole of the Region, which contains a third of the world’s population. Six years ago, this number represented the total number of leprosy patients in the Philippines alone.

He went on: “The disease has already been eliminated in 21 countries and areas which now have a prevalence of less than one case per 10,000 population. If we include countries with small populations which have an absolute number of less than ten cases, there are 24 countries and areas out of the total of 36 in the Region that have reached the elimination of leprosy as a public health problem.”

Dr Han noted that, during a Regional Workshop on Leprosy Elimination held in Manila in March this year, national leprosy programme managers concluded that leprosy could be eliminated in all countries of the Region as early as 1998, two years ahead of the global target. A special programme has been launched by WHO in Micronesia, with the government and the Sasakawa Memorial Health Foundation, based on the systematic screening of the population. This intensified undertaking is the first ever organized for a country in which the disease is highly endemic, and in two years is expected to reduce the prevalence to one case per 10,000 or even lower.

**3. THE GLOBAL LEPROSY SITUATION**

**Dr S.K. Noordeen:** Eliminating leprosy as a public health problem: progress and challenges.

The Director of WHO’s Action Programme for the Elimination of Leprosy, Dr S.K. Noordeen, described how for centuries leprosy had been considered a disease apart, and one that was not easily accepted within the mainstream of medicine and public health. This situation has greatly changed in recent years, thanks to the dramatic improvements in the treatment of the disease through multidrug treatment (MDT) and its widespread application as a public health strategy. This strategy aims at drastically reducing not only the burden of the disease but also its potential for transmission.

Recalling the World Health Assembly resolution in 1991 which committed WHO and its Member States to eliminating leprosy as a public health problem by the year 2000, Dr Noordeen said that the related problem of rehabilitation of the already-disabled patients, as well as the occurrence of small numbers of new cases, will no doubt continue to be challenges even beyond the year 2000. He went on: “However, the very prospect of reducing the global disease burden by more than 97% by the year 2000, as compared with the situation only 15 years earlier, augurs well for the prospect of total eradication of the disease some time during the early part of the next century.”

He went on: “This is indeed a challenging task as the remaining problem is concentrated in the more difficult-to-access areas and populations, as well as in areas where the disease has entrenched itself in strong pockets of endemicity.”
As regards case detection trends over the past 10 to 15 years, the available information indicates only limited gains, with no rapid reduction at the global level. This was partly because implementation of MDT in many countries and in parts of others has not been sufficiently rapid. While current MDT coverage of registered patients in the world is over 90%, it was only 55% even two years ago. But there is still a significant number of geographic areas in several countries where leprosy patients are not being reached and treated, he said. The global problem of poor health service coverage at the periphery is compounded in some areas by problems of physical accessibility and neglect. Furthermore, case detection does not always correlate with the occurrence of new cases, and a high proportion of detections in many countries simply relate to the identification of old “backlog” cases.

Dr Noordeen saw “two positive indications which increase our optimism towards leprosy elimination.” Firstly, there is enough information to indicate a rapid decline in the number and proportion of skin-smear positive cases, i.e. the true multibacillary cases. Secondly, even if the global figures do not show a rapid decline in case detection, individual countries with well-operating programmes do show a substantial decline -- by as much as 10%. The elimination goal also had as its aim to reduce disability due to leprosy. “The most effective and cost-effective approach to disability prevention in leprosy is early identification of patients and their treatment with MDT,” he emphasized. It is estimated that, over the past 10 to 15 years, MDT has contributed to preventing over one million individuals from becoming disabled.

In the current situation, he said, there is a strong need to de-mystify leprosy. Leprosy referral services should be provided at all dermatological facilities and in a very limited number of specialized leprosy centres. Most supervisory and monitoring functions for leprosy can be incorporated within the overall surveillance of communicable diseases, and thus, increasingly in the future, leprosy services should become part and parcel of general health services. The leprosy disabled should also increasingly become part of the overall disability scene and benefit from the community-based rehabilitation activities of all disabled.

In order to meet the challenge of reaching every patient in every village -- not only to cure the patient but also to stop the spread of the disease -- Dr Noordeen concluded that such strategies as the WHO initiatives of Special Action Projects (SAPEL) and Leprosy Elimination Campaigns (LEC) need to be developed and vigorously implemented to address the problems of difficult-to-access areas on the one hand and the problem of hidden cases on the other.

4. PRESENTATIONS OF REGIONAL LEPROSY PROGRAMMES

**Africa:** The prevalence rate in the Region has now fallen to 1.7 per 10 000 population and MDT coverage has increased to 93%. The countries of the Region have been divided into four categories according to prevalence rates and MDT coverage. This approach allows different strategies to be applied which are appropriate to the leprosy situation in each country. The WHO Regional Office provides technical and logistical support to individual programmes, including the development of SAPEL and LEC. It is hoped that the elimination goal will be achieved in all countries in the Region by the year 2000.

**The Americas:** The current prevalence of leprosy in the Region is 2.1 per 10 000; however in Latin America it is 3.6 per 10 000. MDT coverage has reached 76% but the number of new cases detected has remained stable. The leprosy situation varies substantially between countries. After 1996, it is likely that only Brazil and Venezuela will continue to have a prevalence rate greater
than 1 per 10 000. The priority targets are the large Brazilian urban centres and the remote
Amazon areas of Bolivia, Brazil, Colombia, Peru and Venezuela.

Eastern Mediterranean: Leprosy is a significant health problem in some areas of the Region,
although the commitment of Member States has been strengthened. Specific problems in the
Region include continued social stigma, downgrading the priority for leprosy, and organization
of drug delivery. The goal of elimination of leprosy as a public health problem by the year 2000
is attainable in the Region.

South-East Asia: Two-thirds of estimated global cases are in this Region. The registered cases
have declined but the number of new cases detected remains steady. The Region contains
mobile, migrating, inaccessible and slum populations which are suitable for SAPEL. Big
differences between estimated and registered cases exist in some areas, which are appropriate for
the LEC approach. A number of countries still have considerable work to do to achieve the
prevalence target of 1 case per 10 000 population.

Western Pacific: The Region has some very large countries and some very small countries. It
is important to look at case numbers and rates. Objectives have been set to achieve the
elimination target in all countries by 1998 and in states and provinces by 2000. There are still
two endemic countries and two which have endemic districts. The strategy focuses on difficult-
to-access patients and high endemic areas. Training, monitoring and rehabilitation are also part
of the regional strategy.

The Country-by-Country Presentations are given in Annex III.

5. PRESENTATIONS BY INTERNATIONAL ORGANIZATIONS

ILA: Dr Y. Yuasa, President of the International Leprosy Association, said that the first ILA
Congress was held in 1897 and is now held regularly on a five-yearly basis. The next Congress
will be in Beijing in 1998, when the theme will be "Working towards a world without leprosy".
The Association produces the International Journal of Leprosy on a quarterly basis.

ILEP: Dr J.-P. Schenkelaars, President of the International Federation of Anti-Leprosy
Associations, said that this body brings together the main donor organizations in the field of
leprosy. ILEP has a long-term commitment to those affected by leprosy. While it recognizes the
importance of the elimination achievements and supports activities to this goal, ILEP is also
determined to respond to the total and continuing problems of leprosy, including prevention of
disability, sustaining leprosy treatment in areas of low endemicity, and the normalization of the
lives of all people affected by leprosy.

ILU: Dr S.D. Gokhale, Chairman of the International Leprosy Union, said that this association
of NGOs in endemic countries is seeking to put a human face to the elimination programme.
ILU supports early detection and community awareness, prevention of disability and community-
based rehabilitation. The Union is working to develop plans for the post-elimination era.

World Bank: Dr Raj Kumar, Representative of The World Bank Group, New Delhi Office,
underlined that the World Bank is a partner in the global programme for the elimination of
leprosy. In the last three years, the World Bank’s involvement has increased, particularly in
India. He noted that the NGO contribution is considered important to the leprosy programme and sets a good example for other health programmes.

6. TECHNICAL PRESENTATIONS

Accelerating the leprosy elimination efforts at the country level

Dr C. K. Rao, former Deputy Director-General of Health Services (Leprosy), Government of India, explained that high-prevalence areas and areas where MDT was recently introduced require vigorous efforts to accelerate the progress in order to attain the elimination goal within the set time-frame. No decline in new-case detection is reported from some top endemic countries, in part because of the long incubation period of the disease, delay in diagnosis of cases and other operational factors.

He underlined the importance of attaining the target date as it would be difficult to sustain the interest and support given to leprosy elimination efforts by the national governments and the supporting donor agencies for periods longer than planned. Indeed, national governments are looking forward to diverting the considerable amounts of additional resources going into leprosy programmes to other priority health programmes after the goal is reached. Moreover, the technical soundness of the strategies would be doubted by the lay decision-makers if attainment of the goal is delayed much beyond the planned period.

Dr Rao warned that “vigorous efforts have to be initiated and intensified to raise MDT coverage and completion and sustain them at a high level, mobilizing the required resources to enable MDT to reach the estimated two million leprosy patients during the next four years.” Sustained high political commitment is essential for acceleration of the efforts, he went on, observing that “no health programme ever succeeded without adequate political will.” The active involvement and participation of professionals from all “faiths” of medicine would improve the detection and management of leprosy patients, especially in endemic urban areas, while the involvement of medical practitioners, especially dermatologists, would greatly help in case detection and treatment.

Other prerequisites for acceleration include closer collaboration and partnership with donor agencies, the active involvement and training of general health services staff in leprosy work, health education directed towards affected communities, guaranteed year-round availability of MDT drugs, effective surveillance and monitoring, and the continued support of WHO.

Initiatives for reaching every patient in need

Dr H.J.S. Kawuma, Programme Manager at the Buluba Leprosy Centre, Jinja, Uganda, underlined the vital need to make MDT available to all communities and areas in order to treat all registered and all new cases. National programme managers must be stimulated to look for special populations which do not have easy access to diagnosis and treatment of leprosy, and to develop strategies to reach them.

The patients and populations not thus far reached include patients who are registered but are not on MDT, undetected patients in areas covered by the programme, and undetected patients in areas not yet covered by the programme. Dr Kawuma described the Leprosy Elimination
Campaign (LEC) as an initiative to detect patients in areas already covered, while the Special Action Projects for the Elimination of Leprosy (SAPEL) represent an initiative to reach patients in areas or populations not yet covered by the programme.

He said it has been estimated that between now and the year 2000 about 650 000 leprosy cases will be diagnosed and treated through LEC and about 100 000 through SAPEL. At least in the case of SAPEL, one of the functions of the Steering Committee will be to be pro-active in assisting countries to identify special situations and to develop feasible proposals to deal with them in collaboration with WHO and other partners.

**Leprosy Elimination Campaign (LEC)**

**Dr W.H. Van Brakel,** Project Director, Leprosy Project, International Nepal Fellowship, Pokhara, Nepal, said that a pilot LEC project of a new type of health education campaign has been conducted in Parwat, a remote mountainous district in the Western Region of Nepal. The campaign involved basic health services, local NGOs, the community and public sector organizations. The campaign team carried out a KAP Survey (knowledge, attitude and practice) before and after the campaign itself to try to measure the effect of the health education activities.

A particular type of rapid village survey was used in Village Development Committee areas with a registered prevalence of five or more cases per 10 000 population. The survey method relied on detection of cases presenting voluntarily during a local skin camp, where free examination and treatment for common skin diseases were offered. The context of a general skin camp was chosen because of the negative stigma against leprosy that is still prevalent in Nepal. This campaign “made a significant contribution towards the elimination of leprosy from Parwat District, “ Dr van Brakel said.

**Special Action Projects (SAPEL)**

**Dr Y. Yuasa,** President of the International Leprosy Association (ILA), described the SAPEL programme as an initiative to reach difficult-to-reach patients using fast and flexible approaches. More than 36 SAPEL projects are now under way in all regions. He cited the SAPEL project in the high plateau region of Viet Nam as an example where more than 50 cases have already been detected and started on MDT. The SAPEL approach is more expensive than a normal leprosy programme, but these projects are succeeding in reaching special areas. SAPEL plans to cover 100 000 patients up to the year 2000, and NGOs are invited to develop SAPEL projects to meet the needs for accelerated case detection and treatment in areas and among populations requiring a special effort.

**Monitoring and Evaluation**

**Professor M.F. Lechat,** of EUROCAT, Epidemiology Unit, Belgian Institute of Hygiene and Epidemiology, emphasized that there was a need to closely monitor such issues as: Where are we on the way to elimination, how much has been covered in terms of reduction of prevalence and how much remains to be accomplished? How fast are we going, and are prevalence rates decreasing at a satisfactory pace? When do we expect to reach the target? And are delays to be foreseen or obstacles to be identified which could slow down the attainment of the elimination objectives?
The Leprosy Elimination Advisory Group (LEAG) has established a Task Force on Monitoring and Evaluation of Leprosy (MEE) to compile and review these aspects, based on statistical data provided by the endemic countries. This Task Force is at present engaged in defining the relevant indicators for monitoring the elimination programme at global, national and sub-national levels.

Professor Lechat said that, while prevalence rates are declining satisfactorily, the absolute numbers of cases also need to be reviewed. He observed that the actual numbers of cases detected stood at 591,000 in 1993 and 561,000 in 1994, and asked: “Are such figures consistent with the drastic decline observed in prevalence? How could it happen that so many cases are still detected while it has been demonstrated that MDT is rendering the patient non-infective?”

He saw three factors at work here. The first was epidemiological; because of the long incubation period, patients developing the disease today may have been infected some years ago, so a decline in prevalence will take years to translate into a decline in incidence. The second factor was an operational one; MDT was introduced some 12 years ago, was relatively slow to be implemented and is still not complete. And the third factor relates to a definition of “newly detected cases”; these include both cases of recent onset, that is, incidence, as well as ancient cases who until now have escaped detection, that is, backlog prevalence. He commented: “It should therefore be unrealistic to expect an immediate decline in the number of cases detected that would correspond to the decline observed in prevalence rates.” High detection rates do not necessarily reflect an increase in incidence but are, rather, indicative of better case-finding. At the moment, prevalence may be considered as an appropriate indicator for monitoring the progress towards elimination.

He concluded by observing that more attention needs to be paid to the monitoring of disability. “Neglected patients of yesterday are the disabled of today. Neglected patients of today are the disabled of tomorrow. The best way to prevent disabilities is detection and treatment.”

**Quality patient care in leprosy elimination**

**Dr W. Cairns Smith,** Department of Public Health, University of Aberdeen, United Kingdom, said that quality in patient care is about being able to demonstrate that we deliver effective care of an agreed standard to a defined group of patients. The standard should be based on a criterion and a target level of performance which is measurable and attainable. The process of setting standards is critical; such standards should be based on proven effective care and agreed locally by discussion between staff, patients and their communities.

Quality patient care requires a basic minimum of infrastructure which must include appropriate levels of adequately trained staff. Referral hospital facilities to provide in-patient care to the minority of patients who need them are important, but how many and where should be determined locally.

As regards standards in the process of patient care, Dr Cairns Smith said that -- besides early detection of new cases and ensuring that patients start and complete MDT -- it is essential for patients and communities to be offered some degree of health education. In addition, criteria can be set regarding the prompt detection and treatment of reactions (particularly those which involve acute nerve damage), and the assessment of impairments and disabilities at the time of
completion of treatment/cure can be used as a criterion for quality of patient care. He concluded that the quality of programme structure, process and outcome should be assessed. Once the standards are agreed, then the performance should be measured and the practice compared with the standard. This process of quality assurance fosters discussion, highlights problems and motivate changes. This audit cycle should then be repeated.

Community action for leprosy elimination and rehabilitation

Dr S. D. Gokhale, Chairman of the International Leprosy Union (ILU), underlined that, in seeking to eliminate leprosy, the horizons must be widened beyond medical treatment and must reach the social and economic aspects of community life. This will call for community participation, the empowerment of cured leprosy patients, political will, a critical awareness and the involvement of the media. MDT may succeed in preventing deformities but the stigma that is created through the centuries of misconceptions about the disease cannot be washed away overnight, he said, and therefore along with MDT a sustained campaign of community education, early detection and rehabilitation is not only essential but is a must.

Dr Gokhale said that only if the tremendous burden that leprosy places on individuals and families is fully recognized will a sustainable plan of action emerge for a post-MDT programme inclusive of rehabilitation and social acceptance. The ILU had developed a strategy paper which called for a total package of services that would include efforts to reach the unreached and include the excluded by the mapping of leprosy, that would promote universal use of Community-Based Rehabilitation technology, and that would undertake rapid action programmes to eliminate the disease within the targeted time schedule.

He concluded: “Experience shows that anti-leprosy work, like other human development concerns, calls for a broad spectrum approach. The vacuum at the village level, which leaves leprosy-affected persons high and dry, can be filled only by local groups of sensitized citizens viably linked to voluntary agencies. For this to happen, anti-leprosy work must become a part of the consciousness and development of the village community.”

Drug Supply Management

Dr U Tin Shwe, Project Manager of Leprosy Control in the Myanmar Department of Health, described in detail the health care delivery system of his country, and the ways in which drugs are requisitioned, stored and distributed. He said that the objectives are to ensure regular, uninterrupted drug supply to patients, to maintain adequate amounts of drugs as buffer stock at central, divisional, township and rural health centre levels, to prevent drug wastage, to monitor the amount of drug stocks at the project level, and to make MDT accessible to all leprosy patients. Common problems that are encountered include the issue of how to deal with remaining loose drugs, the lack of manpower in drug management, drug wastage due to expiry dates and the need for additional resources for drug-supply monitoring.

Research issues in leprosy

Professor J. Grosset, of the Faculté de Médecine, Hôpital Pitié-Salpêtrière, Paris, said that there is still a need for research in leprosy, despite the success of MDT, to maintain interest in leprosy and because there are many outstanding questions to be addressed. He saw the main research issues as: (i) to improve the quality of MDT, especially the regularity of delivery of drugs and
their intake by patients for the defined duration, in areas where MDT is already fully implemented; (ii) to identify the places where leprosy patients live but are not being treated by MDT, and (iii) to identify the reasons why these patients are not treated by MDT and to find the suitable solutions.

There are a number of challenges in chemotherapy research to be tackled, such as shorter regimens, a common regimen for PB and MB patients, and fully supervised intermittent drug regimens. Thus, dapsone and clofazimine have to be administered daily for two years because of their relatively weak activities against M. leprae. If new drugs with stronger bactericidal activities were available and could be given in combination with rifampicin, the elimination of rifampicin-resistant mutants would be much more rapid and the total duration of MDT could be shortened. Professor Grosset observed that it will be particularly important to have a similar regimen for PB and MB patients in the post-elimination era. He said that WHO is currently assessing the activity, acceptability and tolerance in patients of a different combination of drugs, in which ofloxacin and minocycline are likely to become the companion drugs of rifampicin in a fully supervised monthly regimen.

Other research issues concern immunology, such as the antigen or antigens responsible for protective immunity, and the development of a specific skin test for the detection of hypersensitivity to M. leprae components. Professor Grosset noted that a complete map of the M. leprae genome will open up new opportunities for research.

7. WORKING GROUP REPORTS

Group No. 1: Accelerating the leprosy elimination activities at the country level

Working Group No 1, chaired by Dr C.K. Rao, agreed that issues requiring the highest priority in this context should be country-wide geographical coverage, the provision of MDT services at all existing health facilities, sustaining the political commitment, and identifying the geographic areas that need acceleration.

The geographic areas that will need acceleration of activities are areas that are uncovered for MDT or are difficult to reach, areas where MDT has recently been introduced or is poorly implemented, and high prevalence urban areas under MDT which have an inadequate leprosy infrastructure and poor MDT implementation; it was pointed out that there are often poor leprosy services within primary health care. In addition, attention must be paid to areas populated by culturally or ethnically special groups, such as nomads, refugees, tribals, migratory populations and so on. There may be other places where there is a lack of or insufficient information regarding leprosy status, or where the gap between estimated and registered cases is high.

The type of activities needing acceleration and additional support include those aimed at improving MDT coverage and cure rates or improving the detection of existing leprosy cases, and those seeking to promote the involvement of health staff, general medical practitioners, dermatology-trained personnel and key groups such as teachers or scouts. Traditional healers can also have a value in programmes. Further support will also be needed for supervision and monitoring, for ensuring the integration of leprosy into general health services, and for encouraging greater collaboration between governments, NGOs and donor agencies.
Among the options suggested by the Working Group for improving cure rates were to routinely measure treatment completion rates, to introduce fixed duration MDT, to ensure effective supervision and monitoring, including cohort analysis of a sample of patients under MDT, and to make sure that there is adequate drug supply and delivery right up to the most peripheral unit. Good quality of MDT services is essential, as well as flexibility in treatment delivery (and programme implementation). Besides promoting and utilizing SAPEL initiatives, accelerated activities should take account of patient and family counseling, and should actively seek the involvement of practitioners of other systems of medicine, general medical practitioners, NGOs, the private sector and such service organizations as dermatologists and scouts, especially in urban areas.

In order to improve the detection of cases, programmes should seek support from Leprosy Elimination Campaigns (LECs), develop effective referral systems and services (including the active involvement of dermatologists), and issue clear guidelines on diagnosis in order to improve specificity of diagnosis and prevent over-diagnosis. Besides intensive social and community education, efforts should be made to involve community leaders and patient groups (cured and current). Participants emphasized the need to distinguish between SAPEL and LEC.

The Group felt that collaboration between Governments and NGOs needs to be improved and strengthened wherever appropriate. It was noted that many NGOs are taking up tuberculosis and other programmes, in addition to leprosy work. It was vital for these NGOs to ensure that moving into TB or other programmes does not adversely affect the quality of leprosy work.

The Group believed strongly that sustained political commitment is essential for acceleration of leprosy elimination efforts, but felt that the strong political commitment that was displayed in supporting the WHA resolution in May 1991 and in formulating national plans is not being translated into implementation in some countries. Declining leprosy prevalence should not contribute to a declining level of political commitment, and large countries with federal structures must take care to sustain high political commitment at state, province and municipality levels as well.

There should be periodic review of the programme by the highest decision-makers at national and state, province and municipality level, as well as quick decision-making involving other government functionaries and representatives of donor agencies. It would be useful for programmes to share experiences and the progress made with high-level decision-makers at periodic meetings or through appropriate communications.

It was considered essential that WHO should continue to provide technical support and guidance to member countries for undertaking leprosy elimination efforts. WHO should also continue to sensitize high endemic countries to according high priority to leprosy programme until the goal is attained, and should continue to guide, encourage and assist endemic countries seeking assistance from SAPEL and LEC initiatives.

Working Group No. 1 made the following Recommendations:

1. While MDT accessibility and MDT coverage of registered cases have substantially improved in most countries, all efforts should be directed to achieving the same in others. Geographical coverage should also be improved to ensure that treatment reaches every
patient in every village -- it being understood that urban pockets of leprosy patients must also be reached.

2. The geographical areas needing acceleration of leprosy elimination efforts should be identified, and appropriate plans of action should be developed and implemented as an urgent priority. Additional resources needed to implement these activities have to be mobilized.

3. Effective and patient-friendly approaches should be identified and implemented to ensure high cure rates, including fixed duration MDT, efficient drug supply/delivery, effective case-holding, cohort reporting of a sample of cases on MDT, and support from SAPEL and LEC.

4. Efforts should continue to increase and sustain the political commitment at national and sub-national levels.

5. The collaboration and partnership between the governments and NGOs should be further strengthened and consolidated through MOUs, operational guidelines, and periodic meetings with the representatives of international and local NGOs and of other donor agencies at all levels.

6. NGOs taking up programmes like tuberculosis or other health programmes in addition to leprosy work should ensure that the additional programmes do not hamper leprosy elimination activities or affect the quality of leprosy work.

Working Group 2: Initiatives for reaching every patient in need (SAPEL and LEC)

Initial discussion focused on operational details of the SAPEL and LEC programmes. There was general agreement that such programmes should be initiated in collaboration with the National Programme, and that any effort must be adapted to the local situation, including the extent of access for medical care, local use of alternative medical care systems, variations in local languages and so forth. LEC projects in particular must be prepared to deal with the demand for care resulting from the activities.

Publicity efforts need to be regularly evaluated in order to measure their effectiveness and to ensure that they are indeed reaching their intended audience. The mass media can play their part, but must be carefully handled in the light of local conditions. Participants agreed that strong emphasis on health education, on the free availability of MDT and on access to services is essential to the success of either SAPEL or LEC. It was pointed out that MDT should be made available at the health centre even before any patients are detected. Talking to the patients themselves will help health staff to understand why diagnosis has been delayed; subsequently, patients who have completed treatment can be used in support of these initiatives.

All SAPEL and LEC projects should seek the adequate involvement of all concerned partners, and should emphasize that leprosy is easily curable, that treatment is free and that every effort must be made to reduce the stigma. In some circumstances, there may be overlap between SAPEL and LEC.

The Working Group raised four questions in the context of this issue. Firstly, how can we bring about greater utilization of SAPEL and LEC?
Participants agreed that greater publicity, with much emphasis on the success of SAPEL and LEC efforts to date, should be given a high priority. Leprosy control programmes everywhere, NGOs and others should be made aware of this success and encouraged to apply these initiatives wherever indicated. Similar efforts can be initiated by a country on its own or through NGOs -- not all need to go through WHO. In the future, the Leprosy Elimination Monitoring (LEM) and Geographic Information System (GIS) may make it easier to select areas for such efforts. Attention must also be given to sustaining the effort once it has been initiated. General health education should make provision for training in leprosy work.

Secondly, are there limits to the size of the areas where LEC could or should be applied?

It was decided that the area could range from a major urban centre to a state or province, and perhaps in the case of smaller nations even to the entire country. The programme manager in any country must take decisions on the basis of its needs and the resources available, and of the size of the area where such an effort could best be applied.

Thirdly, is SAPEL cost-effective?

Although costs per patient in some programmes have been relatively high, this is only to be expected, given the areas and problems that justify such a project. As the lessons learned from any given project are applied to situations elsewhere, the costs are likely to decrease.

Finally, are there approaches other than SAPEL and LEC that might serve to speed up case detection and reach all cases?

The group agreed that integration with other programmes, such as vaccination efforts, tuberculosis control or others operating in appropriate areas, may be possible. Alternatively, local initiatives such as an Anti-Leprosy Day held annually or more frequently in order to increase awareness may be useful, to the extent that there is an existing health care system within which individuals can be trained to diagnose and treat patients seeking care. Persons cured can also be used in these projects. It was considered important that the successes and failures of SAPEL and LEC programmes should be widely reported.

**Working Group 3: Monitoring and evaluation of elimination**

Professor Lechat in his opening remarks referred to relevant documents and reports available to the participants while considering the issue of Monitoring and Evaluation of Elimination (MEE). He explained that MEE has an important task to undertake in studying how much decline in prevalence is being achieved, and how much still needs to be achieved over the time available to reach the target of achieving elimination by the year 2000; it will also serve to identify the obstacles impeding rapid corrective actions.

The group considered at length the following issues and made some specific recommendations with regard to: hidden cases, case detection, a national information system for elimination of leprosy, the LEM initiative, the Geographic Information System, and research relevant for monitoring and evaluation.

1. **Hidden cases**: Available prevalence data have shown a dramatic decline in the prevalence of leprosy. In that context, the problem of hidden cases and the paradoxical situation
of over-diagnosis was considered. The need for strengthening the operational aspects of the programme was stressed. Hidden cases are important from the point of view of transmission, drug supply, patient care and trends over a period.

The group discussed estimates of leprosy based on sample surveys and whether such exercises are needed. Estimation exercises are called for only in those areas where leprosy is known to exist as a problem, and where health services for leprosy patients are inadequate or non-existent. Methods of estimation should be fully documented.

2. **Case detection**: It was agreed that the emphasis should be on monitoring case detection, rather than estimations. It was felt that high-quality case detection is needed, and information about the profile of new cases detected will be useful. The profile of new cases will depend on case detection procedures. In areas depending essentially on passive case-finding, the proportion of cases of consequence will be high. In areas with active case-finding, a sizable proportion of cases is expected to consist of single lesion cases, with low specificity and self-healing potentials. In several places, it was noted that case detection is much higher than the targets set, and in addition target-setting certainly interferes with the monitoring exercise.

As a consequence, firstly, methods of case detection need to be documented and, secondly, no target need be given for case detection, but targets should be set for operations of the programme.

3. **Information system**: The group considered the need for any additional data or indicators for monitoring purposes at national and sub-national levels. It was agreed that the recommended six essential indicators provide adequate information for this purpose. Collection of data for these six indicators was quite possible within the existing leprosy programmes. The group also considered the requirement of simplification in the context of integrated health systems.

4. **Absolute number of cases**: It was strongly argued that countries should report absolute numbers of cases along with the rates at national and sub-national levels. It is necessary to provide clear information on denominators.

5. **Monitoring the Elimination of Leprosy - LEM Initiative**: It was explained that WHO is willing to implement an initiative to validate new indicators for MDT distribution, quality of case detection and patient care. This could be done by using an adequate representative sample, taking the patient as the sampling unit. Monitors can be appointed for this purpose, who would work in collaboration with WHO and programme managers. The Working Group agreed that it should be implemented as soon as possible.

6. **Geographic information system** (GIS): The group was most interested to learn that GIS is being considered for use in Nigeria and Bangladesh, and that DANIDA is to implement this system in two States of India. Initially, GIS is to be used as a monitoring tool for implementing the proper supply and use of MDT drugs. It has potentials for use in various ways, such as mapping the distribution of leprosy cases for epidemiological and operational purposes. However, at this stage the potentialities of GIS need to be further explored. It was stressed that GIS needs to be a dynamic approach and will need constant updating.

7. **Special Monitoring**: A recommendation of the first meeting of the MEE Task Force stated: “It is strongly recommended by the Task Force that a programme of special monitoring and evaluation be established to collect information which is not provided by the essential indicators
but which would complement them. The special monitoring would address specific issues such as incidence, disability, defaulting and relapse and would provide a picture of the changing patterns of leprosy which is not provided by the essential indicators. The need for such a programme is urgent and it is likely that it will continue to be needed in the period after the elimination goal is achieved.”

The group seriously considered this recommendation and agreed on the need to implement it speedily. It was observed that information about incidence and several other useful indicators could be generated through this approach. Special monitoring can be developed in certain good settings, identified as where the system could be improved with minimum additional inputs.

8. Simulation modeling: The group noted with interest the simulation model project on leprosy, which is supported by the LEP/WHO and which has yielded initial promising results. They also noted that the second Task Force Meeting has reviewed this development and has recommended validation and updating of this approach. The working group noted the potential of the simulation model approach for epidemiological and operational purposes as well as for planning and identifying various cost-effective interventions.

The group recommended continuation of the simulation model approach, its validation and its early utilization so that the exercise will be useful for various Leprosy Elimination Programmes.

Working Group 4: Quality patient care and community action for leprosy elimination and rehabilitation

The group started by identifying which specific areas they wanted to discuss under the broad brief given. From the list of topics raised by the group members, the following four were selected:
- How to portray a more positive image of persons (previously) affected by leprosy,
- Community participation and community action,
- Rehabilitation versus prevention of impairment and disability, and
- Components of quality patient care.

How to portray a more positive image of persons (previously) affected by leprosy

The group discussed the potential negative effects of someone who has leprosy always being labeled as a “leprosy patient” or even just a “patient”. It was felt that, in the context of the social stigma against leprosy, this label wrongly gave the impression that a person affected by leprosy would always remain a patient and thus would never really be cured. From a rehabilitation point of view, it would be very desirable to positively change the terminology used. The attitude conveyed by the behaviour of the health worker towards patients is also very important in this context.

The group made the following recommendations:

- The use of the word “patient” should be context-dependent. Its use is only appropriate in a medical context of a health worker-patient relationship.

- The preferred term to use when referring to a person when his/her association with leprosy needs mentioning is “a person affected by leprosy”.
- In situations where the relation with leprosy is irrelevant, e.g. in many rehabilitation situations, a description such as “a person with disability” would be preferable.

- Recommendations for a change of terminology should be prepared for a wide range of uses, including the media, health training materials, legal documents, and medical/technical papers and publications.

- The importance of health workers demonstrating a positive attitude towards leprosy patients should be emphasized whenever possible. Training to this extent should be included in leprosy courses, particularly those intended for general health workers.

- Appropriate education should be given to all patients with regard to their non-infectiousness. Too many patients are still unsure, even after MDT, whether or not they can still pass on the disease to others. This misunderstanding may strongly influence their social relationships and could lead to (self-) isolation. All community education should also include the message that a patient is no longer contagious as soon as he or she starts to take MDT.

**Community participation and community action**

The importance of community participation and action in relation to the elimination of leprosy and to rehabilitation was discussed at length. Because the term “community participation” is nowadays often used as a slogan without actual meaning, the group felt that some practical statements and recommendations needed to be made.

- Community participation and action should emerge from the people. It can therefore never be imposed from outside, but can only be facilitated. The first step in this process is the raising of awareness concerning the issues involved.

- Community participation and action can normally only be expected to happen at the village level. Efforts to involve the community should therefore be localized. Areas with high priority, such as those with a high leprosy prevalence or with a concentration of persons needing care after MDT, should be identified.

- Practical ways of involving the community in leprosy elimination should be explored. These might include follow-up of irregular patients and supervision of MDT intake.

- In the setting up of any new programme, the planning “checklist” should include the question: “How can the community be involved with the activities of this programme?” Involvement of the community at every stage, including the planning stage, should be emphasized. Community participation should include the person(s) affected by leprosy and their family.

- The need for local leaders in the community participation process was stressed. These should be identified as much as possible in advance and should be given appropriate training. They could, for instance, be religious or local political leaders, midwives, traditional practitioners or representatives of patient groups.
Rehabilitation versus prevention of impairment and disability

The group discussed the importance of distinguishing between rehabilitation and prevention of impairment and disability. It was recognized that, where possible, rehabilitation should begin with “prevention of dehability”, which may include treatment of impairment and disability, and health education. The group defined “rehabilitation” as “the psychological, social, physical and spiritual restoration of persons affected by leprosy in their own community.” The group made the following recommendations:

- The outcome of rehabilitation should be measured in terms of disability (inability to perform an activity) and/or social handicap (relationships adversely affected). A person with impairment who is not disabled or handicapped is unlikely to need any intervention (except that which is aimed at prevention of further impairment).

- Rehabilitation will often call for a multidisciplinary approach. Cooperation should be encouraged at national and local level between different sectors, e.g. medicine, education, business corporations, religious institutions and so on, not forgetting representative patient groups.

- In rehabilitation practice, it is useful to distinguish between social, economic and physical rehabilitation. For each patient it should be determined which kind or which combination of approaches is required -- with input from the person needing rehabilitation. The necessity for extending physical rehabilitation to the home was acknowledged. Ways of putting this into practice should to be investigated.

- Rehabilitation needs resources. Financial and other resources must be allocated by both governments and NGOs who take the issue of rehabilitation seriously.

- There is an urgent need for data collection on rehabilitation needs and opportunities. This should include an inventory of available rehabilitation services, their target groups and so forth. Gender-specific information should be collected, particularly on women affected with leprosy.

- Rehabilitation services should be made available in all leprosy endemic areas. This would include enlisting the cooperation of existing rehabilitation programmes and facilities.

- The importance of locally appropriate technology is strongly emphasized.

- Positive examples of rehabilitation should be collected and widely disseminated, indeed disability work should be part of general rehabilitation to avoid any further stigmatization of patients.

- Institutional care for the disabled should be avoided, but concern was expressed for those already in long-term institutional care.

- Legislative changes may be required to assist rehabilitation.
Components of quality patient care

The Group identified a number of key components of quality care, right from the first contact of the patient with the health services onwards. It was realized that appropriate standards for each of these would need to be set locally; the concept of “quality care” and the desire to make leprosy treatment available in every village may well conflict with each other. Experience shows that provision of leprosy services through a primary health care system often results in reduced quality of care; it was therefore essential to define what is meant by the term.

The Group agreed that the key components of quality care are:

1. Surveillance in the general health services to pick up cases of leprosy at an early stage.
2. Training of all relevant health workers, including the social/human aspects of leprosy.
3. Accessibility of the health services for all. If there are areas or groups of people with limited access, an analysis of the constraints should be made before solutions are suggested. Integration of leprosy work into the general health services needs to be considered where this is not yet the case.
4. Health education to the patient and his/her family. Thought must be given to the accessibility of the information (e.g. is the patient literate?). The importance of listening to the patient was stressed: “What information is the patient asking for?”
5. The portrayal of positive images, e.g. through the pictures and photographs included in health education materials.
6. Regular drug supply and treatment with MDT.
7. A good referral system, with access to prevention and treatment of impairment and disability. This may include the provision of protective footwear for patients with insensitive feet, and also material for ulcer dressing.
8. Adequate recording and reporting of patient information.
9. The follow-up of irregular patients.
RECOMMENDATIONS

The Second International Conference on the Elimination of Leprosy, convened on the initiative of the World Health Organization in New Delhi, India, from 11 to 13 October 1996, mindful of the commitment of all Member States of WHO, under World Health Assembly Resolution WHA44.9 of 1991, "to continue to promote the use of all control measures including Multidrug Therapy (MDT) together with case-finding in order to attain the global elimination of leprosy as a public health problem by the year 2000", endorses the updated WHO global strategy and the intensified plan of action, and RECOMMENDS that:

- All parties concerned - national governments, non-governmental organizations and international agencies - should recognize the unprecedented opportunity available now to reach the goal of eliminating leprosy as a public health problem, particularly in the light of the remarkable progress made so far, and that they intensify their political commitment and efforts to reach the remaining patients before the year 2000, bearing in mind that there is no room for complacency if the goal is to be attained.

- The remaining problem of leprosy treatment will be far more difficult as it includes hitherto neglected areas, population groups and communities. It is important that programme managers develop special intensive operations to reach them through such mechanisms as leprosy elimination campaigns (LEC) to detect hidden cases and special action projects (SAPEL) to reach difficult-to-access patients among under-served population groups such as nomads, refugees, migrants, etc.

- Ministries of Health in endemic countries should take immediate steps to further involve health personnel from the general health services in the treatment of leprosy patients, as well as in case-detection, so that these activities are adequately integrated into the general health services. Even as integration within the general health services is achieved, the quality of services provided to patients should be assured.

- As the technology employed to reach the leprosy elimination goal is essentially through the treatment of patients with multidrug therapy (MDT), it is extremely important that the free supply of WHO recommended MDT drugs in blister packs to patients be continued without interruption to ensure every patient has access to MDT.

- In order to ensure that all patients have access to MDT and that the progress being made towards leprosy elimination can be accurately assessed, the special initiative of leprosy monitoring (LEM) should be implemented as soon as possible.

- In view of the continued social problems faced by persons affected by leprosy, it is highly important to further intensify our efforts at creating community awareness of the disease and its curability, and to mobilize community action towards the elimination of leprosy. It is important that persons affected by leprosy be actively involved as partners in this process.

- Even as leprosy patients are being cured of the disease, many of them continue to face problems in rehabilitating and re integrating themselves within their communities, and consequently every attempt should be made to bring persons disabled due to leprosy and their rehabilitation within the general ambit of all disabled in the community and within existing community-based rehabilitation programmes.
• At this critical stage in the progress being made towards reaching the target, there is an urgent need for all to step up the coordination and mobilization of the resources needed - finance, manpower and planning for the future. This is particularly important for all partners, including governments, international donors and nongovernmental organizations.

• It is important that research activities in leprosy be continued, especially with regard to the operational aspects, chemotherapy and treatment of complications of leprosy. The understanding of the basic biological mechanisms of this disease is important for developing potential tools that may lead to eventual eradication.

• Countries, as they reach the elimination goal at the national level, should focus their attention on the target of elimination at the sub-national levels, and sustain leprosy treatment and rehabilitation activities. It is important to ensure that services are capable of continuing to detect and treat new cases, and to respond to physical and social needs faced by individuals who have been affected by the disease. The efforts to ensure elimination as a public health problem will lay the foundation for our ultimate vision of the total eradication of leprosy in the future.
REPORT OF THE CONCURRENT MINISTERIAL MEETING HELD IN NEW DELHI DURING THE 2nd INTERNATIONAL CONFERENCE ON THE ELIMINATION OF LEPROSY (Friday, 11 October 1996)

A meeting of health ministers participating in the 2nd International Conference on the Elimination of Leprosy took place at Vigyan Bhawan, New Delhi, on the afternoon of Friday, 11 October 1996. The meeting, under the chairmanship of Mr Saleem I. Shervani, Minister of Health for India, included Ministers of Health from 13 other leprosy-endemic countries (i.e. Brazil, Chad, China, Guinea, Indonesia, Madagascar, Mali, Mozambique, Myanmar, Nepal, Niger, Sudan and Viet Nam), in addition to the Director-General, WHO, three WHO Regional Directors (AFRO, SEARO and WPRO), Director LEP, and representatives of the Sasakawa Memorial Health Foundation.

Dr Hiroshi Nakajima, Director-General, WHO, introduced the topic of the need to strengthen commitment to the goal of eliminating leprosy and also presented the WHO Global Plan of Action to reach this goal. He emphasized the excellent opportunity currently available to eliminate leprosy, particularly in the light of very good progress made, and underlined how the elimination of leprosy would contribute to the overall goal of Health For All. Even though achievements so far were impressive, with a reduction in prevalence of more than 80% since 1986 and the cumulative number of cured exceeding 8 million, the challenges that remained were very considerable. These involved reaching 2 million more patients over the next four years through various means, including Special Action Projects (SAPEL) to meet the needs of underserved populations and Leprosy Elimination Campaigns (LEC) to reach the “hidden” cases. The regional and country distribution of the problem clearly indicated the important role that must be played by SEAR and India. Dr Nakajima indicated that the estimated additional resource requirements to reach the elimination goal stood at US$367 million for the various activities.

The ministers participated actively, seeking clarification on some issues and committing their governments strongly to the goal of eliminating leprosy. The Minister from Sudan raised the question of accessibility of leprosy services in certain areas and the need for involving national NGOs. The Minister from Indonesia pointed out the problem of acceptance of leprosy patients, and emphasized the importance of the intersectoral approach for starting a strong movement towards leprosy elimination. The Minister from Chad raised the possibility of a package of activities to deal with the year 2000 target diseases, and of seeking support from international agencies such as the World Bank. The Minister from Mali questioned the advisability of campaigns for every disease programme, particularly in the light of limited national budgets. He indicated the need for strengthening health infrastructure and involving the community to provide social support. The Minister from China emphasized the need to reach the leprosy elimination level of 1 per 10 000 at all subnational levels through the promotion of community awareness.

Dr Samba, Regional Director for Africa, emphasized the commitment of the Region to attain leprosy elimination despite the complexity of the health situation in Africa. He proposed to contact Heads of State in endemic countries and work out the necessary strategies to reach the
goal. Dr Uton, Regional Director for South-East Asia, proposed to deal with the problem of stigma against leprosy through an intersectoral approach and also to develop strategies to reach low endemic areas. He too expressed the strong commitment of the Region to reach the goal. Dr Han, Regional Director for the Western Pacific, emphasized the strong commitment of the countries in the Region, and the possibility of countries in his Region reaching elimination even by 1998.

After some clarification by Director, LEP, the Chairman concluded by indicating the similarity of the problems worldwide, including specific problems faced when prevalence reaches low levels. In thanking the ministers, regional directors and the Director-General for their very strong commitment, Mr Shervani stated that it was clear to everyone that the goal is achievable provided that we are able to make the extra effort needed. His final statement -- “We are determined - let us send this message to the world” -- summarized succinctly the conclusion of the meeting.
ANNEX II

LIST OF PARTICIPANTS
LISTE DES PARTICIPANTS

COUNTRY DELEGATES
DELEGUES DES PAYS

African Region - Région d’Afrique

Chad/Tchad: His Excellency Mr Kedallah Younous Hamid, Ministre de la Santé publique
Dr Patchou Gakaitangou, Directeur du Programme National de Lutte antilépreuse, Ministère de la Santé publique

Guinea/Guinée: His Excellency Dr Kandjura Drame, Ministre de la Santé
Dr Abdourahmane Sherif, Coordonnateur National du Programme de Lutte contre la Lèpre

Madagascar: Professeur Pascal Soavelo, Ministre de la Santé
Dr D. Rakotondramarina, Coordonnateur National du Programme de Lutte contre la Lèpre et la Tuberculose

Mali: His Excellency Mr Modibo Sidibé, Ministre de la Santé, de la Solidarité et des Personnes Agées
Dr Adama Berthé, Coordonnateur du Programme National de Lutte Contre la Lèpre
Monsieur Dicko Mohamed, Directeur général de la Pharmacie Populaire du Mali
Monsieur Coulibaly Bakary Nana, Directeur général de l’Usine Malienne des Produits Pharmaceutiques

Mozambique: Honorable Dr Aurélio Amando Zilhao, Minister of Health
Dr Alfredo MacArthur, National Programme Manager

Niger: Her Excellency Madame Sambo Abdoulaye Mariama, Ministre de la Santé Publique et des Affaires Sociales
Dr Moussa Mamadou, Coordonnateur National de Lutte Contre la Lèpre

Nigeria: Dr (Mrs) T. O. Sofola, National Coordinator, National TBL Control Programme

Zaïre: Dr Mputu Luengu Boyau, Directeur du Bureau National Lèpre, Ministère de la Santé Publique
American Region - Région des Amériques

Brazil/Brésil:  
Dr Jose Carlos Seixas, Deputy Minister of Health  
Dr Gerson Oliveira Penna, Special Adviser to the Minister  
Dr Maria Leide W. de Oliveira, National Coordinator of Sanitary Dermatology

Mexico/Mexique:  
Dr José Rodríguez Domínguez, Director General de Medicina Preventiva

Eastern Mediterranean Region - Région de la Méditerranée orientale

Egypt/Egypte:  
Dr Al Said Ahmd Aly Aoun, Director-General, Communicable Diseases Control Department, Ministry of Health  
Dr Mohsen Labib Abdel Maguid, Director, Leprosy Control Department, Ministry of Health and National Manager of Leprosy Elimination Programme

Pakistan:  
Dr Qazi A. Saboor Khan, Chief, Ministry of Health  
Dr Ashfaq Ali Khan, Director of Training, National Institute of Leprosy, Marie Adelaide Leprosy Centre

Sudan/Soudan:  
Mrs I. Ghabshawi, Federal Minister of Health,  
Dr Abdulla Ismail, Director General, International Health, Federal Ministry of Health  
Dr Khalafalla Mohammed Ahmed, National Leprosy Control Programme

South-East Asia Region - Région de l’Asie du Sud-Est

Bangladesh:  
Mr Abdul Motaleb Mian, Deputy Secretary (Health), Ministry of Health and Family Welfare  
Dr A.H. Imanuzzaman, Project Director, TB/Leprosy Control Services  
Dr Jalaluddin Ahmed, Assistant Director (Leprosy), Ministry of Health and Family Welfare

India/Inde:  
Mr Saleem Iqbal Shervani, Minister of Health  
Mr P.P. Chauhan, Secretary, Ministry of Health  
Mr P.S. Bhatnagar, Additional Secretary, Ministry of Health  
Dr Narendra Bihari, Director General Health Services  
Dr N.S. Dharmsaktu, DDG(LEP), Ministry of Health & Family Welfare  
Mr A.P.V.N. Sarma, Secretary (Health), Andhra Pradesh  
Mr A.C. Dash, Secretary (Health), Assam  
Dr M.T. Hemareddy, Director (Health Services), Karnataka  
Mr P.K. Mehrotra, Principal Secretary (Health), Madhya Pradesh  
Dr S.R. Salunke, Director (Health Services), Maharashtra
Mrs Meena Gupta, Secretary (Health), Orissa
Dr Ajit Singh, State Leprosy Officer, Bihar
Mr R. Poornalingam, Secretary (Health), Tamil Nadu
Mr Bachchi Lal, Principal Secretary (Health), Uttar Pradesh
Dr Leena Chakravarty, Secretary (Health), West Bengal

Indonesia/
Indonésie: Professor Sujudi, Minister of Health
Dr Hadi M. Abednego, Director-General of Communicable Disease Control and Environmental Health, Ministry of Health.
Dr Yamin Hasibuan, Chief, Sub-directorate of Leprosy Control, Directorate General of Communicable Disease Control and Environmental Health, Ministry of Health.

Myanmar: Col. Than Zin, Deputy Minister of Health
Dr Tin Shwe, Chief, Leprosy Control Programme

Nepal/Népal: Mr Arjun Narasingha K.C., Minister of Health
Dr Jaya Prasad Baral, Chief, Leprosy Control Programme, Department of Health Services, Teku
Dr Kedar Narasingh K.C., Medical Officer, HMG, Ministry of Health, Ramshahpath

Thailand/
Thaïlande: Dr Charoon Pirayavaraporn, Director, Leprosy Division
Dr Krongkarn Dasananjali, Senior Medical Officer, Leprosy Division, Department of Communicable Disease Control, Ministry of Public Health

Western Pacific Region - Région du Pacifique occidental

Cambodia/
Cambodge: Dr Khoun Nguon Heng, Vice Directeur, Centre National Antituberculeux et Antilépreux, Ministre de la Santé
Dr Nuth Sokhon, Under Secretary of State for Health, Ministry of Health

China/Chine Dr Yin Dakui, Vice-Minister of Health
Madame Situ Wen, Programme Officer (Interpreter)
Dr Zhang Guocheng, Director, Department of Leprosy Rehabilitation, National Centre for STD and Leprosy Control, Institute of Dermatology, Chinese Academy of Medical Science, Nanjing
Dr Wan Liya, Department of Diseases Control, Ministry of Health

Philippines: Dr Jesus Abella, Director, Communicable Disease Control Service, Department of Health
Dr Antonio Lopez, Acting Undersecretary of Health, Office for Public Health Services, Department of Health
Viet Nam:  
**Professor Le Ngoc Trong**, Vice Minister of Health  
**Dr Pham Van Hien**, Director of National Institute of Dermato-Venereology, Hanoi  
**Dr (Mrs) Nguyen Thi Hai Van**, Medical Director of Technical Guidance Department

**REPRESENTATIVES OF UN, NONGOVERNMENTAL AND OTHER ORGANIZATIONS**  
**REPRÉSENTANTS DES NATIONS UNIES, ORGANISATIONS NONGOUVERNEMENTALES ET D'AUTRES**

The World Bank Group, New Delhi Office: **Dr Raj Kumar**

American Leprosy Missions (ALM), 1 ALM Way, Greenville, S. C. 29601, USA: **Mr Christopher J. Doyle, President**

Amici de Raoul Follereau, Via Borselli, 40135 Bologna, Italy: **Dr Salvatore Amaro, Member of the Board, and Dr Sunil Deepak, Project Sector**

Association Française Raoul Follereau (AFRF), Rue du Dantzig, B.P. 79, 75722 Paris Cedex 15, France: **Dr Ji Baohong, Secretary, Medical Commission**

Ciba-Geigy Foundation for Cooperation with Developing Countries, Ciba-Geigy Leprosy Fund, P. O. Box, 4002 Basel, Switzerland: **Mrs Penny Grewal**

Damien Foundation Belgium (DFB), Boulevard Léopold II 263, 1080 Brussels, Belgium: **Dr Jean-Pierre Schenkelaars, President (also President of ILEP) and Dr P. Krishnamurthy, Secretary of the Damien Foundation India Trust**

German Leprosy Relief Association (GLRA), Postfach 110462, 97067 Würzburg 11, Germany: **Mr Jayaraj Devadas, India Representative and Dr Thomas Abraham, Medical Adviser**

International Federation of Anti-Leprosy Associations (ILEP), 234 Blythe Road, London W14 0HJ, UK: **Dr J.-P. Schenkelaars, President (also President of DFB) and Mr Paul Sommerfeld, Secretary-General**

International Leprosy Union (ILU), "Gurutrayi" Building, 1779-1784 Sadashivpath, Bharat Scout Ground Compound, Pune 411030, India - **Dr S. D. Gokhale, Chairman, Shri R.H. Belavadi and Dr (Mrs) Neera Sohoni**

International Leprosy Association (ILA) - **Dr Y. Yuasa, President (also Executive & Medical Director, SMHF)**

The Leprosy Mission International (TLMI), 80 Windmill Road, Brentford, Middlesex TW8 0QH, UK: **Mr Trevor Durston, General Director and Dr Cornelius Walter, Director for South Asia**
The British Leprosy Relief Association (LEPRA), Fairfax House, Causton Road, Colchester, Essex CO1 1PU, UK: Mr Douglas Soutar, Programme Manager and Dr K.V. Desikan

International Association for Integration, Dignity and Economic Advancement (IDEA): Dr P.K. Gopal, President for International Relations and Ms Anwei S. Law, Treasurer

Leprosy Relief Organization Munich (AHM), Zennistrasse 45, 80337 Munich, Germany: Mr Max Gruner, Chairman, Mrs Mathilde Gruner, Managing Director and Mr G. Ranga Rao

Leprosy Relief Work Emmaus-Switzerland (ALES), Spitalgasse 9, 3001 Berne, Switzerland: Mrs Rina Perolini Bohner, General Secretary and Dr V.P. Macaden, Adviser to ALES in India

Netherlands Leprosy Relief Association (NSL), Wibautstraat 135, 1097 DN Amsterdam, The Netherlands: Mr L. Zielhuis, Head, Projects Department

The Nippon Foundation, Senpaku Shinko Building, 1-15-16 Toranomon, Minato-ku, Tokyo 105, Japan: Mr Yohei Sasakawa, President and Mr T. Takagi.

Order of Malta, rue N° 604, Maison N° 6, Sangkat Bang Kok2, Khan Tuol Kok, P.O. Box 2388, Phnom Penh, Cambodia: Dr War Sam Nang

World Organization of the Scout Movement, 5 rue du Pré-Jérôme, 1205 Genève, Switzerland: Mrs Bina Chakraborty, Executive Director, The Bharat Scouts and Guides, New Delhi

International Foundation for Dermatology, Department of Dermatology, The Churchill Hospital, Headington, Oxford OX3 7LJ, UK: Dr Terence J. Ryan, Secretary-Treasurer

Rehabilitation International, 25 East 21st Street, New York, N. Y. 10010, USA: Shri Thakur V. Hari Prasad, President

Danish International Development Agency (DANIDA), Assiatisk Plads 2, 1448 Copenhagen K., Denmark: Dr B.F.A.M. Peters, Chief Adviser, Delhi

EXPERTS

Professeur J. Grosset, Faculté de Médecine, Hôpital Pitié-Salpêtrière, 91 Boulevard de l'Hôpital, 75634 Paris Cedex 13, France

Dr M.D. Gupte, Project Officer, CJIL Field Unit for Epidemiology of Leprosy, Indian Council of Medical Research, 271 Nehru Bazaar, Avadi, Madras 600 054, India

Dr R. Jacobson, Director, Clinical Branch and Medical Department, Gillis W. Long Hansen's Disease Center, 5445 Point Clair Road, Carville, LA 70721, USA

Dr H.J.S. Kawuma, Programme Manager, Buluba Leprosy Centre, P.O. Box 1059, Jinja, Uganda
Professor M.F. Lechat, 109, EUROCAT, Epidemiology Unit, Institute of Hygiene & Epidemiology, rue Juliette Wytsman 14, 1050 Brussels, Belgium

Professor Le Kinh Due, Viet Nam Leprosy Control Programme, Vien D Lieu - B.V. Bach Mai, Hanoi, Viet Nam

Dr Li Huan Ying, Leprosy Unit, Beijing Tropical Medicine Research Institute, 95 Yong An Road, Beijing, People's Republic of China

Dr Gerson F. Mendes Pereira, Av. Brigadeiro Luis Antonio, 1884, Edificio Jardim das Americas, Entrada Mexico, 5º Andar, Apto. 55, Sao Paulo, Brazil

Dr C.K. Rao, Greenlands, Devara Yernjal, (via) Hakimpet, Hyderabad, Secunderabad, AP 500014, India

Dr J. Rodriguez Dominguez, Director-General of Preventive Medicine, Ministry of Health, Mexico City, Mexico

Dr W. Cairns Smith, Department of Public Health, University of Aberdeen, Polwarth Building, Foresterhill, Aberdeen, AB9 2ZD, Scotland

Dr Wim H. van Brakel, Project Director, Leprosy Project, International Nepal Fellowship, Post Box 5, Pokhara 33701, Nepal

Dr M. Virmond, Instituto "Lauro de Souza Lima", Caixa Postal 62, C.E.P. 17001, Bauru, SP Brésil

**WHO Representatives - Représentants de l'OMS**

**Guinea/ Guinée:**

Dr T. M. Aby Sy, Boîte postale 817, Conakry

**Nigeria:**

Dr E. K. Njelesani, P. O. Box 2152, Lagos

**India/Inde:**

Dr N. K. Shah, Nirman Bhavan, Room 533-35, “A” Wing, Maulana Azad Road, New Delhi 110011

**Indonesia/Indonesie:**

Dr Robert J. Kim-Farley, P. O. Box 1302, Jakarta 1035

**Myanmar:**

Dr Klaus Wagner, P. O. Box 14, Yangon

**WHO Secretariat - Secrétariat de l'OMS**

**AFRO:**

Dr E. M. Samba, Directeur régional, Brazzaville
Dr Bidé Landry, Consultant, Lèpre, Brazzaville
Dr A.S. Diallo, Consultant, Lèpre, Mali
AMRO: Dr Stephen Corber, Director, Disease Prevention and Control, Washington  
Dr Clovis Lombardi, Regional Adviser, Leprosy, PWRO, Brazil

EMRO: Dr M.H. Wahdan, Assistant, Regional Director, Alexandria  
Dr N. I. Neouimine, Regional Adviser, Integrated Control of Diseases, Alexandria

SEARO: Dr Utan Muchtar Rafei, Regional Director, New Delhi  
Dr A. Louhenapessy, Medical Officer, Leprosy, New Delhi  
Dr D. Lobo, Leprosy Adviser, Bangladesh

WPRO: Dr S.T. Han, Regional Director, Manila  
Dr L. Blanc, Regional Adviser, Chronic Diseases, Manila

HQ: Dr H. Nakajima, Director-General  
Dr S.K. Noordeen, Director, LEP  
Mrs J. Bell, Administrative Assistant, LEP  
Mr J. Bland, Consultant, LEP  
Dr D. Daumerie, Medical Officer, MEE/LEP  
Dr S. Lyons, Consultant, MEE/LEP  
Dr Myo Thet Htoon, Medical Officer, LEP  
Dr S.J. Nkinda, Medical Officer, CBH/LEP  
Dr V. Pannikar, Medical Officer, LEP

Sasakawa Memorial Health Foundation Secretariat - Secrétariat de Sasakawa Memorial Health Foundation

Dr Y. Yuasa, Executive and Medical Director  
Prof. K. Kiikuni, Executive Managing Director  
Mrs K. Yamaguchi, Manager, International Programme Division  
Mr S. Suzuki, General Manager, General Affairs Division

* * *
ANNEX III

COUNTRY PRESENTATIONS

South-East Asia:

India: Short-term targets are to achieve less than 1 case per 10,000 in individual states and to provide MDT at all health centres. Elimination is possible if 100% MDT is achieved and if the MB proportion is not greater than 20%; a decline in the detection of new cases is also required.

Myanmar: Leprosy prevalence has declined over the past ten years, and case detection is declining after a peak in 1992. The programme is integrated and includes the prevention of disability as well as rehabilitation. It is estimated that the elimination goal will be reached by 1999.

Nepal: In 1995-96, 100% geographical coverage has been achieved. Strong political commitment has been made to reach the elimination goal by the year 2000.

Thailand: The elimination target has been reached in the country as a whole but six provinces have still to attain the target. The plan now is to improve early detection and prevention of disability.

Bangladesh: A countrywide programme has been established with the involvement of NGOs. Improvements in drug supply, case detection and disability prevention are planned. A continuing problem of the gap between estimated and registered cases is being addressed through SAPEL and LEC.

Indonesia: The prevalence rate is continuing to fall, and SAPEL and LEC will be used to improve case detection. There are difficult-to-reach patients, and social stigma continues to create difficulties for the programme. An intersectoral approach is being used to strengthen the programme.

Africa:

Nigeria: MDT coverage of 100% has now been achieved and case detection includes the mopping up of backlog cases. It is estimated that by 1999 the number of cases will be less than 10,000. SAPEL and LEC projects are being implemented to solve existing problems.

Zaire: Endemicity varies throughout the country. There are a number of difficulties which include inaccessible areas and nomadic groups; it is hoped that SAPEL will provide solutions to these difficulties.

Mozambique: The leprosy programme has been affected by the civil unrest, in that health facilities were destroyed and many people displaced. Now a specific elimination programme using MDT has been established which has resulted in a fall in prevalence and an increase in cases detected. It is predicted that MDT coverage of 100% will be achieved in 1997.
Mali: The specific goals are to achieve 100% geographical coverage of the programme with decentralization and integration of the programme. Two regions are at present not covered, but all other regions have 100% MDT coverage.

Madagascar: The programme coverage is 50% but the MDT coverage is 100%. The prevalence has fallen and case detection has increased since 1991. It is planned to increase programme coverage to 80% in 1997 and to introduce a LEC project.

Chad: Programme coverage is 63% but MDT coverage is 96% in the areas covered. The prevalence has been reduced but new cases detected have increased since 1992. It is planned to achieve the elimination goal in 1999 and to use SAPEL and LEC to address specific issues such as nomadic groups.

Niger: There are a number of challenges which must be tackled to achieve the elimination target, for example, limited coverage of health services, inaccessible areas, untrained staff and lack of transport. LEC will be developed in 1997. The support of partners is essential to overcome these challenges.

Guinea: There is a high endemicity rate in the country (5 per 10 000). There is also a high proportion of children among the new cases detected. There are problems of refugees from neighbouring countries. SAPEL and LEC will be used to improve the programme. Our partners from France and Switzerland, as well as WHO, have helped to support the leprosy programme.

The Americas:

Brazil: The programme is integrated, but is combined with dermatology in the urban areas. The LEC will be implemented in major cities and the high defaulters rate will be reviewed and the procedures simplified.

Mexico: The prevalence rate has fallen since 1990 while new cases detected have increased since 1989. Five states still have prevalence rates greater than 1 in 10 000. Intensification of the programme and training is planned for areas which have not achieved the elimination goal. Disability prevention activities are being planned.

Eastern Mediterranean:

Sudan: There has been an intensification of the leprosy programme since 1992 resulting in greater case detection rates. The political commitment has led to the setting of ambitious goals for the whole country. The main difficulties are reaching inaccessible and insecure areas and six SAPEL projects have been launched to overcome these problems.

Egypt: The elimination target has been achieved at national level but not yet in four provinces. These provinces are the focus for the programme to intensify activities to achieve elimination in all provinces of the country.

Pakistan: Programme objectives take account of the current situation, in which countrywide elimination has been achieved but not yet in all districts. More attention is being paid to the prevention of disability.
Western Pacific:

**Philippines**: The prevalence of leprosy is falling rapidly and it is predicted that the elimination goal will be achieved by 1998. LEC will be carried out in six provinces and a SAPEL project in areas of some civil disorder.

**Viet Nam**: The programme target of elimination has been achieved. The prevalence rates remain high in high plateau and mountainous areas. A SAPEL project will be used to reach patients in these areas in cooperation with WHO and NGOs.

**Cambodia**: The short-term goal is to eliminate leprosy in 10 states by 1997 by implementing MDT services in every health service. Prevention of disability activities will also be strengthened. The programme is now integrated with the tuberculosis programme at the central level. SAPEL is planned for 12 provinces with security problems, and LEC in seven provinces.

**China**: The elimination goal has been achieved at national level but endemic pockets remain in Guizhou, Sichuan and Yunnan provinces. The programme focuses on these provinces, where SAPEL will be used. Patients relapsing after monotherapy constitute a problem and re-treatment with MDT is required. Rehabilitation activities are being developed with support from international organizations.