SEAMEO REGIONAL TROPICAL MEDICINE AND PUBLIC HEALTH NETWORK

Chamlong Harinasuta

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The SEAMEO Regional Tropical Medicine and Public Health Network (SEAMEO-TROPMED) is a regional cooperative network established in 1967 for education, training and research in tropical medicine and public health in Southeast Asia (TROPMED) under the auspices of the Southeast Asian Ministers of Education Organization (SEAMEO). This year, 1992, is thus its 25th anniversary.

SEAMEO-TROPMED consists of the TROPMED Central Office of the Governing Board, ie the Central Coordinating Board located in Bangkok and a network of TROPMED Centers in Indonesia, Malaysia, Philippines and Thailand. The Governing Board is composed of representatives from each of the Member Countries nominated by their respective Ministers of Education. The Secretary-General/Coordinator of the Network is appointed by SEAMEC. Policy making, program approval and overall review of the Network are carried out by the Governing Board, while the executive function lies with the TROPMED Central Office.

The TROPMED Central Office headed by the Secretary-General/Coordinator and his staff performs administrative, technical and coordination functions for the Network, ie processes scholarships, organizes seminars and technical meetings, and operate publications, information services, personnel exchanges and technical services.

Changing patterns of diseases in Southeast Asia

Four main factors that contribute critical changes of health patterns in Southeast Asia include illiteracy, poverty, diseases and fertility which still cause a vicious cycle of poor environmental rural and urban communities as shown in the following chart:

At present, the vital causes of diseases in Southeast Asian countries can be categorized in groups according to their priorities as follows:

1. Emerging of industrial, agricultural and environmental hazards due to rapid growth of socioeconomic development in many Southeast Asian Countries (to be "NICS" = new industrial countries, and rural communities using more various kinds of new fertilizers and pesticides in agricultural practices).

2. Increasing number of elderly people which causes more cases of chronic degenerative diseases and problems including hypertension, diabetes mellitus, stroke-associated paresis, arteriosclerotic coronary heart diseases, chronic osteo-arthritis, cancer of various organs, etc.

3. Increase in social-behavioral diseases including AIDS (Acquired Immunodeficiency Syndrome), drug addition with heroin, marihuana, vapors, etc, alcoholism, motor cycle and motor car accidents, high motor vehicle density causing psychoneurosis problems to the local people in capital cities.

4. Tropical and infectious diseases are still prevalent among rural people including mosquito-borne diseases, ie malaria, filariasis, dengue hemorrhagic fever, Japanese encephalitis, hookworm infections, schistosomiasis japonicum and S. mekongi infections, etc.
Current TROPMED programs and activities

The major subjects of SEAMEO-TROPMED implemented annually include:
1. 19 post-graduate regional teaching courses, ie 4 diploma courses, each of 6 months; 11 master degree courses, each of 10 months, 12 months or 2 years; and 4 doctoral degree courses, each of 3 years; about 150-160 trainees yearly.
2. One regional seminar and one technical meeting.
3. Personnel exchanges, including about 20 doctors and medical scientists.
4. Annual publications of the Southeast Asian Journal of Tropical Medicine and Public Health (4 issues) and TROP MED Newsletter (4 issues).
5. The research and development are performed in many tropical diseases and public health problems separately and individually in the 4 TROP MED Centers of Indonesia, Malaysia, Philippines and Thailand, using their own budgets. Some of the same research projects are performed simultaneously in 4 TROP MED countries in order to compare their results in different environments.

Summary of TROP MED programs and activities in the next decade

1. The 4 TROP MED Centers in Indonesia (TROP MED/Indonesia in Jakarta), in Malaysia (TROP MED/Philippines in Manila), and in Thailand (TROP MED/Thailand in Bangkok) have been upgraded to be the Regional Centers (RC), each for specialized subjects in Tropical Medicine and Public Health, ie in Indonesia to be RC in “Community Nutrition”, in Malaysia to be RC in “Medical Microbiology, Parasitology and Entomology”, in Philippines to be RC in “Public Health, Hospital Administration Occupational Health and Environmental Health”, and in Thailand to be RC in “General and Clinical Tropical Medicine, and Tropical Pediatrics”.

2. The 19 regular TROP MED post-graduate teaching courses:

<table>
<thead>
<tr>
<th>Country</th>
<th>Course Code</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>DComNutr</td>
<td>6 months</td>
</tr>
<tr>
<td></td>
<td>MScComNutr</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td>PhDNutr</td>
<td>3 years</td>
</tr>
<tr>
<td>Malaysia</td>
<td>DMedMicrob</td>
<td>6 months</td>
</tr>
<tr>
<td></td>
<td>DAP&amp;E</td>
<td>6 months</td>
</tr>
<tr>
<td></td>
<td>MScParasit or Entomol or MedMicrob</td>
<td>2 years</td>
</tr>
<tr>
<td>Philippines</td>
<td>MPH</td>
<td>12 months</td>
</tr>
<tr>
<td></td>
<td>M HospAdm</td>
<td>12 months</td>
</tr>
<tr>
<td></td>
<td>MOccHlth</td>
<td>10 months</td>
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<tr>
<td></td>
<td>MScPH</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td>MScPH(Epid)</td>
<td>2 years</td>
</tr>
<tr>
<td></td>
<td>DrPH</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>D TM&amp;H</td>
<td>6 months</td>
</tr>
<tr>
<td></td>
<td>M ClinTropMed</td>
<td>12 months</td>
</tr>
<tr>
<td></td>
<td>M ClinTropMed (TropPed)</td>
<td>12 months</td>
</tr>
<tr>
<td></td>
<td>M ScTropMed</td>
<td>2 years</td>
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<td></td>
<td>Ph DT ropMed</td>
<td>3 years</td>
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<td></td>
<td>Ph DC linTropMed</td>
<td>3 years</td>
</tr>
<tr>
<td></td>
<td>MPH UrbHlth</td>
<td>10 months</td>
</tr>
<tr>
<td></td>
<td>MScMedEpid</td>
<td>12 months</td>
</tr>
</tbody>
</table>

3. Many important short-term training courses, each of 2-4 weeks duration; recent examples are:

1. In Jakarta:
   (i) Management, planning, monitoring and evaluation in community nutrition (3 weeks)
   (ii) Nutritional epidemiology (3 weeks)
   (iii) Food safety and food control (3 weeks)
2. In Kuala Lumpur:
   (iv) Modern biotechnology in tropical disease research (2 weeks)
   (v) Mosquito vector biology and control (2 weeks)
   (vi) Clinical and experimental pathology in some important tropical diseases (3 weeks)
3. In Manila
   (vii) Epidemiological approaches to health care management (4 weeks)
   (viii) Health promotion and health education in the context of primary health care (3 weeks)
   (ix) Studies on occupational and environmental health (4 weeks)
4. In Thailand:
   (x) Clinical tropical pharmacology (2 weeks)
   (xi) Diagnosis, clinical management and control of diarrheal diseases in children (2 weeks)
   (xii) Research design and methodology in social and behavioral aspects of some important tropical diseases (4 weeks)
5. In Singapore in the Department of Community, Occupational and Family Medicine, National University of Singapore under the ASEAN Scholarship Programme for Applied Tropical
SEAMEO Regional Tropical Medicine and Public Health Network

TROPMED Governing Board
- Teaching and Training-Postgraduate courses
TROPMED Central Office
- Research and Development
- Technical Meetings and Seminars
Secretary-General/Coordinator
- Personnel Exchanges
- Technical Consultant Services
- Publications and Information Services
(Southeast Asian Journal of Tropical Medicine and Public Health, TROPMED Newsletter, etc)

TROPMED CENTERS

<table>
<thead>
<tr>
<th>Indonesia</th>
<th>Malaysia</th>
<th>Philippines</th>
<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Center</td>
<td>Institute for</td>
<td>College of</td>
<td>Faculty of</td>
</tr>
<tr>
<td>for Nutrition,</td>
<td>Medical Research,</td>
<td>Public Health,</td>
<td>Tropical</td>
</tr>
<tr>
<td>University of</td>
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<td>University of the Philippines,</td>
<td>Medicine,</td>
</tr>
<tr>
<td>Indonesia,</td>
<td></td>
<td>Manila</td>
<td>Mahidol</td>
</tr>
<tr>
<td>Jakarta</td>
<td></td>
<td></td>
<td>University</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>Bangkok</td>
</tr>
</tbody>
</table>

REGIONAL SPECIALIZATION

- Community Nutrition
- Medical Microbiology, Parasitology, and Entomology
- Public Health Hospital Administration
- Occupational Health and Environmental Health
- General and Clinical Tropical Medicine Tropical Pediatrics

TRAINING PROGRAMS

<table>
<thead>
<tr>
<th>Indonesia</th>
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<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>DComNutr</td>
<td>DMedMicrobiol</td>
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</tr>
<tr>
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<td>PhD Nutr</td>
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<td>MScPH</td>
<td>MScTropMed</td>
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<td></td>
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<td>MScPH(Epid)</td>
<td>PhD TropMed</td>
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<tr>
<td></td>
<td></td>
<td>DrPH</td>
<td>PhDClinTropMed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MPH Urban Health</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MSc Med Epid</td>
</tr>
</tbody>
</table>

Medicine and Public Health:
(xiii) Environmental Toxicology (2 weeks)
(xiv) Epidemiology of non-communicable diseases (3 weeks)
(xv) Health economics for effective health planning (2 weeks)

Summary of SEAMEO-TROPMED accomplishments from 1967 to 1991

(25 years) is as follows:

1. Training of 2,314 physicians and medical scientists under 17 post-graduate teaching courses.
2. TROP MED Scholars in FY 1991/1992 are 130 in number:

<table>
<thead>
<tr>
<th>Country</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Indonesia</td>
<td>18</td>
<td>11</td>
<td>29</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>7</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>Malaysia</td>
<td>11</td>
<td>13</td>
<td>24</td>
</tr>
<tr>
<td>Philippines</td>
<td>4</td>
<td>27</td>
<td>31</td>
</tr>
<tr>
<td>Thailand</td>
<td>15</td>
<td>23</td>
<td>38</td>
</tr>
<tr>
<td>Total</td>
<td>56</td>
<td>74</td>
<td>130</td>
</tr>
</tbody>
</table>

3. In early 1992, 14 medically-oriented personnel from Cambodia were trained under a 6-week short course at the Faculty of Tropical Medicine, Mahidol University, Bangkok at the request of USAID-Office of Khmer Affairs and World Vision Cambodia. The course was designed to improve their ability to diagnose and to treat diseases commonly found in Southeast Asia. Twenty paramedical personnel underwent an 8-week training course in basic midwifery at the Faculty of Nursing, Siriraj Hospital, Mahidol University, Bangkok during April-July 1992.

4. Under the TROP MED Personnel Exchange Program in the past 25 years, 595 staff of the TROP MED countries Indonesia, Malaysia, Philippines and Thailand were involved, acting as visiting lecturers, external examiners of various teaching courses, in-service training for young scientists, attending workshops and short-teaching courses, research apprenticeships, etc.

5. A total of 195 specialists from academic institutions in USA, UK, Australia, Germany, France, Netherlands, Japan, WHO and other international organizations were assigned as technical consultants to the 4 TROP MED countries on research and training programs and participated in many TROP MED regional seminars, conferences and technical meetings.

6. Publication of scientific papers and academic information dissemination through The Southeast Asian Journal of Tropical Medicine and Public Health (a quarterly periodical, now 23 volumes of 92 issues), and TROP MED Newsletter (a quarterly bulletin, now 3 volumes of 12 issues). More than 45 volumes of the proceedings of seminars, conferences and technical meetings have also been published.

7. Assistance from Academic Institutions and Organizations

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(1) **Assistance from personnel:** During the period of developing TROP MED in 1967-1980, many friendly countries and institutions were approached to assist in the development. The approaches were made firstly through our consultants who were senior foreign doctors in developed countries. Two particular great friends were Professor BG Maegraith (from Liverpool School of Tropical Medicine, UK) on teaching and research in endemic tropical diseases and administration work of TROP MED/Thailand and SEAMEO-TROP MED during 1967-1980; Professor Manabu Sasa (from the University of Tokyo, Japan), on parasitology, entomology and tropical medicine during 1967-1978. Two persons in the USAID Office for Regional Education Development Affairs, US Embassy, Bangkok, who were of a great help to TROP MED were Mr Lee St Lawrence, Chief, and Dr Robert Jacobs, Education Adviser (1967-1980).

(2) **The UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (WHO TDR Programme)** in Geneva assisted the 4 TROP MED National Centers of Indonesia, Malaysia, Philippines and Thailand by institutional strengthening during 1979-1984, providing consultants, equipment and supplies, scholarships and staff training abroad in developed countries, funds to support field research, and funds to strengthen the institutions. The WHO TDR Programme also donated funds for various research projects during 1978-1990. The assistance to Indonesia was on research in filariasis and parasitic diseases; to Malaysia for strengthening research and training capabilities in immunology, entomology, epidemiology and biostatistics of tropical diseases; to the Philippines on research and training on malaria, schistosomiasis, leprosy; to Thailand on development of research and training in epidemiology, and social and economic aspects of tropical diseases using malaria as a model for development etc.

TROP MED/Malaysia has been designated since 1978 by the WHO Western Pacific Regional Office (WPRO) as the WHO Regional Centre for Research and Training in Tropical Diseases and Nutrition.

(3) **The ASEAN Scholarship Program for Applied Tropical Medicine and Public Health** donated by USAID commenced in July 1981 and extended to
June 1992 (11 years). This Program for Health Manpower Development at the academic level in Southeast Asia, operated by supporting the existing TROPMED Regional post-graduate teaching courses conducted in Indonesia, Malaysia, Philippines and Thailand. The funds each year were to the amount of US$500,000, representing about 50-60% of the total Special Funds of SEAMO-TROPMED.

(4) Linkages with other academic and research institutions. Since its establishment in 1967, TROPMED has worked in cooperation and coordination with various governmental, regional and international institutions and organizations. The TROPMED Central Office as well as each of the 4 TROPMED National Centers of Indonesia, Malaysia, Philippines and Thailand, has established its own efforts and process for seeking funding support for institutional strengthening from appropriate friendly donors. The cooperation and assistance have been in the form of experts and consultants, fellowship funds for staff development, exchange of scientific materials, publications and information, exchanges of professors and joint research funds. At present the governments, institutions, organizations and agencies that are extending their assistances to TROPMED include:

(i) Germany: GTZ and DAAD.
(ii) UK: Liverpool School of Tropical Medicine, Liverpool.
(iii) France: Institut Pasteur; Laboratoire de Parasitologie Biomedical; Hospital Salpetrière, Paris; Immunology Research Unit, Marseille; Institut National D'Information Scientifique et Technique.
(iv) Canada: University of Manitoba (with TROPMED/Indonesia), University of Ottawa (with TROPMED/Malaysia, Memorial University of Newfoundland (with TROPMED/Philippines), University of Calgary (with TROPMED/Thailand); International Development Research Centre (IDRC).
(v) Australia: Tropical Health Program, University of Queensland and Queensland Institute of Medical Research, Brisbane.
(vi) Russia: Martsinovsky Institute of Medical Parasitology and Tropical Medicine (MIMPTM).
(vii) Austria: Faculty of Medicine, University of Innsbruck.
(viii) Netherlands: Funds for Scholarship Programs in the Region, and Netherlands Literature Program.

(5) Roche Asian Research Foundation, Hong Kong
This private organization has continued grant in-aid support for publication of the Southeast Asian Journal of Tropical Medicine and Public Health since 1977 (about 40-50% of the expenses). Moreover, the organization also extended its financial support to physicians and medical scientists from non-SEAMEO countries such as Burma, Sri Lanka, India, etc to participate in some TROPMED seminars and technical meetings.

SEAMO-TROPMED Assistance to Lao PDR, Cambodia and Vietnam
Since 1991, SEAMO-TROPMED has given assistance in the development of health manpower resources to Lao People's Democratic Republic (PDR), Cambodia and Vietnam as follows:

Lao PDR
In 1991, 3 Lao doctors from the Ministry of Health and Social Welfare were awarded TROPMED Scholarships to attend the 6 month post-graduate teaching course leading to Diploma in Applied Parasitology and Entomology (DAP&E) at TROPMED/Malaysia in Kuala Lumpur, ie 2 scholarships from the New Zealand Government and 1 scholarship from the Malaysian Government.

In 1992, more 14 Lao doctors from the National Institute of Malaria and Parasitic Diseases; the National Institute of Hygiene and Epidemiology; the Faculty of Medicine, University of Medical Science; and the Department of Preventive and Curative of the Ministry of Health and Social Welfare were awarded scholarships to attend post-graduate teaching courses at various TROPMED Centers as follows:

2. Diploma in Applied Parasitology and Entomology, Kuala Lumpur (6 months), April - September 1992; 2 candidates, scholarships from the German Government (DAAD).
In addition, 1 candidate was awarded a WHO scholarship to attend this course.

3. Diploma in Tropical Medicine and Hygiene, Bangkok (6 months), April-September 1992; 1 candidate, scholarship from the Government of New Zealand.

4. Master of Clinical Tropical Medicine, Bangkok (12 months), April 1992-March 1993; 3 candidates, scholarships from the German Government (DAAD).

5. Master of Science in Tropical Medicine, Bangkok (2 years), beginning June 1992; 1 candidate, scholarship from the Government of New Zealand; 4 candidates scholarship from the German Government.


Cambodia

Through a special contract with the USAID Khmer Affairs Office in Bangkok, one USAID scholarship was awarded to a medical officer from Cambodia to attend the 10-month course (May 1992 - March 1993) leading to Master of Public Health Urban Health (concentrating more on Primary Health Care) at the Faculty of Public Health, Mahidol University, Bangkok.

In addition, WHO awarded 2 scholarships to 2 health officials from the Institute of Malariology in Phnom Penh to attend the 6-month course leading to Diploma in Applied Parasitology and Entomology (DAP&E) during April-September 1992 at the Institute for Medical Research, Kuala Lumpur.

Vietnam

One scholarship from the SEAMEO TROP-MED/GTZ Community Nutrition project in Jakarta has been awarded to a candidate from the Food Processing and Storage Section, Ministry of Agriculture, Hanoi, Vietnam to attend the 6-month course leading to Diploma in Community Nutrition (DComNutr) at TROPMED/Indonesia, University of Indonesia, Jakarta.

CONCLUSION

SEAMEO-TROPMD commenced the 5th Five-Year Plan in July 1990 to continue the policy of Human Resource Development for Southeast Asia, with special emphasis on further extension of assistance in rehabilitation of the three countries of Lao PDR, Cambodia and Vietnam.

The TROPMD motto is: “To learn together, to solve problems together, to share and to gain experience and knowledge from each other are what medical scientists and clinicians in Southeast Asia benefit from SEAMEO-TROPMED training, research, seminars and personnel exchange programs. Their strength has been joined in cooperative endeavor to improve the health and standard of living of the people in Southeast Asia”.

“Healthy Economy needs Healthy Community”