



SPECIAL PROGRAMME FOR RESEARCH AND
TRAINING IN TROPICAL DISEASES

REPORT OF THE FIRST MEETING OF THE
RESEARCH STRENGTHENING GROUP

Geneva, 24-28 October 1977

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SUMMARY

The first meeting of the Research Strengthening Group (RSG) of the Special Programme for Research and Training in Tropical Diseases was held in Geneva to determine the main policy guidelines for the institution strengthening and training activities which will contribute to the development of self-reliance in research and training in the tropical countries.

To achieve this objective, the RSG specified the following main policy guidelines:

- strengthening of research and training institutions in tropical countries;
- support of training of persons from tropical countries;
- assistance in the diffusion, interpretation and integration of new knowledge;
- contribution to the rapid transfer to the affected countries of the relevant knowledge, technology and skills

The Group emphasized the need for collaboration with national and regional bodies, specified the contribution that institutions and scientists from non-tropical countries

could make in increasing the research capability of tropical countries and considered the basic requirements necessary for carrying out the Programme's institution strengthening and training activities in tropical countries.

Specific procedures were established for carrying out the policy guidelines of the RSG. The Group emphasized the necessity of clear commitments by governments and institutions in tropical countries to promote health research, particularly research relevant to the control of the six diseases, and urged that a prerequisite for Programme support be firm governmental commitment to the progressive assumption of responsibility for activities strengthened by the Special Programme. The latter would assist tropical countries to develop their own research resources in relation to disease control, to develop career structures in relation to availability of research resources, and to link the selection of research workers for advanced training to identifiable posts.

The underlying requirement of all training and institution strengthening activities is to attract individuals of intellectual quality to training and research in tropical diseases. Thus, first priority was given to the need to identify and make best use of trained scientists available in the tropical countries and regions, and to support the training of scientists and technicians of the highest quality. The RSG established operational guidelines for carrying out training activities and considered criteria for the evaluation of training.

Institution strengthening activities will lead to the creation of a network of centres collaborating within the Special Programme. The network will be widely distributed in areas where the six diseases are endemic to meet the objectives of the Special Programme, the ultimate objective being a balanced network covering all endemic areas. These centres will be used as sites for both research and training activities. The RSG defined criteria for selection of Special Programme network centres and criteria for the evaluation of institution strengthening activities.

The Group reviewed and approved various pilot activities undertaken in 1977. Several proposals for participation as Special Programme network centres were examined and given preliminary approval, and the Secretariat was urged to expand its efforts in identifying other potential research and training centres in endemic areas. Other proposals were deferred until the next meeting of the RSG in 1978.

The RSG approved the 1978 budget of US \$3,600,000 as submitted.

An Executive Sub-Group was constituted and authorized to make grants for pilot activities on a short-term basis.

scope to a specific task. RSG activities will thus be developed in close consultation with governments, Regional Advisory Councils on Medical Research (ACMRs) and other appropriate regional bodies.

The RSG will endeavour to match its activities to SWG needs so as to develop an adequate infrastructure in the affected countries to implement SWG strategic plans. Furthermore, the RSG intends to actively strengthen the scientific communities in tropical countries so as to enable them to participate increasingly in SWG activities. The SWGs should identify those institution strengthening and training needs required by their strategic plans in tropical countries, as well as the general training needs in the affected countries. They should give specific attention to involving scientists from the Special Programme network centres in their activities. The combined activities of the SWGs and the RSG should help to promote the worldwide collaboration so necessary to effective accomplishment of the Special Programme objectives.

The RSG considered that the underlying requirement of all training and institution strengthening activities is to attract individuals of intellectual quality to training and research in tropical diseases. They appreciated that no organizational or administrative structure could ensure this, but that this requirement should be the guiding principle in the selection of individuals for training or staff for Special Programme centres.

3.1 Collaboration with national and regional programmes

To render the Programme most effective:

- (a) RSG activities will be implemented in close collaboration with the appropriate national and regional authorities, so as to facilitate the implementation of decisions and the negotiation of clear commitments by governments and institutions in tropical countries to promote health research, particularly research relevant to the control of the six diseases.
- (b) A prerequisite for Programme support should be a firm governmental commitment to the progressive assumption of responsibility for activities strengthened by the Special Programme so that countries can develop their own research resources in biomedical and other relevant sciences; career structures should be developed in which posts are linked to the availability of research resources; and, whenever possible, the selection of research workers for advanced training should be clearly linked to identifiable posts. Before selection for advanced research training, for example, for a Ph.D. programme, candidates should normally have had at least a year of practical experience involving research so as to provide evidence of interest and aptitude.
- (c) Only national or regional institutions or the national component of research institutions in tropical countries will be eligible for institutional strengthening. Institutions which include a significant percentage of staff foreign to the country or the region will receive support only if they present a satisfactory plan for the development of local self-sufficiency in research with particular reference to the provision of career posts, the effective use of qualified local personnel and the training of counterparts to replace at least a high proportion of foreign staff.

3.2 Basic requirements for strengthening institutions in tropical countries

3.2.1 Scientists

The first priority must be to identify and make the best use of the trained scientists available in the country or region and to rectify any deficiencies in their

education, training or experience. In order to obtain scientists of high quality, each individual's requirements for training should be examined in relation to training resources available locally and internationally. Whenever possible, the scientist should be trained to fulfil a specific research or training task relevant to the Programme. In order to recruit scientists with the necessary potential, the country or institution must provide a sufficiently attractive career and salary structure.

3.2.2 Technicians

The provision of technicians of high quality in tropical countries is essential for the pursuit of effective research. In many tropical countries the role of technicians is poorly appreciated and the career of technician is unattractive to those with the necessary secondary education because of poor status, poor pay and/or poor career prospects. For institution strengthening to be effective, the country or institution must rectify these problems. Carefully selected technicians should receive training and experience in first class institutions (if necessary in non-tropical countries) to provide a nucleus of teachers for training programmes in their own countries. WHO should encourage and promote these aims.

3.2.3 Other requirements

Other requirements which must be met to achieve effective research are:

- (a) The provision of resources for the improved planning and analysis of research Assistance in planning research and in writing research grant proposals should be made available when necessary. Planning and analysis of research requires statistical consultant services - particularly for surveys, surveillance and other long-term studies. Posts should be created and statisticians should be trained specifically to meet national and regional needs in these areas. Initially, some of them will probably have to come from non-tropical countries, but urgent steps should be taken to select suitable candidates from tropical areas for special training and on-the-job experience in good centres with wide-ranging activities of this type.
- (b) Equipment maintenance throughout most of the tropics is inadequate. Valuable equipment, much of it of the type needed for research in the Special Programme, is either non-functioning or malfunctioning. Means must be devised for regular and efficient maintenance of equipment. Technician training must include training in the repair and maintenance of equipment*, and adequate workshop facilities must be made available. The availability of adequate servicing should be a condition for the purchase of major equipment.
- (c) The network should develop protocols and reagents for quality control systems to maintain a check on the reliability of laboratory, clinical and field data.
- (d) Library resources and documentary capabilities should be developed and supported to facilitate the diffusion of knowledge throughout the health sector.
- (e) Animal house facilities will often have to be improved physically, in operation and in management. Technicians must be trained in animal house management.
- (f) Sound administration and management must be developed in all institutions supported by the Programme. Appropriate management training will be provided when necessary for senior laboratory technicians and scientists in the Programme. Adequate provisions for laboratory safety will be required. In regard to investigation on human subjects, it will be necessary to establish a properly constituted Ethical Committee, especially in relation to clinical and field trials.

* Courses are being developed for this purpose, but need to be strengthened and their use expanded.

3.3 Contribution of institutions and scientists from non-tropical countries

The RSG will seek to improve and expand the contribution of scientists and institutions in non-tropical countries to increase the research capability of tropical countries.

Selected institutions in non-tropical countries, whether academic, governmental or industrial, will be asked to:

- train selected research workers from tropical countries in specific subjects for which appropriate training opportunities are not available in tropical countries;
- collaborate, particularly within the network, with institutions in tropical countries to strengthen their research and training activities.

Institution strengthening by the RSG is limited to centres in tropical countries. If national or regional scientists are not available, scientists from any country may be recruited. When such research workers are recruited from outside an affected region, secondment from their home institutions will be preferred to appointment as WHO staff. Arrangements will always be made for counterpart training for national posts.

To enable more competent scientists to spend periods of time in tropical countries, "twinning" agreements between institutions will be encouraged. Such agreements should provide for exchange of research staff between the institutions and for joint research projects and training programmes.

3.3.1 Training

The Special Programme will, in certain circumstances, support the training of research workers from tropical countries in institutions in non-tropical countries. Accepting that as much training as possible should be in the tropical countries themselves and that maximum use should be made of Special Programme network centres in tropical countries, there are a number of circumstances where training in non-tropical countries will be necessary. Such circumstances may arise when training in such fundamental subjects as parasitology, epidemiology or entomology are not available in the country or region or when advanced training in highly specialized disciplines, such as immunology, clinical pharmacology or molecular biology, is required. In particular, institutions in non-tropical countries should provide advanced training and research experience for the leaders or potential leaders of research teams in the tropics, and for teachers who will later provide training locally.

3.3.2 Career structures

Scientists in developed countries with interest, quality and relevant expertise in tropical diseases are small in number in relation to the scale of tasks of the Special Programme and they must therefore be used as effectively as possible. In this respect, more scientists of quality are essential and at least some of them must be provided with reasonably long-term experience in developing countries if their contributions are to be effective. In general, provision for more long-term career posts must realistically be based in the country of origin of the individual. The governments of non-tropical countries committed to the Special Programme should therefore be persuaded to create additional career posts for scientists, based in home institutions with adequate guarantees for long-term careers, who could be seconded to Special Programme activities in tropical countries for as long as necessary or feasible.

3.3.3 Research subject areas

In some relevant subject areas there are relatively few strong centres in tropical and non-tropical countries capable of undertaking the necessary research and training. These are mainly in entomology, helminthology, protozoology and clinical tropical medicine. Centres for research and training in epidemiology, statistics and demography related to tropical diseases are far fewer. Other subject areas are strong but traditionally have not been concerned with tropical problems, e.g. immunology, clinical pharmacology, pathology, biochemistry, molecular and cell biology, and genetics. There are also subjects very important to the Special Programme which are poorly developed in both developed and developing countries and which will need considerable strengthening if they are to contribute to research and training and to create nuclei of expertise in tropical diseases, e.g. operational research in relation to the planning and evaluation of disease control measures, behavioural sciences and economics.

3.4 Activities

Institution strengthening and training are inter-related and most, if not all, activities supported will contain both components. They are separated here only for convenience of presentation.

3.4.1 Scope of activities

Institution strengthening and training activities supported by the Special Programme may concern any of the following aspects of health research related to the six diseases: (a) epidemiological and clinical, (b) operational, (c) developmental (technical improvement or adaptation of existing methods), (d) targeted research towards new tools, or (e) fundamental research aimed at increasing the scientific base of knowledge for the control of these diseases.

The nature of institution strengthening activities within a given country will vary with many factors, including its state of development, the importance of the diseases and the priority given to their control within the country. Institutions in some countries will be able to participate immediately in many aspects of Special Programme research and training. A first step may often be development of the capability to analyze the country's health problems, research needs and priorities. Some countries will need assistance and advice in developing satisfactory management structures for their research and training activities.

The extent and nature of the training activities will also vary greatly from country to country. In some, priority will be given to training very specialized personnel and a wide range of supporting staff. In others, the attainment of a certain degree of self-reliance in research capability may initially require the training of personnel at all levels for both research and service. In many cases, the training activities will have to be undertaken jointly by a group of countries. Health related research and service personnel have common educational needs and require mutual understanding and communication if their work is to be effective and relevant to the needs of their country.

The Special Programme will assist governments in training the full spectrum of technologists and scientists to carry out the required research. Improved control of disease through research will be achieved as much by a critical attitude of mind among health personnel as by specific activities in the laboratories; all health workers therefore need training and stimulation throughout their careers. The Programme can play a significant role in relation to the six diseases by:

- (a) assisting in the preparation of sound educational programmes, relevant to local needs and of the best possible quality in terms of both content and educational process;
- (b) helping in the preparation of special teaching materials appropriate to the problems of tropical countries, such as manuals, texts, visual aids, etc.;
- (c) improving the teaching skills of researchers and teachers.

These activities will normally take place within tropical regions. In implementing these activities, the Special Programme will liaise with the Division of Health Manpower Development, whose assistance will be sought especially in the development of innovative group training methods and in evaluation.

3.4.2 Types of activities

(a) Institution strengthening activities will lead to the creation of a network of centres collaborating within the Special Programme. These centres should become focal points for strengthening the research capabilities and developing the self-reliance of the affected countries, and should increasingly become capable of performing the specific research and development activities planned by the disease and trans-disease SWGs. Training will constitute a very important component of the activities of the Special Programme network and whenever possible, the network centres will also be the sites for training activities.

Network centres can be single institutions or groups of institutions. Seldom will any one institution be able to work in all areas of interest to the Programme. The objective should therefore be to help develop groups of centres which together could undertake the following minimal list of activities for a particular geographical area:

- epidemiological and operational research on any of the six diseases which may be present;
- clinical, epidemiological and laboratory support of clinical trials (after exhaustive screening in animals), from initial detailed studies of a new drug or vaccine administered to a very small number of patients, to extensive field trials.
- training of local personnel at the technical and para-professional levels;
- training of undergraduate and postgraduate students to a high academic level.

An example of such a group of centres which might be further developed is the SEAMEO-TROPMED network in South-East Asia.

(b) As a general principle, formal training should be developed nationally to the highest level appropriate to the country's resources. If resources do not permit the training of all necessary categories of personnel relevant to the Special Programme activities, there should be access to such training elsewhere in the region. Training in industrialized countries should be undertaken only on presentation of special cases carrying satisfactory justification. In this way the Special Programme will help to create active teaching and scientific communities in the tropical countries as a basis for self-reliance.

4. OPERATIONAL GUIDELINES

4.1 Special Programme network

4.1.1 Network centres

The RSG will recommend for participation in the network those institutions which they judge capable of making a significant contribution to the Programme, wherever they may be in the world. Such a participating centre may be a single department, a single institution, or a cluster of coordinated centre, with or without satellite field stations. Together these centres will form the network of collaboration and communication that the Special Programme requires to achieve its objectives.

Only centres in tropical countries will be eligible for institution strengthening support from the RSG. The responsibilities assigned and support given to each such centre will be specifically defined and appropriate to actual and potential capability, and will be reviewed annually.

4.1.2 Geographical distribution

In developing the network, the RSG will give special consideration to an appropriate geographical distribution of the centres. The network should be built up on the basis of groups of centres able to collaborate easily through geographical affinity, common disease problems, language and cultural links, etc. However, the Special Programme should be concerned to overcome existing language barriers when these are detrimental to the objectives of the Programme. Groups of centres should be able to respond to training needs which otherwise could not be met at a national level.

4.1.3 Selection criteria

In developed countries, centres will be selected for participation on the merits of their academic excellence and their potential contribution to the Special Programme. In selecting centres in tropical countries, the criteria will include the following:

- (a) the potential ability of the centre to contribute to the goals of the Special Programme within the Programme network;
- (b) the potential for development of the centre at the national level; the degree of governmental and institutional commitment as well as the stability of the institution;
- (c) satisfactory and specific plans for the institution or government to assume financial responsibility for the programme over the period of RSG support;
- (d) the training capabilities and physical and managerial facilities which it will need to meet national and regional requirements.
- (e) the capability for multiple disease and trans-disease research;
- (f) a specific timetable for attaining research, training and institution strengthening goals;
- (g) the interaction of the institution with other relevant health research programmes and organizations (including relevant agricultural and veterinary institutions).

4.1.4 Selection Procedure

- (a) Candidate institutions for participation as network centres will be proposed by the institutions, governments, Regional ACMRs, other regional organizations or by SWGs of the Special Programme. In all cases, early involvement of the respective governments will be sought in collaboration with the WHO Regional Office.
- (b) For each candidate institution, a research, education and training profile of the institution will be prepared¹ and a preliminary site visit organized if necessary. At this early stage, it is important to involve WHO staff at the country, Regional and HQ level, as well as to seek advice from outside consultants. All the information gathered will then be submitted to the RSG for preliminary approval.
- (c) The next step will be to negotiate an Invited Proposal with the government and institution concerned, in collaboration with the Regional Office, the Regional ACMR and any other relevant regional organization. Such a proposal will include a general agreement with specification of government commitments to the eventual take-over of the staff, facilities and other support provided by the Programme; a five-year plan of action; a detailed plan of action for the first year (including a firm budget); and budget and planning projections for the following four years.
- (d) On the basis of the Invited Proposal, the RSG will recommend that the center be considered as part of the Special Programme network for a five-year period and propose a core support budget for the first year.

In each subsequent year, the RSG will review the Annual Report and the revised Invited Proposal and propose the budget for the next year.

4.1.5 Types of support

Assistance to the network centres will be tailored to their needs and capacity for collaboration in Special Programme activities. Network centres can be supported through a variety of mechanisms:

¹The "Questionnaire for Network Catalogue of Medical Research Institutes" (Annex II, Document TDR/RCSWG(1)/77.1b) should be expanded to seek specific information on the following aspects of any institution considered for Special Programme support:

- the present level of educational and training activities;
- a history of the institution, including an account of past and present research and training projects, past achievements and levels of achievement, and future plans;
- the organizational structure and types of institutional support received;
- the relationship of the institution to other centres and organizations;
- a description of management and planning capabilities;
- a thorough description of the scientific and supporting staff: training, experience, and achievements;
- a description of physical facilities and expansion possibilities;
- a description of field facilities, clinical facilities, and animal house facilities;
- the availability of maintenance and equipment servicing capabilities;
- the library resources and services.

- Core support funds will contribute to the basic requirements of the centre to participate in network activities. Equipment and supplies are an example. Salaries for full-time personnel, the level of which will be determined by the institution or government, may also be included. Consideration could be given to provide appropriate allowances for experts, such as clinical specialists who undertake part-time research work within team projects. The national commitment to undertake the financing of these salaries on a time-phased sliding scale will be guaranteed in the proposal, and will be subject to annual review. Where core support requires outside expertise, plans for the training of a local counterpart should be specified in the initial agreement. Major building costs will not be considered, although relatively small building alterations could be accepted. Core support may often be relatively large initially. If so, it should diminish with time, especially if additional support is obtained for research projects through the SWGs.
- Twinning agreements will include secondment of research staff from a more developed research centre, exchange of research staff, joint research projects and training programmes.
- Visiting scientists and short-term consultants will review progress, advise on future activities, assist in preparing the Invited Proposals and SWG research project proposals, and help set up new techniques or research projects.
- Support for training of staff of network centres will be provided as necessary. Such training may occur outside the institution or may be arranged as part of the institution's programme.
- Workshops and seminars will be supported that will benefit not only the staff of the centre, but also scientists from the country and region.

4.2 Training

4.2.1 Types of activities

Support for training activities can be of two types: for group training and for training of individuals. Requests for support for either should originate in tropical countries (governments or institutions within or outside the Special Programme network), from Regional ACMRs or from SWGs.

All proposals for such training activities will be processed and funded by the Secretariat with advice as necessary from the Executive Sub-Group. A list of all grants given during the previous period and a plan for forthcoming activities will be submitted to each RSG for annual review. All training opportunities within the Special Programme should be widely publicized.

4.2.2 Group training activities

Requests for support of group training activities can range from formal and ad hoc courses to seminars, workshops and scientific meetings.

(a) Ad hoc courses and formal training programmes:

Such courses in tropical countries will be supported by the RSG, preferably at regional level by:

- (i) providing experts to improve the scope and quality of the courses;
- (ii) providing or helping to create technical material;

- (iii) supporting the attendance of trainees, normally only from outside the country where the course is being held*; and
- (iv) promoting and funding research projects aimed at improving existing training. Training for operational research would be particularly suited to innovative approaches.

The criteria for granting support will be based mainly on the relevance of the objectives and contents of the courses to national and regional needs, including the availability of appropriate career structures and opportunities for research, and on an assessment of the efficacy of the proposed activity. Requests for major support should be presented to the RSG or its Executive Sub-Group with adequate background information obtained from the WHO Regional Offices.

(b) Workshops, seminars and scientific meetings

Support for workshops, seminars and scientific meetings will depend on their direct relevance to the Special Programme objectives, particularly in those areas given priority by the RSG or the SWGs. Preference will be given to those to be held in network centres.

4.2.3 Individual training activities

The Special Programme can support the training of nationals from tropical countries by:

- (a) providing Research Training Grants to potential research leaders and teachers from tropical countries for specific training objectives, e.g. for graduate, doctoral or post-doctoral work, on an agreed project at an institution outside his/her own country;
- (b) awarding Visiting Scientific Grants to established scientists from tropical countries for specific training outside their countries, including training courses and seminars or workshops, research discussions, and/or planned short-term joint research;
- (c) providing on-the-job training opportunities through the research grants of the SWGs;
- (d) awarding Re-entry Grants over 1 or 2 years for trainees returning to their home countries, whether or not they have been trained within the Special Programme. Such grants will be awarded on the basis of a formal proposal and protocol with the objective of allowing the application of the new knowledge acquired, e.g. setting up a technique, starting a new research line, etc. Trainees returning to a network centre will normally be ineligible for such grants since resources for re-entry of trainees should be provided through core and/or project support to the centre. In general, these grants will be limited to US \$20,000.

Individuals will be selected for training on the basis of:

- evidence of aptitude for research;
- submission of a training proposal that is relevant to the needs of the Special Programme; and

* For this purpose, the existing WHO Fellowship Programme at the Regional Office level should suffice for undergraduate and early postgraduate levels of training, particularly attendance at regional courses. Other trainees can be supported through Research Training Grants or Visiting Scientific Grants.

- satisfactory educational background and linguistic ability.

4.3 The Small Grants Programme

The Small Grants Programme will complement the institution strengthening and training activities outlined above. Opportunities for such grants should be widely advertised.

These grants will assist promising young scientists in tropical countries engaged in or starting research relevant to the Special Programme objectives, but not associated with the Special Programme network or with the SWGs.

Small grants up to \$5,000 annually will be given on the basis of a request submitted through the Director of the institution and will be administered by the institution. These grants will normally be limited to such purposes as the purchase of laboratory supplies, literature resources and the provision of limited laboratory assistance. Normally, no more than one such grant at any one time will be awarded to a given department of an institution. These grants should be of short duration (1-2 years).

5. EVALUATION

The RSG gives the highest importance to evaluation and will monitor and evaluate both training and institution strengthening activities. Evaluation will depend on the following general principles:

- (a) All proposals must be approved in terms of clearly defined, attainable objectives with a well-defined time frame.
- (b) Continuous self-evaluation will be built into the system of annual reporting.
- (c) External evaluation will be undertaken by the RSG on the basis of the annual reports, and on visits when necessary or convenient.

The RSG will be kept informed of the evaluations by the SWGs of their own programmes.

5.1 Criteria for the evaluation of institution strengthening

Evaluation of institution strengthening activities will include:

- (a) Progress towards self-reliance as judged by:
 - provision of service to the community and the government in relation to control of the six diseases, particularly contributions to the development, utilization and integration of new tools into control programmes;
 - quality of the research and its relevance to local needs;
 - improvements in professional reputation and in ability to attract research support and staff;
 - evolution towards independence from Special Programme institution strengthening support, i.e. evaluation of the progressive take-over of strengthening activities and support by the national government.
- (b) Contributions to the research and development area of the Special Programme as judged by the relevance to and quality of its research activities within the strategic plans of the SWGs.

On the occasion of a proposal for continuing support for another five-year period, the RSG will take into account evaluations by the government, the Regional ACMR and other relevant regional organizations, as well as SWG appraisals.

5.2 Criteria for the evaluation of training

Evaluation of training activities will attempt to measure:

- effectiveness, by judging on the basis of the annual report how the objectives set have been met;
- efficiency, by judging on the basis of the annual report how adequate the training process has been, particularly in cost-effectiveness;
- impact, by judging how far the training has led to improvement in local or regional research. This aspect should be subject to 5-year review and evaluated in collaboration with the government, the Regional ACMR and any other relevant regional organization.

Evaluation of training requires mechanisms to assess the process during the training period, immediately after completion, and over medium (1-5 years) and longer-term periods.

In accordance with these general principles, the Secretariat will present to the next RSG meeting a detailed scheme for the evaluation of all relevant activities. This continuing process of evaluation will influence the decisions of the RSG in their annual review of budget proposals.

6. ESTABLISHMENT OF THE SPECIAL PROGRAMME NETWORK

The intention is to support a network of centres with a wide distribution in areas where one or more of the six diseases are endemic, to meet the objectives of the Special Programme. Plans are in hand to examine many possibilities in endemic areas, with the ultimate objective of developing a balanced network covering all endemic areas. The following proposals were available in time for this meeting of the RSG; many of them had originated in the SWGs and should be discussed with the regional ACMRs in order to match these proposals with national and regional needs.

Information was also provided on a number of initiatives on which inadequate data was so far available. The Secretariat was asked to bring forward further details to the next meeting of the RSG, after consultation with the regional ACMRs.

6.1 Tropical Disease Research Centre, Ndola, Zambia

The pilot activities undertaken in 1977 were reviewed and approved. Extension of these pilot activities was approved and the Secretariat was asked to invite a proposal from the Zambian Government and to negotiate an agreement in accordance with the criteria of the RSG.

6.2 Research and Training Centre, Nairobi, Kenya

The pilot activities at the WHO Immunology Research and Training Centre were reviewed and approved. The proposal to create a Special Programme network centre constituted from a cluster of institutions in Nairobi and concerned with trypanosomiasis, schistosomiasis and possibly others of the six diseases, was approved. The Secretariat was requested to invite a proposal from the Kenyan Government and to negotiate an agreement in accordance with the criteria of the RSG.

6.3 Institute for Medical Research, Kuala Lumpur, Malaysia

The preliminary proposals and the agreements negotiated by WHO with the Malaysian Government were reviewed. The Secretariat was asked to invite a proposal from the Malaysian Government and to negotiate an agreement in accordance with the criteria of the RSG.

The attention of the Secretariat was specifically drawn to the need to discuss this proposal with SEAMEO-TROPMED so as to reconcile it with plans currently being put forward to the RSG by SEAMEO-TROPMED.

6.4 Department of Scientific and Technical Studies, National University of Benin, Cotonou, People's Republic of Benin

The pilot activities in Benin were reviewed and also the proposals for an extension of the work to Togo. A further extension of the pilot activities, including the extension to Togo, was approved. The Secretariat was requested to invite proposals from the Governments of Benin and Togo and to proceed with negotiation of agreements in accordance with the criteria of the RSG.

6.5 THELEP centres: Chingleput, India; Rangoon, Burma; Bamako, Mali

The proposals from the Leprosy SWG were reviewed and the Secretariat was asked to examine the possibility of enlarging these proposals to ensure that a longer-term programme to achieve strengthening of research and training capability could be submitted to the RSG for approval. RSG support for the proposed standardization workshop was approved.

6.6 MRC Laboratories, The Gambia

The preliminary proposals were reviewed and the recommendations to provide posts for trained Gambian nationals, the improvement of clinical capability and the development of epidemiological and operational research were approved. The Secretariat was asked to invite a proposal from the Government of The Gambia and to negotiate an agreement in accordance with the criteria of the RSG.

It was recognized that in present circumstances The Gambia would be unable itself to sustain a research institution of the present size, and the RSG encouraged the Secretariat to investigate whether neighbouring countries or regions wished to participate in the future.

6.7 University of Ibadan, Nigeria

The preliminary proposal to create a centre for research and training in clinical pharmacology was approved. The Secretariat was requested to invite a proposal from the Government of Nigeria and to negotiate an agreement in accordance with the criteria of the RSG.

6.8 Institute of Tropical Medicine, Omdurman, Sudan

The preliminary proposal to focus the activities of the Special Programme in the Sudan on the Institute of Tropical Medicine at Omdurman was approved. The Secretariat was asked to invite a proposal from the Government of Sudan and to negotiate an agreement in accordance with the criteria of the RSG.

7. BUDGET

The 1978 budget (Annex I) was approved as submitted. This budget and projections for subsequent years will be reviewed at the next RSG meeting in June 1978.

8. EXECUTIVE SUB-GROUP

The Director of the Special Programme requested the following members to act as an Executive Sub-Group to assist him in carrying out the recommendations of the RSG, until the next meeting of the Group on 12-16 June 1978:

Dr J. Barzelatto, Secretary, Research Strengthening Group, Special Programme for Research and Training in Tropical Diseases, WHO, Geneva.

Dr J.A.D. Cooper, President, Association of American Medical Colleges, Washington, D.C., United States of America.

Professor Chamlong Harinasuta, Coordinator, Regional Tropical Medicine and Public Health Project (TROPMED), Office of Central Coordinating Board, Bangkok, Thailand.

Professor G.L. Monekosso, Director, Centre Universitaire des Sciences de la Santé, Yaoundé, Cameroon.

Dr A. Nadim, Dean, School of Public Health, and Director, Institute of Public Health, University of Teheran, Teheran, Iran.

Professor F.F. Soprunov, Department of Biology and Biochemistry, Martinovsky Institute of Medical Parasitology and Tropical Medicine, Moscow, Union of Soviet Socialist Republics.

Dr C.E. Gordon Smith, Dean, London School of Hygiene and Tropical Medicine, London, United Kingdom.

In order to prevent unnecessary delay in initiating activities, the Executive Sub-Group was authorized to make grants for pilot activities on the strict understanding that it would be made clear that these did not commit the RSG to long-term support. Such long-term support would have to be approved by the RSG on the basis of a negotiated Invited Proposal in accordance with the criteria established at this first meeting.

LIST OF PARTICIPANTS:

Professor Elias Bengtsson, Karolinska Institute, Roslagstulls Hospital, Stockholm, Sweden

Professor J. Briggs, Department of Entomology, College of Biological Sciences, Ohio State University, Columbus, Ohio, United States of America.

Dr L. Chambon, Sous-Directeur, Institut Pasteur, Paris, France

Dr J.A.D. Cooper, President, Association of American Medical Colleges, Washington, United States of America

Dr M.G.E. Davies, Chief Medical Officer, Ministry of Health, Freetown, Sierra Leone

Dr A. El Kholy, Director, Biomedical Research Centre for Infectious Diseases, Cairo, Egypt

Dr C.E. Gordon Smith, Dean, London School of Hygiene and Tropical Medicine, London, United Kingdom (Chairman)

Professor Chamlong Harinasuta, Coordinator, Regional Tropical Medicine and Public Health Project (TROPMED), Office of Central Coordinating Board, Bangkok, Thailand

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Dr U. Kyaw Lwin, Ministry of Health, Rangoon, Burma

Dr F. Kamunvi, c/o East African Medical Research Council, East African Community, Arusha, Tanzania

Professor O. Kranendonk, Department of Tropical Hygiene, Royal Tropical Institute, Amsterdam, Netherlands

Dr W. Lobato Paraense, Research Vice-President, Oswaldo Cruz Foundation, Rio de Janeiro, Brazil

* Professor G.L. Monekosso, Directeur, Centre Universitaire des Sciences de la Santé, Yaoundé, Cameroon

Dr A. Nadim, Dean, School of Public Health, and Director, Institute of Public Health, University of Teheran, Teheran, Iran (Rapporteur)

Professor F.F. Soprunov, Department of Biology and Biochemistry, Martinovsky Institute of Medical Parasitology and Tropical Medicine, Moscow, Union of Soviet Socialist Republics

Dr C. Sow, Secrétaire général de l'Organisation de Coordination et de Coopération pour la Lutte contre les Grandes Endémies, Bobo-Dioulasso, Upper Volta

WHO SECRETARIAT:

Dr A. A. Arata, Vector Genetics and Bionomics, Division of Vector Biology and Control, WHO, Geneva

Dr J. Barzelatto, Special Programme for Research and Training in Tropical Diseases, WHO, Geneva (Secretary, Research Strengthening Group)

Dr T. Fulop, Director, Division of Health Manpower Development, WHO, Geneva

Dr B. A. Jayaweera, WHO Regional Office for South East Asia, New Delhi, India

Dr F. M. Katz, Education Evaluation, Division of Health Manpower Development, WHO, Geneva

Dr H. G. Kupferschmidt, Research Coordination, Epidemiology and Training, Division of Malaria and Other Parasitic Diseases, WHO, Geneva

Dr T. Iepes, Director, Division of Malaria and Other Parasitic Diseases, WHO, Geneva

Dr A. O. Lucas, Director, Special Programme for Research and Training in Tropical Diseases, WHO, Geneva

Dr R. Pal, Vector Genetics and Bionomics, Division of Vector Biology and Control, WHO, Geneva

Dr C. P. Ramachandran, Special Programme for Research and Training in Tropical Diseases, WHO, Geneva (Consultant)

Dr D. S. Rowe, Special Programme for Research and Training in Tropical Diseases, WHO, Geneva

* Unable to attend

BUDGET SUMMARY FOR
STRENGTHENING OF BIOMEDICAL RESEARCH CAPABILITY

Table 1: Overview of estimated obligations

Description	Amounts shown in US\$ (thousands)				
	1978	1979	1980	1981	Total 1978-1981
Programme planning and general activities	475	561	661	703	2 400
Training activities	825	1 170	1 515	1 760	5 270
Institution strengthening activities	2 300	4 200	5 300	6 300	18 100
Total	3 600	5 931	7 476	8 763	25 770

Table 2: Programme planning and general activities

Description	Amounts shown in US\$ (thousands)				
	1978	1979	1980	1981	Total 1978-1981
<u>Programme planning and general activities</u>					
1. Salaries and related costs	339	410	498	528	1 775
2. Consultants	40	45	50	55	190
3. Duty travel	35	35	35	35	140
4. Meetings	61	71	78	85	295
Total	475	561	661	703	2 400

Table 3: Training and institution strengthening activities

Description	Amounts shown in US\$ (thousands)				
	1978	1979	1980	1981	Total 1978-1981
<u>Training activities</u>					
1. Research Training Grants and Exchange of Research Workers' Grants	400	620	815	910	2 745
2. Re-entry Grants	80	150	250	350	830
3. Support to courses, workshops, seminars	345	400	450	500	1 695
Total	825	1 170	1 515	1 760	5 270
<u>Institution strengthening activities</u>					
1. Support to Special Programme network centres	2 200	4 000	5 000	6 000	17 200
2. Small Grants Programme	100	200	300	300	900
Total	2 300	4 200	5 300	6 300	18 100

Table 4: Staffing summary

Staff requirements	Man-year/months			
	1978	1979	1980	1981
<u>Programme planning and general activities</u>				
Professional staff	2	2	2	2
Secretarial support	2	2	2	2
Research Coordinator at Regional Offices	4	5	6	6
Total	8	9	10	10