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With the compliments

of the

Director-General

Avec les compliments

du

Directeur Général

Dr John Evans
Director
Population, Health and Nutrition Department
The World Bank
1818 H. Street, N.W.
Washington D.C. 20433
USA

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In reply please refer to:
Prière de rappeler la référence:

Mr A.W. Clausen
President
International Bank for Reconstruction and Development
1818 H. Street, N.W.
Washington D.C. 20433
Etats-Unis d'Amérique

15 March 1982

Dear Mr Clausen,

Progress of the Health Resources Group for Primary Health Care

If we look back to the early days of preparation for the Health Resources Group for Primary Health Care (HRG), I believe that all who have been concerned will agree that, to put it at its simplest, there was an enthusiastic response to the idea of all those involved in health development "speaking to each other". With experience, this turned out not to be quite so simple.

The efforts of the secretariat to keep everyone informed through the distribution of reports, the meetings of the Steering Committee, and the communication of its views through documents for HRG meetings as such, still seem to leave the feeling that only an "inner circle" was fully informed. Partly, this may have been due to changing individual representation of governments and agencies in the HRG itself and in the Steering Committee. In view of the innovative nature of the activity, the handover of responsibility, however careful the briefing, sometimes made it difficult to sustain the even rhythm of progress and exchange of views.

You will understand, therefore, if the first progress report, which ... accompanies this letter, may seem somewhat lengthy. It is intended to show all those interested in the Health Resources Group how the thinking process is continuing, although the exchange of ideas cannot practically be regularly pursued on a personal basis with all participants, but rather with those who are, or who make themselves, available.

If you still feel that anything is missing from this first progress report, please let me know and we will try to remedy the situation in the next.

Yours sincerely,

Stuart Kingma

Dr Stuart Kingma
Chairman
Health Resources Group for Primary Health Care

... ENCL: as stated
cc: Dr John Evans, Director, Population, Health and Nutrition Department, World Bank Washington

WORLD HEALTH ORGANIZATION
ORGANISATION MONDIALE DE LA SANTÉ

HRG/PROG.REP/82.1

HEALTH RESOURCES GROUP FOR PRIMARY HEALTH CARE

Progress Report as at 1 March, 1982

I. Introduction

The meeting of the Health Resources Group for Primary Health Care (HRG) in December 1981 was the largest held since its inception. Only two and one-half days could be allotted to consideration of a heavily charged agenda, including the first experiences with Country Resource Utilization (CRU) mechanism in five countries: Benin, Ecuador, The Gambia, Sri Lanka and Sudan. The animated discussions and contributions of all participants showed a welcome degree of interest, but one result was that little or no time was left for summation and detailed conclusions.

It emerged during the meeting that some participants, especially those who had not been represented in Steering Committee meetings, felt that they were not sufficiently familiar with the evolution of the HRG, and that this need was not adequately met by receipt of reports of the HRG meetings. We hope to overcome this lack by issuing informal progress reports, of which this is the first, when there are matters of general interest to report.

In addition, it is planned to hold informal meetings with representatives of Permanent Missions in Geneva, as and when progress warrants them, at which any queries passed to them by their Governments can be clarified and a steady exchange of information ensured. The first such meeting was held on 12 February 1982 (see Annex 1 for list of participants).

II. Outcomes of the HRG and Executive Board meetings

As a result of the HRG December meeting, it was planned to hold a first meeting of the HRG Preparatory Committee on 23-24 February; subsequent discussions with participants led to the conclusion that for technical and administrative reasons, including the non-availability of a number of persons, it would be preferable to postpone the first meeting to 3-4 June 1982. These reasons and a decision not to hold a full meeting of the HRG in 1982 are explained later in this report.

The sixty-ninth session of the Executive Board in January 1982 approved the progress of the HRG, as reported by the Director-General in document EB69/7 Add.1 (Annex 2) and its resolution EB69.R4, 2. (Annex 3) requested the Director-General "to pursue his efforts to rationalize the international flow of resources for the Strategy for Health for All by the Year 2000 and to mobilize additional resources if necessary in accordance with resolution WHA34.37, including the flexible and pragmatic development of the work of the Health Resources Group for Primary Health Care." This is in line with what the Director-General is trying to do when dealing with North/South aid flows, that is, not only to look for multilateral and multibilateral resources, but also to try, through the HRG, in which bilateral aid agencies participate, to guide the bilateral health resource flows. The Executive Board will report to the World Health Assembly in May 1982 on its discussions.

Summary Records of Executive Board discussions, which are at present only available in provisional form, will be provided to all HRG participants as soon as they are finalized.

Traditionally, WHO's constituency is composed of Ministers of Health, who are not the main controllers of international resources. A comparison of discussions at the HRG and the Executive Board shows that where the representatives come from different Ministries of

the same country, their views do not always harmonise. At times, it even seemed from some quarters, that two policy voices were being heard - one, the more cautious voice of aid agencies and the other the strongly supportive voice of the technical ministries. We can only hope for and urge a greater degree of coherence, but this coordination of view most come from within individual countries' systems and WHO's constituency remains the Ministries of Health, and we are working through these channels.

A clear message has emerged that all parties concerned in health development - developing countries, developed countries, non-governmental organizations and United Nations agencies - support an approach emphasizing action at the country level:

- development of primary health care programmes leading to health for all by the year 2000, taking an intersectoral view of requirements and inviting the government as a whole, including especially the central planning body, to support the technical ideas and objectives of the health ministry;

- credible costing of such programmes, which in the past has not always been available when bilateral support was sought by governments, taking into account the overall socioeconomic position of the country, which would reassure the providers of resources that a regular flow could be properly absorbed.

There can be said to be no fundamental objections. However, some bilateral agencies were concerned that their independent freedom to continue to negotiate on a direct bilateral basis might be constrained. We hope that these fears were allayed by the explanation that the intention of the HRG is to act solely as a facilitator in developing the flow of health resources, and that this will in no way affect direct bilateral discussions, which would have the advantage of a starting point in a well-costed and realistic programme, identified in the Country Resource Utilization Review (CRU) mechanism.

Some developing countries were concerned with their own state of unpreparedness and a feeling that they might be pressed to take an untimely political decision. Other countries which felt that they were ready, were anxious to proceed, and their awareness of the HRG/CRU mechanism has further developed their own broad political commitment to primary health care and their hopes for the participation of others.

Some reservations were also expressed on the part of the multilaterals. Notably, the World Bank participant queried the suitability of the CRU documents for the intended purpose. The World Bank has great experience in this field as it has examined in many countries the potential worthiness for investment in health, whereas the HRG as a body is concerned with the technical quality of the country's health programmes and its absorptive capacity for grants to help carry through the programme and to promote the capability to attract such resources. Keeping in mind this possible difference but convergence in optique, the World Bank is being asked to share its wide information base with the rest of the HRG so as to improve the quality of the country reviews, while at the same time it is emphasized that, by general agreement, detailed discussion of a country's needs and capacities should take place in the country itself, after the optimal circumstances have been created for such discussion by the production of a CRU document.

UNICEF, a major partner in health development, continued to declare its full support in both the development of CRU documents and in the later stage of country meetings.

UNDP, which has had an outstanding record for nearly two decades in developing countries in areas such as agriculture, and of course in health, has shown a very constructive interest, particularly in the need for a good management structure of the health programme at the country level if the confidence of external partners is to be attracted and sustained.

This is a welcome orientation as it is a continuing priority for WHO to encourage the country itself to develop its own managerial competence and to avoid any tinge of paternalism or supranationalism. Some countries are not so far along the road to development as others, and they need more encouragement and support to reach the starting point of self-reliance. For many others the stage has been reached where they are ready to absorb outside support and these, therefore, tend to be the countries ready to be first in line for Health Resource Group activity at country level. The WHO message in all this will achieve less than we hope if countries are only prepared to decide on priorities when there is a prospect of external aid.

One possible outcome of country primary health care resource group meetings could be agreement between the various partners on a management structure for existing and proposed external support. Monitoring and evaluation of the progress of the programme and the utilization of resources are very important, and one method might be by periodic meetings of the original participants in the country PHC resource group, but such a mechanism should obviously not trespass on the country's sovereignty.

On the part of the nongovernmental organizations, there were no reservations, only enthusiastic support. Ways must now be sought by which international NGOs can ensure that national NGOs' input is effective. This will be helped by the information exchange which will be an important part of the country-level meetings.

From discussions with the many partners in health development and with Executive Board members, it is clear that there is support for the aim of promoting a team sense of purpose and method in external support to health development in country specific terms.

The Executive Board has formally given its full support, and in subsequent discussions with the Director-General, the Regional Directors have expressed their view that the priority work of the HRG should be that at country level. The HRG and its country level activity will be discussed at the 1982 meetings of Regional Committees, which take place in the autumn, and the Regional Committees will be asked to select regional representatives for the HRG and to decide on priority selection of countries for resource reviews. They will also consider the best forms of regional support for the country activity.

The consensus was that a global HRG meeting should only be convened for specific reasons, and that it is not a suitable venue for in-depth examination of CRUs. The presentation of the initial five test countries at the December 1981 meeting has served its purpose as an impulse to generate the country mechanism. However, a second HRG meeting would be inappropriate until solid experience has been gained with subsequent country primary health care resource group meetings, which will not be available before year-end. The Director-General considers that a second meeting would be premature before summer 1983 at the earliest, when the results in at least two countries, if not more, will have provided more solid experience.

Similarly, one of the main items on the agenda for the first meeting of the Preparatory Committee, proposed originally for 23-24 February 1982, was the examination of revised guidelines for CRUs. It emerged that it was considered preferable to try out and further develop the revised guidelines in the four CRUs being undertaken in March/April 1982, i.e. Burma, Nepal, Democratic Yemen and Yemen Arab Republic, and discuss the outcome in these country situations at a later meeting of the Preparatory Committee, now envisaged for 3-4 June 1982. The further revised guidelines could then be used by the remaining four countries to be reviewed, i.e. Papua New Guinea, Philippines, Ethiopia and Malawi. Thus, revision of the guidelines will be an ongoing process.

A second approach to the country mechanism concerns those Member States which feel they are ready to prepare a well-costed, feasible primary health care programme, and have reached a stage of planning and commitment where they can proceed to the convening of a

country primary health care resource group meeting without an intervening review. In such instances, the role of the HRG would be to provide guidance and support as required. The first country to implement this approach is likely to be Mozambique, and the resultant experience may inspire other countries to take similar steps. The HRG will be kept informed of this initiative so that its members can take advantage of the experience gained.

With regard to the first five countries which presented CRU documents to the HRG December meeting, i.e. Benin, Ecuador, The Gambia, Sri Lanka and Sudan, four are planning to hold country primary health care resource group meetings, as follows:

Benin	May 1982 (as part of development aid round table)
The Gambia	April 1982
Sri Lanka	June 1982
Sudan	October 1982

Their expectations have been aroused, if not of a greatly increased flow of health resources, at least of a coordinated cooperative response to their priority needs. It is hoped that interested external partners will make every effort to participate in these meetings. Because of the preparation of the country resource document and the possibility of expert technical analysis at the agency headquarters, it should be possible to ensure such participation by well-briefed staff of embassies or country and regional offices of agencies, who could discuss their potential or actual input in terms of its applicability and rationality, and need not necessarily call for the presence of principals at all meetings, though the presence of experts will obviously be appreciated.

In the first five countries, and hopefully in others who will join in the HRG process, the first objective has already been achieved in that health is being looked at as an integral part of development and its needs have received central planning and overall government approval.

Finally, it should be mentioned that the HRG secretariat is continuing to operate on the part-time efforts of existing WHO staff, backed up by consultants. Inputs from HRG participants will be welcomed. For example, there may be reports of missions in the health sector in countries who have agreed to resource reviews, which have been undertaken in recent times by governments or agencies, and which could be used for pre-review preparation. These would now be very welcome to WHO. A further input could be the alerting of government and agency representatives in review countries, so that they can cooperate in preparatory activities and during actual reviews. The WHO Programme Coordinator in such countries would be the obvious point of contact.

It is hoped that all HRG participants will consider how best they can help in the further development of this action, especially at the country level.

Dr John L. Kilgour
Secretary
Health Resources Group for Primary
Health Care

HEALTH RESOURCES GROUP FOR PRIMARY HEALTH CARE (HRG)

(Informal meeting of representatives from Permanent Missions in Geneva, Friday, 12 February 1982)

Present:

Australia	Mr K.R. Widdows, First Secretary
Denmark	Miss M.-L. Laursen, Secretary
Federal Republic of Germany	Mr T. Läufer, Second Secretary
Netherlands	Mr R.R. Smit, Counsellor
Sweden	Mr E. Cornell, Minister
USA	Mr W.C. Bartley, International Health Attaché
USSR	Dr A.A. Kisselev, Counsellor

HRG Secretariat

Dr John L. Kilgour, Secretary, Director, Division of Coordination

Mr P. Lawton, Chief, Cooperative Programmes for Development (CPD)

Miss M. O'Doherty, External Relations Officer, CPD

WORLD HEALTH ORGANIZATION
ORGANISATION MONDIALE DE LA SANTÉ

EB69/7 Add.1
5 January 1982

EXECUTIVE BOARD

Sixty-ninth Session

Provisional agenda item 7.3

HEALTH RESOURCES GROUP FOR PRIMARY HEALTH CARE

Note by the Director-General

1. At its sixty-seventh and sixty-eighth sessions, in January and May 1981, the Executive Board was informed[1] of developments concerning the establishment of a Health Resources Group for Primary Health Care (HRG). The Board's discussions are reflected in the relevant summary records.[2] The Board decided to request the Director-General to move ahead in a pragmatic, cautious and flexible manner in establishing the Group and entrusted him with convening it.

2. The Thirty-fourth World Health Assembly in May 1981 adopted resolution WHA34.37 on "Resources for strategies for health for all by the year 2000",[3] in which it requested the Director-General, inter alia, to take appropriate measures for identifying external resource requirements in support of well-defined strategies for health for all, for matching available resources to such needs, for rationalizing the use of such resources, and for mobilizing additional resources if necessary. The Health Assembly noted with satisfaction the decision[4] taken by the Board with regard to the establishment of a Health Resources Group.

3. The Director-General accordingly convened a meeting of the Group in Geneva from 6 to 8 December 1981. He emphasized the constitutional role of WHO as the coordinating authority in international health matters. With respect to the international flow of resources for health, this role was, in particular, to facilitate the provision of further opportunities for all those interested in supporting health development to work together, not only with individual developing countries but also among themselves.

4. The meeting was distinguished by a wide spectrum of participants attending as representatives of the partners in the movement for health for all: countries with defined strategies and plans of action, developing countries selected by their respective regional committees, countries and agencies in a position to transfer resources, i.e. bilateral agencies, development banks, multilateral organizations, funds, foundations and nongovernmental organizations. The meeting was chaired by Dr Stuart Kingma, Director, Christian Medical Commission.

5. The meeting consisted of two main elements:

(1) a review of the modus operandi for achieving the main aims of the Group, proposed by the Director-General along the lines of advice provided by a steering committee representing a cross-section of the Group. These aims were:

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[1] Documents EB67/WP/3 and EB68/7.

[2] See document EB67/1981/REC/2, pp. 59-62 and 272-283; and document EB68/1981/REC/1, pp. 58-65.

[3] Document WHA34/1981/REC/1, p. 36.

[4] Document EB67/1981/REC/1, p. 27, decision EB67(5).

- to promote the rationalization of the use of all available resources for primary health care activities in developing countries, with the aim of achieving health for all by the year 2000, in accordance with the priorities recognized by WHO Member States and incorporated in resolutions of the Health Assembly and the United Nations General Assembly; and

- to stimulate the mobilization of resources, including those of developing countries themselves and of external partners, to achieve the world community's social goal of health for all by the year 2000, using primary health care as the main method, and to facilitate appropriate utilization of these resources by interested organizations and developing countries, according to source, topic or other relevant criteria.

(2) the presentation and discussion of country resource utilization reviews prepared jointly by ministries of health and ministries of planning in five countries,[1] and discussion on the expected outcome - country primary health care resource groups, to be convened by the five governments concerned. These groups would consist of representatives both of the host government and of interested external partners.

6. During the meeting it was stressed that the Group is not a pledging group, a fund-raising mechanism, or a vehicle for attracting extrabudgetary funds for WHO's own programmes. It is rather a means of facilitating a more rational international transfer of resources for health and a vehicle for cooperation between those interested in supporting health in developing countries and the developing countries themselves, so that ways can be found of improving the use of international resources for health and of channelling them into national strategies for health for all based on primary health care.

7. The meeting was marked by an innovative and pragmatic approach, involving a frank exchange of views with the aim of coordinating inputs for health development at the country level. One particular innovation was the joint presentation of national health strategies by ministries of health and ministries of planning.

8. All participants from the developing countries welcomed the idea of such country discussions or meetings of country primary health care resource groups. The Group stressed that such sectoral meetings should also form a constructive part of any reviews of a country's overall development needs. Some participants from developed countries, in explaining their country's or agency's policy, foresaw difficulties in adopting such a concerted approach, and considered that they would have to continue to follow bilateral dialogue with individual countries. It was stressed that any such approach would not alter national prerogatives or replace existing bilateral or multilateral relationships. All partners would remain completely sovereign and external partners would retain their visibility. They could only stand to gain by knowing what the government and others were doing to implement the country health strategies, and by cooperating with each other could assure the most efficient and effective use of all available resources.

9. It was proposed that a country primary health care resources group should constitute a continuous relationship that might influence attitudes in a constructive manner, so that external partners can apply, with confidence, criteria for fostering valid strategies through selective support, and countries can adopt more realistic primary health care programmes within their economic and political capabilities. It should not be a one-time effort, and should continue in any given country until external resources were no longer required, and as long as its evaluation of the use of joint resources was proving useful.

10. The presentation of the five country statements led to fruitful discussions, ranging from primarily technical aspects of the programme to the resource, and especially financial, aspects, and included far-reaching considerations of broader socioeconomic and developmental policy. It was recognized that all proposals warranted more detailed discussion and analysis

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[1] Benin, Ecuador, Gambia, Sri Lanka, and Sudan.

within countries by the interested parties, although some proposals had been more fully developed than others. Either before or during such discussions, which the government concerned would convene, certain modifications in the proposals would be necessary.

11. In each case, a number of participants indicated their organization's readiness to join such country discussions, and the way was left open for any other potential partners to take part. Tentative arrangements were initiated for follow-up meetings at the invitation of the host government.

12. As for the future, it was agreed that, when strategies had been sufficiently developed by governments, they could usefully convene country primary health care resource groups to consider the strategy for primary health care and the related proposals for external support. This should lead to more effective and coordinated action by permitting each beneficiary and its partners in health development to join forces for a common purpose, but retaining at the same time their sovereignty, individuality and visibility. WHO's role in this country-focused process is to facilitate such mutually supportive bilateralism.

13. In this process, the future role of the regional committees was seen in the light of resolution WHA34.37, operative paragraph 6, which invites the regional committees to review regularly the needs of Member States in the region for external resources in support of well-defined strategies for health for all, and report thereon to the Executive Board. This information would facilitate the tasks of the Regional Directors and the Director-General in supporting countries and in taking the necessary action at the regional and global levels.

14. It was foreseen that the role of the Health Resources Group would evolve in response to these developments, and particularly in relation to the country primary health care resource groups. It could also constitute a useful forum for the discussion of new and promising ideas. It would facilitate the monitoring and evaluation at the global level of specific efforts to rationalize the international transfer of resources for health. For the resultant information would help the Director-General in consulting the Group and in submitting his reports to the Executive Board on the international flow of resources in support of the Strategy for Health for All, in accordance with the Board's draft plan of action[1] for the implementation of the Strategy.

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[1] Document EB69/5.

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世界衛生組織執行委員會 決議
قرار المجلس التنفيذي لمنظمة الصحة العالمية
RESOLUTION OF THE EXECUTIVE BOARD OF THE WHO
RÉSOLUTION DU CONSEIL EXÉCUTIF DE L'OMS
РЕЗОЛЮЦИЯ ИСПОЛНИТЕЛЬНОГО КОМИТЕТА ВОЗ
RESOLUCION DEL CONSEJO EJECUTIVO DE LA OMS

Sixty-ninth Session

EB69.R4

16 January 1982

RESOURCES FOR STRATEGIES FOR HEALTH FOR ALL BY THE YEAR 2000

The Executive Board,

Having considered the report by the Director-General on the review of health expenditures, financial needs of the Strategy for Health for All by the Year 2000, and the international flow of resources for the Strategy,[1] as well as his note on the Health Resources Group for Primary Health Care;[2]

1. NOTES these reports;

2. REQUESTS the Director-General:

(1) to continue the study of health expenditures in Member States on the basis of information provided by them, to seek improved methods of estimating costs, and to support Member States in applying these methods as part of their health situation and trend analyses;

(2) to refine progressively estimates of the cost of implementing the Global Strategy for Health for All by the Year 2000;

(3) to pursue his efforts to rationalize the international flow of resources for the Strategy for Health for All by the Year 2000 and to mobilize additional resources if necessary in accordance with resolution WHA34.37, including the flexible and pragmatic development of the work of the Health Resources Group for Primary Health Care;

(4) to report periodically to the Executive Board on the above issues in conformity with the plan of action for implementing the Global Strategy for Health for All.

Seventh meeting, 16 January 1982
EB69/SR/7

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[1] Document EB69/7.

[2] Document EB69/7 Add.1.

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WORLD HEALTH ORGANIZATION
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TDR/SER/SC(6)-TRN/82.3
ENGLISH ONLY

UNDP/WORLD BANK/WHO SPECIAL PROGRAMME FOR
RESEARCH AND TRAINING IN TROPICAL DISEASES

Geneva, 28 - 29 April 1982

REPORT ON INFORMAL CONSULTATION ON TRAINING IN SOCIAL SCIENCES FOR TROPICAL DISEASE STUDIES

CONTENTS

1. INTRODUCTION

Since November 1979, the Social and Economic Research Scientific Working Group (SER SWG) of the UNDP/WORLD BANK/WHO Special Programme for Research and Training in Tropical Diseases has been promoting and supporting research

This report contains the collective views of an international group of experts convened to advise on the UNDP/WORLD BANK/WHO SPECIAL PROGRAMME FOR RESEARCH AND TRAINING IN TROPICAL DISEASES.

Ce rapport exprime les vues collectives d'un groupe international d'experts réuni pour donner des avis au sujet du Programme SPECIAL PNUD/BANQUE MONDIALE/ OMS DE RECHERCHE ET DE FORMATION CONCERNANT LES MALADIES TROPICALES.

projects, including the preparation of bibliographies, and holding technical and policy meetings. The main aim of these activities is to contribute to the effectiveness of disease control measures and programmes through the incorporation of social and economic factors. From these experiences, two related needs have been identified, providing the focus for this informal consultation: (1) the need to rapidly increase the interest and capabilities of social scientists and community health research workers in interdisciplinary research on the tropical diseases and (2) the need to increase formal training in this area in the endemic countries so that there is continued capability to meet future needs.

Social scientists in the developing countries where the diseases are endemic are often in high demand for many research and operational programmes, as well as for teaching. Traditionally, few have been attracted to work in the health sector. With increasing emphasis in the health sector on improving primary health care, allocation of resources, health education, community participation and other social science concerns, recognition of the need to incorporate social scientists into the "health team" staff in Ministries of Health or at least into Ministry of Health projects, is also growing. Appropriately trained individuals will increasingly be sought to provide this assistance.

As is the case with biomedical scientists, training social scientists from the endemic developing countries at the post-graduate level traditionally has taken place in non-local institutions, usually non-regional, and most likely located in Europe or North America. While the theoretical training received is sound, the practical aspects are taught in a context unrelated to the situation found at home. In the health sector, specifically in the area of tropical diseases, the disease transmission and control factors are intimately associated with site-specific cultural, economic, ecological and epidemiological conditions so that on-site training and research is essential. At the Ph.D. level, it may be possible for the student to return home for dissertation research, but this is rarely feasible at the master's level, even for the research master's degree. Moreover, few, if any, of the social science master's or Ph.D. degree programmes which do exist in the developing countries include health components so that few social science programmes provide appropriate training.

The community health specialists on the other hand, often have a keen awareness of site-specific aspects of tropical disease transmission and control. Yet their training in social science research methods is more limited, usually only incorporating survey methods which are often not appropriate for answering the pertinent research questions. Thus, their training also needs to be strengthened in order to enable graduates to participate in interdisciplinary activities.

For all of these reasons, it was decided that special attention must be paid to improving the training programmes available to social scientists and community health workers by strengthening capabilities in interdisciplinary research linking social sciences and biomedical sciences. With such improvements in training, two results are envisioned: 1)the area of research would be better defined and is likely to attract more interest, and 2) the capabilities of those in the field would be increased.

The aim of these efforts is the same as that of the SER Strategic Plan:

> "To increase the effectiveness of disease control measures and programmes through integration of human behavioural (cultural, social, economic) factors in programme design and management."

The ultimate goal is to increase human well-being through the control and prevention of tropical disease transmission.

This report presents the results of an informal consultation on training in social sciences for tropical disease studies held in Geneva, 28-29 April 1982. The discussion covered both short-term and long-term objectives of training programmes and their content, as well as constraints to programme development. Criteria for selecting training institutions were established and recommendations were made about procedures to be followed. A plan of action was approved for implementing the recommendations. The types of educational material needed by such programmes were reviewed and recommendations were made about developing the material. The discussions on training and on educational material are presented separately here although it is recognized that the two are closely related.

2. TRAINING PROGRAMMES: NEEDS AND OBJECTIVES

In this section, the reasons for Special Programme interest in developing training programmes in the social sciences for social scientists and community health researchers are described. The objectives of such training as suggested by the participants are also presented.

2.1 Assessment of Need

At the October 1981 meeting of the SER Steering Committee (SC), it was decided that the first step in preparing a plan of action for training was to assess the availability and suitability of already existing programmes. To make the assessment, institutions would be contacted to ascertain their experience and interest in interdisciplinary training programmes linking social and medical sciences. The criteria for institutions to be contacted were:

- the institution should be located in a developing country where one or more of the diseases of concern to the Special Programme occur;
- the institution should offer social science training at the master's level.

These criteria were based on the following premises:

1. Interdisciplinary training can be most successful when trainees have a solid theoretical grasp of at least one discipline among the collaborating disciplines. Such a trainee should have both the confidence and skills to be able to benefit from further training in interdisciplinary research. Furthermore, these trainees would have more advantages with regard to future career opportunities.

2. It was recognized that the majority of research projects and interest shown in the SER programme have come from community health programmes in schools of public health or medicine, where research skills often need improvement. Thus there was strong concern to promote research in social science programmes so that social scientists could contribute as productive members of an interdisciplinary team.

3. The SWG on Epidemiology and the Research Strengthening Group have been developing training courses in epidemiology offered to medical scientists based in medical institutions with some attempt to introduce social science issues within the course syllabi, thus responding to the needs of the community health programmes and trainees.

4. Experiences from "Population and Development" Training Programme activities have emphasized the need to strengthen or develop

training within established institutions so that the programme is continued once outside financial support ends. (1)

These considerations provided a guide for contacting institutions and resource people. Names of those contacted were compiled from information available at WHO, Geneva and from WHO Regional Offices.* In order to prepare an inventory of interested institutions, 157 letters were sent throughout the six regions of WHO by 1 February 1981; by the time of the Informal Consultation, 43 responses had been received. (For more details, see (1).) From a preliminary review of these responses, it was possible to conclude that social science training programmes which include interdisciplinary research do exist, although only a few are linked to health research:

> The information collected confirms that many social science degree training programmes at the master's level are available in the countries where tropical diseases are present. The range of social science disciplines available include economics, anthropology, sociology, history, political science, psychology, demography, management, education, statistics and environmental sciences.
>
> Interdisciplinary degree training programmes are available with economics as the base discipline. The collaborating disciplines represent agriculture, development studies and demography.
>
> Past, ongoing and planned interdisciplinary research in the social sciences exists in endemic countries of the six regions. The area of concentration for this research includes Agriculture and Rural Development, Population and Growth.
>
> Interdisciplinary training linking the social to the biomedical sciences is offered in: economics, anthropology, sociology and management within at least one of the AFR, AMR and SEAR countries. Interdisciplinary degree programmes are offered in one of the following social science discipline bases, i.e. economics, anthropology, sociology, demography and social work, in at least one country of the AFR, AMR, SEAR and WPR regions.
>
> Past, ongoing and planned interdisciplinary research linking the social sciences and the biomedical sciences with a focus on the tropical diseases is recorded in the AFR, AMR, SEAR and WPR countries. The social science disciplines include economics, anthropology, sociology and health education. These are mainly projects funded by SER. (1)

While acknowledging the limited sample size for this review, the participants agreed that a considerable number of potential sites is available and that the main thrust of Special Programme activities should be to strengthen on-going programmes rather than develop new ones.

The participants also reaffirmed that training programmes would be strengthened only in developing countries where the diseases of concern to the Special Programme are prevalent. However, based on their own experiences, the participants thought it useful to include, along with social science

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* Regional Office for Africa (AFRO), Regional Office for the Americas (AMRO), Regional Office for the Eastern Mediterranean (EMRO), Regional Office for South East Asia (SEARO), Regional Office for the Western Pacific (WPRO), Regional Office for Europe (EURO).

institutions, community health (public health, etc.) programmes with strong social science components, where training of social scientists as well as health personnel could take place.

2.2 Training Objectives

Taking as the starting point for discussion the decision to concentrate on existing programmes and institutions, the participants then focused on the objectives of training. Increasing the capabilities of social science research workers from social science or health backgrounds so that they can better contribute to the control of tropical diseases was identified as a short-run objective. Participants discussed short courses and workshops in research methods as a means to increase interest in this area and increase the number of research projects underway at the country level.

The longer-run objective agreed upon is to increase institutional capabilities in this area, focusing on master's degree and possibly Ph.D. training, to ensure continued interest and strong capabilities for future tropical disease activities. The ways to meet these objectives are discussed in the following sections.

3. TRAINING PROGRAMMES: SHORT- AND LONG-TERM ACTIVITIES

Two types of activities were discussed by the participants:

1) Short courses to meet the first objective of increasing rapidly interest and capabilities in interdisciplinary research;

2) Longer term, more formal degree courses, for strengthening institutional capabilities in this area of research.

3.1 Short courses and workshops

Three short courses and workshops have already been sponsored by the SER SWG, specifically focused on stimulating interest and training in interdisciplinary research. Two such courses (Health Services Courses in Tropical Disease Studies, one held in Egypt and one in Sudan) have already resulted in increased interest as measured by the development of research proposals. Two projects directly resulting from the course in Egypt are now underway with Special Programme support and at least one other is underway with local support. A third course on social science research methods is planned for June 1982 in Kenya.

The courses in Egypt and Sudan brought together health ministry staff and research workers from universities, development institutes and other agencies interested in tropical disease control. The course planned for June 1982 will bring together social scientists primarily, along with a few health scientists, who will review the process of proposal development by examining a case study from Kenya in conjunction with the development of their own research ideas.

These workshops aim to upgrade research capabilities by training participants in project formulation, research design, sampling methods, data collection and analysis methods and overall research project development; particular attention is paid to the methods for integrating epidemiological research approaches and social science methods.

It is expected that the outcomes from these courses will be the expansion of research capabilities which will increase the level of research activity in tropical endemic areas.

3.2. Research Master's Degree Training Programmes

3.2.1. Special Programme Experiences

The development of research master's training programmes needs to be "related to a nation's size, development, and human resources (and prospects for career employment) as well as to national and regional needs in research and training". (ref. 4, p.1). These concerns underline the training programme development strategy already promoted by the Research Strengthening Group (RSG) of the Special Programme. In addition to support of training and institutional strengthening grants, the RSG also supports degree courses in endemic areas where relevant institutions are present: five M.Sc. courses in medical entomology are supported; two in epidemiology; and one in maintenance of electronic equipment. The courses are evaluated each year and the RSG also provides grants for applicants from other countries to attend.

The experience of the Epidemiology SWG in developing a M.Sc. training course was reviewed. The emphasis of the Epidemiology SWG in training is on post-doctoral (M.D.) training. In cooperation with the RSG, one or two institutions in each region will be supported. The institutions are identified on the basis of their capacity to conduct strong programmes, usually where there is an existing Master of Public Health degree programme. There should also be interest and opportunities for field work and for mathematical, statistical and computer training. The training programmes are identified initially by a consultant or someone from a WHO Regional Office and are then visited by a Epidemiology SC-RSG team. The team advises the institution on the training programme curriculum and the development of a proposal to the RSG.

The Epidemiology SWG is also supporting workshops for teachers of epidemiology and is developing teaching tools, such as simulation models, for classroom use.

Given the objectives agreed to at this Informal Consultation to increase the pool of capable research workers in social sciences aspects of tropical diseases, and to strengthen interdisciplinary training in existing institutions, the experiences of the RSG and Epidemiology SWG were considered appropriate models to follow.

3.2.2. SER Criteria

Master's programmes already in existence in endemic developing countries range from a broad coverage of the medical social sciences to more narrow, discipline-based curricula in Population and Development, and in Health Economics. In order to assist in the decision of what types of training programmes to support and where they should be located, the participants discussed possible criteria, ranging from content of the course to institutional characteristics.

In general the disciplines to be considered include: "sociology (including social survey research), anthropology (both sociocultural and biological/biomedical), economics, statistics, epidemiology, human biology/basic medical sciences and also: some exposure to clinical medicine, psychology/social psychology and health policy, biomedical ethics". (4) Medical geography and education were also though to be relevant fields.

It was considered essential that social scientists be exposed not only to epidemiology but also to biomedical fields such as parasitology and vector biology. "...an interdisciplinary training programme in social sciences should provide the student with some exposure to the basic and clinical medical sciences". (4, p. 3)

The details of training programme content will depend on location, students and national needs. The student should have basic training in one social science discipline and research skills:

> Whatever the disciplinary base each student should be exposed to the theory, methods, and content of all the central medical social science disciplines (sociology, anthropology, economics at a minimum) together with statistics and epidemiology.
>
> Students coming from a variety of backgrounds (some with more social science background, others with health sciences training and experience) will have quite different requirements in the early stages of their doctoral training. Monitoring is extremely important, particularly in the first year - to assess progress and detect gaps and deficiencies. (Dunn, p.3)

The main institutional characteristics to be considered are: (a) discipline resources of the institution; (b) capability of faculty; (d) flexibility of curriculum; (d) university degree requirements, and (e) on-going research from Special Programme activity (SER or other groups).

The participants strongly urged that the best locations for research training programmes are institutions where the Special Programme is already involved through research projects (i.e., SER, EPI, disease-specific field research) and institutional support (RSG). A Plan of Action for identifying institutions for support is described in section 4.

3.3 Possible constraints to Programme Development

The participants of the Informal Consultation and resource people contacted at the institutions pointed out constraints to training programme development. These included: a relative shortage of career opportunities; traditional attitudes which may resist the multidisciplinary approach; limited availability of qualified staff; and funding.

Evaluating career opportunities is difficult since new skills will be taught and, as referred to in the introduction, interest in hiring persons with these types of skills is only now beginning to expand. One reason for insisting that any candidate or programme have a strong disciplinary base is so that the trainee has a set of skills to ensure flexibility in his/her future career. However, based on suggestions of persons contacted by mail, some opportunities in teaching, research and government already require interdisciplinary skills. To expand these existing career opportunities and orient them towards health, the participants suggested that training programmes be developed in collaboration with relevant government agencies.

The traditional attitudes of single discipline departments and their lack of available staff trained or experienced in interdisciplinary research was also perceived as a constraint to the development of a training programme. This resistance should be moderated by training in inter-disciplinary research for both faculty and trainees. At least the faculty should have some exposure to the other fields, with new staff being trained in more depth.

Funding constraints also hinder programme development. Sources of funding need to be examined at the regional, national and international levels. Proposals for training courses and fellowships could be considered for support by the RSG if their guidelines are followed (5). Ultimately, programme costs must be borne locally, although some fellowships, particularly for students from other countries, could continue to be supported by non-local funds.

3.4 Educational Material for Training Programmes

Since 1979, the SER SC has supported the preparation of a number of bibliographies and literature reviews which have indicated the dearth of published material on social or economic aspects of tropical disease transmission and control. Moreover, much of the limited material available, even in the broader area of health-related social science research, does not provide for in-depth analyses of the research process or results (see ref. 2 for more details).

Several types of publications to remedy this situation were discussed by the participants. Case studies or detailed reports of the research projects funded by SER could be used to demonstrate the process and results of inter-disciplinary research. Project reports in related areas could be published together as a "readings volume". Topics such as (a) consequences of disease, (b) knowledge, attitudes and practices, and (c) behavioural interventions (e.g., community participation and health education) might be appropriate for treatment in separate volumes. Disease-specific case studies were also considered useful for both social science and community health courses. Publication of research results of Special Programme projects as policy papers to influence decision makers was also considered useful. These "readings" would be in addition to the usual publications in academic or scientific journals.

The readings could systematically present the project and analyze the research process and outcomes. Such studies could document and analyze, for example, how community participation was mobilized, how the interdisciplinary team was developed and sustained, and even problems encountered in data analysis. Management of the research process could also be discussed.

Other types of publications which could be used in both short-term and long-term training programmes include policy papers to recommend ways of using results. Manuals for Ministry of Health could be developed with the purpose of describing, for example, methods for estimating cost-effectiveness of alternative disease control measures or the implementation of studies to evaluate the role of human behaviour in disease transmission in a particular situation (e.g. people's contact with snail-infected water and resulting transmission of schistosomiasis).

In considering these possibilities, the participants recommended that a plan for preparing a reading volume should be developed. This was considered the most appropriate form of publication to develop since it is assumed that the investigators themselves will publish scientific results in journals. The reading volume would be for use in the training activities. The readings should be drawn from supported projects which contain material appropriate for educational uses. A format should be developed by the SER SC at its next meeting along with a plan for preparation of the volumes.

4. RECOMMENDATIONS AND PLAN OF ACTION

Recommendations of the participants are given below along with the suggested plan of action for implementing them.

4.1 Short Courses and Workshop

Short courses and workshops on regional, sub-regional and national bases should be developed with the aim of enhancing interest in this area of research and skills of social scientists and community health specialists in working on social science aspects of health and disease. For the short courses it was proposed that institutions in the endemic countries should be encouraged to organize research workshops. Site visits should be made to

assess interest in organizing the courses. The experience from workshops already organized and planned should be drawn upon in planning future ones. In addition to research methods, these future workshops could cover intensive instruction in one or more of the tropical diseases or any special issues, including dissemination of research results and methods of data analysis.

4.2 Research Master's Degree Training Programmes

The Master's courses should be developed and initially supported at a few regional centres. These should be based at institutions in which SER projects already exist or where there are other relevant Special Programme supported activities. The objective should be to enable social scientists to understand epidemiology, human biology and the basic medical sciences, and to acquire the language necessary to communicate with medical personnel. Details of programme content will depend on the students, the location, and the needs. However, selection of a degree programme for an individual should include consideration of the potential for exposure to field conditions, the disciplinary resources of the institution, the attitudes of the faculty, and the flexibility of the curriculum. Although it was recognized that research training programmes should preferably be located in existing social science institutions, the need for flexibility was suggested. In some situations Community Health or Public Health Departments may be better placed to promote interdisciplinary policy-oriented research especially given their close links with Ministries of Health.

Greater support should be available for social science Ph.D candidates from developing countries to conduct research in their own countries for dissertations on tropical disease-related topics; this may also include support to institutions for the development of teaching tools.

4.3 Plan of Action - Time Frame for Implementing Training Programme Recommendations

To implement the above recommendations, the Plan of Action was recommended by the participants. (See Table 1.)

In line with RSG/EPI-SWG approach, institutions should be identified for exploratory site visits. To identify the institutions, the inventory should be reviewed and expanded as follows:

a) all persons in the inventory should be contacted again, with information about the recommendations of this consultation;

b) WHO Regional Offices should be informed of the recommended Plan of Action and asked for specific suggestions;

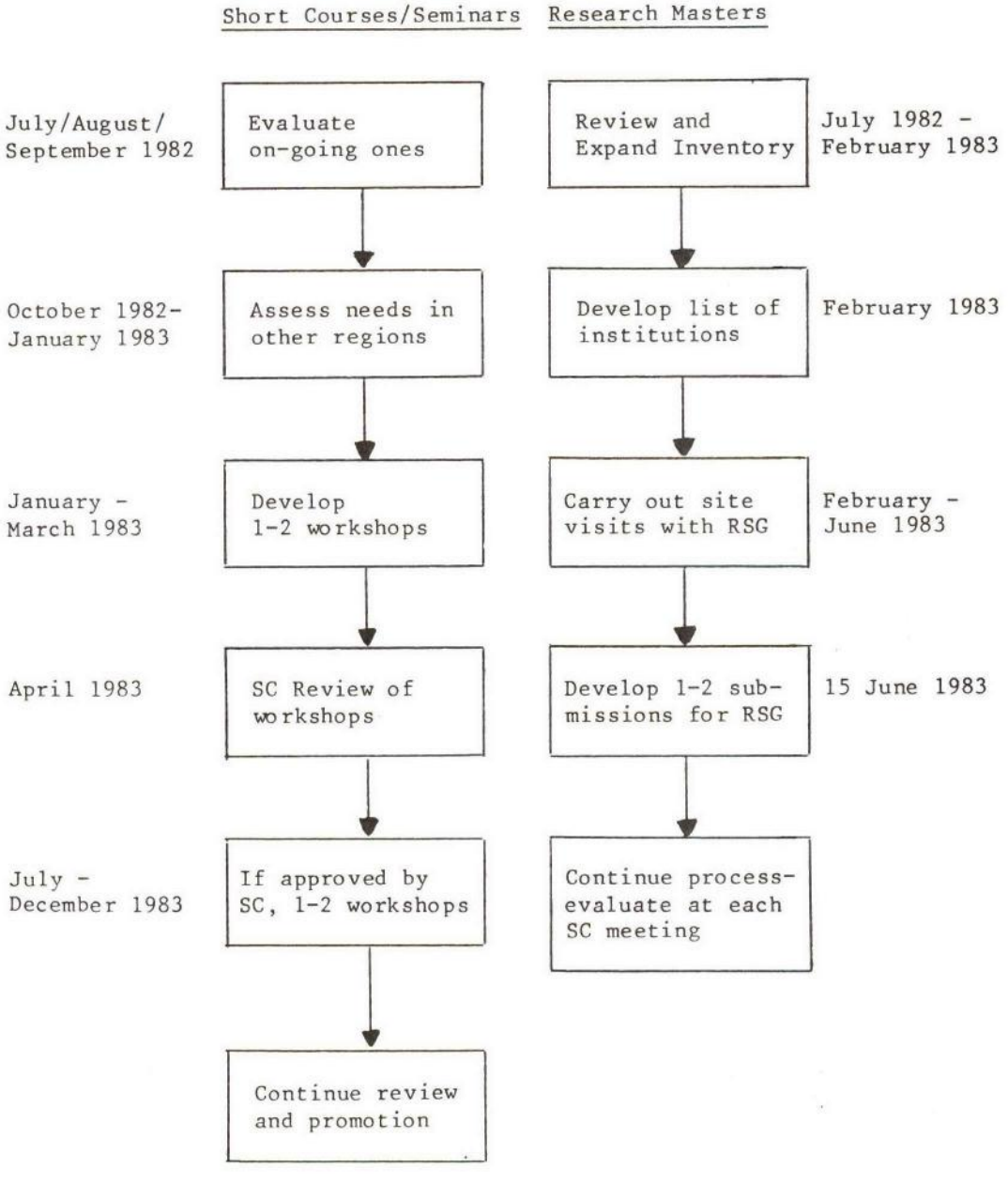
c) social science and health-related regional groups should be contacted;

d) a matrix should be developed relating institutions to on-going relevant Special Programme projects, interest in this area of training, prevalence of Special Programme diseases, and other relevant criteria.

e) a list of institutions for consideration by the Director of the Special Programme for site visits should be developed. Site visits should be undertaken jointly by SER SWG, the RSG and other SWG and Secretariat members. These visits will be used to assess the viability of developing training programmes and to advise on possible curricula, in view of national situations. More than one type of degree programme may be needed.

Table 1

Training Strategy Plan of Action



Steps a) through e) should be completed over a ten-month period by February 1983. To assist the Secretariat in implementing the plan, the participants recommended that a sub-group from the Consultation be organized. The responsibility of the sub-group would be: to review activities to date; to recommend to the SC possible short courses and workshops for consideration, and, in collaboration with the RSG, to assist in the promotion of research master's programmes. Evaluations will be made at subsequent SC meetings and plans will be assessed and revised (if needed) on an annual basis.

4.4 Recommendations for Educational Material Development

The participants strongly recommended that a collection of case studies be prepared, based on selected SER-supported projects, to assist in the training programmes.

Case studies, whether published separately or in a "readings" volume, should go beyond the usual research publications to review the entire research process, including issues that might arise relating to financing, logistics and unforseen difficulties.

Other publications such as policy papers and manuals should also be considered. From time to time, SER may wish to commission literature reviews of knowledge about human factors in the epidemiology and control of each of the six diseases. These reviews of the state of the art may be useful in training, perhaps in conjunction with the case studies.

The participants recommended that a plan of action for educational material preparation should be developed at the next meeting of the SER Steering Committee.

5. CONCLUSIONS

The need for collaboration between social scientists, biomedical researchers and other professions is increasingly recognized by social scientists as well as specialists in the biomedical and health service fields. Two key observations strongly support this:

a. Social scientists interested in research on problems of health and disease are handicapped by their lack of knowledge of the epidemiology of tropical diseases and by their lack of familiarity with medical language, often making communication or collaboration with those in the biomedical professions ineffective.

b. Enhancement of the quality of proposals and research methodology among social scientists and community health workers already carrying out research in the countries where tropical diseases are prevalent is necessary in order to contribute to improving the effectiveness of disease control activities.

It is hoped that the recommendations for training programmes and educational material will assist in meeting this need for collaboration so that tropical disease control can be accomplished in culturally sound and cost-effective ways.

6. LIST OF PARTICIPANTS

Dr F. Ahmed, Ministry of Health and Social Welfare, Islamabad, Pakistan

Dr R.K. Davidson, Division of Social Sciences, The Rockefeller Foundation, New York, USA (Chairman)

Dr F.L. Dunn, Department of Epidemiology and International Health, University of California, San Francisco, USA

Dr F. Golladay, Division of Water, Transport and Telecommunications, The World Bank, Washington DC, USA

Professor Sang-Bok Han, Department of Anthropology, Seoul National University, Seoul, Korea

Dr W. Hassouna, Cultural and Social Centre, Institute of National Planning, Cairo, Egypt

Professor Koentjaraningrat, Department of Anthropology, University of Indonesia, Jakarta, Indonesia

Professor S. Migot-Adholla, Institute of Development Studies, University of Nairobi, Nairobi, Kenya (Rapporteur)

Dr E. Rubin de Celis, Centro de Investigacion y Promocion del Campesinado, Piura, Peru

Professor A.P. Ruderman, School of Public Administration, Dalhousie University, Halifax, Nova Scotia, Canada

Professor L. Tandap, Economic Commission for Africa, Addis Ababa, Ethiopia

Secretariat

Dr R. Morrow, Special Programme for Research and Training in Tropical Diseases/ Parasitic Disease Programme

Dr C.H. Piyaratna, Regional Adviser in Health Education, SEARO, New Delhi, India

Dr P. Rosenfield, Special Programme for Research and Training in Tropical Diseases (Secretary)

Dr T. Varagunam, Special Programme for Research and Training in Tropical Diseases (Co-secretary)

Ms M. Bornstein

Dr R. Wilson, Special Programme for Research and Training in Tropical Diseases

7. LIST OF WORKING PAPERS

1.	Training Activities Review by M. Bornstein	TDR/SER/SC-TRN/82.4
2.	Curriculum Development Review by M. Bornstein	TDR/SER/SC-TRN/82.5
3.	Case-Study Review by M. Bornstein	TDR/SER/SC-TRN/82.6
4.	Notes on Interdisciplinary Medical Social Science Training, by F. Dunn, April 1982	
5.	Report of the Sixth Meeting of the Research Strengthening Group (RSG)	TDR/RSG(6)/81.3

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WORLD HEALTH ORGANIZATION ORGANISATION MONDIALE DE LA SANTE

JRE OR 9/23
JH
RB

Téléphone Central/Exchange: 91 21 11
Direct: 91 25 85

In reply please refer to: TDR/T16/83/3 (82)
Priere de rappeler la référence:

Professor J. Kostrzewski
National Institute of Hygiene
24 Chocimska Street
00-791 Warsaw
Pologne

2 September 1982

Dear Professor Kostrzewski,

UNDP/World Bank/WHO Special Programme for
Research and Training in Tropical Diseases

I am writing to thank you for having agreed to take over the responsibilities of Chairman of the Research Strengthening Group. As we discussed recently this will represent a heavy task and I, therefore, agree that it would be appropriate that you withdraw as a member of the Scientific and Technical Advisory Committee with immediate effect. May I take this opportunity to express my gratitude to you for having served as a member of STAC - I am sure the other members of this Committee will miss your participation at the next meeting.

With kind regards,

Yours sincerely,

Adetokunbo O. Lucas, M.D.
Director
Special Programme for Research and
Training in Tropical Diseases

cc: RD EURO, attn: Dr B. Nizetic, RPD/EURO
Dr John Evans, World Bank, Washington
Mr William T. Mashler, UNDP, New York
Dr A.B. Morrison, Department of Health and Welfare, Ottawa

OFFICE MEMORANDUM

Mr. Warren C. Baum DATE: May 1, 1980

K. Georg Gabriel, Director, P&B

A Proposal for World Bank Participation in International Health Research Programs - P&B's Comments

We support the objectives of the International Health Research Programs which the Bank has been asked to support, and we appreciate the role which the Bank is being asked to play with regard to program management and administration.

We have the following comments:

The proposal makes the point that the Bank was invited to become a cosponsor in order to increase donors' confidence in program management and administration (para. 30). If this is the expected role of the Bank and if, as the paper indicates, we are dealing with a rather cumbersome administrative structure which could be further complicated by inter-agency rivalry, what are the budgetary implications of the Bank assuming this role? The proposal focuses mainly on the funds required to "buy" a share in the TDR program, but it does not make it sufficiently clear what is involved when it comes to playing the very role which provides the justification for the Bank's financial participation. Specifically, our questions are: How efficient is the present setup for program administration? What is the administrative cost associated with the present arrangements which involve a Secretariat, staff officers, senior technical advisory bodies, scientific working groups and a rather involved committee structure? Since the TDR model is to be replicated for other large-scale health research programs, it would be important to know what claim administrative expenses are making on TDR program funds. In this context, what will it cost in terms of Bank staff and other Bank resources to play the proposed role? Will the staff support referred to in para. 39 be sufficient and will it be financed under the program or under the Bank's administrative budget?

Under Section III, it would be helpful if some first indications were to be given as to the potential size of the finance contribution that the Bank would be called upon to make as a consequence of accepting a role as cosponsor of the JCBHR.

As the next step, we recommend that the proposed contributions to the International Health Research Programs be discussed by the Finance Committee. If it is decided to proceed along the proposed lines, this matter should be presented to the Board as a possible use of the Bank's IDA transfer in the upcoming Board paper on the uses of Bank income.

cc: Messrs. Stern, Qureshi, Benjenk

HV:di

WORLD BANK / INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: K. Georg Gabriel, Director, P&B

DATE: May 23, 1980

FROM: Warren Baum, CPSVP

SUBJECT: Proposal for World Bank Participation in International Health Research Programs

1. The following information addresses the questions raised in your May 1 Memorandum on costs and effectiveness of administering the Special Programme for Research and Training in Tropical Diseases (TDR) and the budgetary implications of the Bank's proposed role in management and administration of international health research programs.

TDR Administration Costs

2. Administrative costs at WHO headquarters and regional offices associated with operations of scientific, financial and administrative bodies of the Secretariat, technical officers, and the scientific working group structure are estimated at 18% of the total approved budget for 1980. This includes personnel services, 11%; meetings, 3%; duty travel, 1%; and information systems services, scientific and public information, administrative support and common services, supplies and equipment at 3%. It is difficult to measure the level of administrative efficiency. The network approach has been adopted as the most effective means of achieving the program's objectives in scientific development and in strengthening research capabilities in developing countries. The research management system for network activities is, however, complex and may be expected to involve relatively high administrative costs.

3. WHO, not the Bank, is the Executing Agency for TDR. All administrative expenses are shared pro rata by all donors. If the Bank made a financial contribution to TDR, it would share administrative costs pro rata with other donors. WHO makes a direct financial contribution to the program; it has not charged overhead for its role as executive agency.

4. From the outset there has been an expectation on the part of donors that the Bank, as a cosponsor, would perform a valuable service in the administration and financial management of TDR. The Bank's position with the donors had been weakened, however, because unlike the other cosponsors it has not provided financial support to the program. The Bank's influence on the administrative efficiency of the program is needed and would be welcomed by the donor community. However, exercising its influence on program management will be much more difficult for the Bank if it does not provide financial support.

5. The proposed contribution to TDR is 10% of donor pledges to the approved annual budget. This would be $2.0M in CY80, increasing to about $3.5M at the peak level of expenditure when field trials and clinical evaluations would be carried out, as indicated in para. 29 of the proposal.

The approved TDR budget for the 1981-82 biennium calls for a 20% real growth in operations. Donor contributions are expected to increase by 10% per annum in real terms. The Bank's projected contributions for TDR over the five year period 1980-1984 assumes annual (real) increments of 10% (Table 1).

6. In addition to TDR, the proposed JCBHR portfolio is expected to include two additional programs within this period: Control of Diarrheal Diseases (CDD), and Health Services Research (HSR). The rate of growth of the CDD and HSR cannot be predicted with confidence at this early stage of their development; a 10% real growth rate has been used in Table 1. The five year projection of estimated contributions presented in the table is calculated on 10% of total estimated donor contributions to approved annual budgets and is expressed in 1980 dollars.

Table 1

Projected Bank Resources
for JCBHR Programs

Program	1980	1981	1982	1983	1984	5-Year Total
TDR	$2.0 M	$2.2 M	$2.4 M	$2.7 M	$2.9 M	$12.2 M
CDD	--	1.5	1.7	1.8	2.0	7.0
HSR	--	--	1.0	1.1	1.2	3.3
Total	$2.0 M	$3.7 M	$5.1 M	$5.6 M	$6.1 M	$22.5 M

7. Bank Special Support Staff In addition to the proposed Bank resources for JCBHR programs, the Bank should also expect to incur costs to support the Bank's representation as cosponsor. Since 1978, the Bank has incurred one full-time staff position for this program, plus travel and secretarial expenses. Adequate support would require two full-time staff from FY82 onward, and about 12 consultants weeks each year, plus travel and secretarial expenses. No provision in this estimate has been made for promotion and fund raising. If the Bank assumed this responsibility, it is estimated that 20 staff weeks would be required during the start-up period and 10 staff weeks p.a. thereafter, based on OCP experience.

8. Table 2. presents estimated Bank resources for required staffing CY80-84.

Table 2

Bank Resources for JCBHR
Estimated Staffing Required

Estimated Staffing Requirements	CY81	CY82	CY83	CY84
Total Number Staff Positions	1	2	2	2
Total Number Consultant Weeks	8	20	12	12

Position	CY80	CY81	CY82	CY83	CY84	5-Year Total*
Staff	$91,000	$145,600	$320,320	$352,352	$387,587	$1,296,859
Consultant	---	9,240	25,880	17,088	18,798	71,006
Total	$91,000	$154,840	$346,200	$369,440	$406,385	$1,367,865

* Estimates are in 1980 dollars and on recommendations from P&B assume a 12% inflationary rate in CY81 and 10% p.a. for CY82-84.

cc: Evans/Fonaroff, PHN
van der Tak, CPSVP

JREvans/ AFonaroff:tw

Ref: GLO/78/005

August 15, 1979

Dear Bill:

Thank you for your welcomed letter of August 8 transmitting two (2) Conformed copies of the global project on Diarrheal Diseases Control.

This marks the beginning of an endeavor which is of signal importance to the peoples of developing countries. The conquest of the diarrheal diseases is a goal greatly to be wished and you, and your associates can take great pride and satisfaction in launching this research effort toward that end.

With kindest regards,

Cordially,

Dr. James A. Lee
Director
Office of Environmental and
Health Affairs

Mr. William T. Mashler
Senior Director
Division for Global and Interregional Projects
United Nations Development Project
One United Nations Plaza
NEW YORK, N. Y. 10017

cc: Mrs. A. Fonaroff, OEHA
Mrs. S. Boskey, IRD

JALee:va

Files May 29, 1980

Arlene Fonaroff, PHN

Request for Bank Financial Support of
International Health Research Programme (JCBHR)

1. The Finance Committee considered the JCBHR proposal at its May 20 meeting. It was decided that a decision could not be taken until a full set of criteria were available for evaluating all proposals requesting research support. The Weiss criteria were considered insufficient for the purpose, and P&B will form a task force to prepare such criteria. Estimated completion is late September or early October, but meeting this target date is questionable because it conflicts with assignments related to the Bank's annual meeting (week of September 29).

2. Because of the above action, the JCBHR proposal will not be included in the paper on uses of Bank income scheduled for Board presentation July 29. While the JCBHR proposal was considered to be more fully developed than other research proposals considered by the Finance Committee, its review would have benefited by having information on budget implications to the Bank. The latter are contained in the May 23 memo from Mr. Baum to Mr. Gabriel.

3. P&B actions place time constraints on the Bank's position vis-a-vis TDR. While the Bank's decision on a financial contribution to TDR will not be presented officially until the December 10-11 meeting of the JCB, delay on favorable action will likely affect response to Bank input on critical management issues to be discussed at Standing Committee meetings of the TDR cosponsors (June 19-20, October 6-7).

4. We may wish to alert senior management to these time constraints, and to explore with management the possibility of treating the JCBHR proposal in the characteristic Bank manner of appraising specific items on their own merits. The Regional Vice Presidents have all had the opportunity to review the JCBHR proposal circulated by Mr. Baum with Mr. Stern's agreement. Mr. Gabriel has been provided with answers to the questions presented to Mr. Baum on costs and effectiveness of administering TDR and the budgetary implications of the proposed JCBHR. In light of extenuating circumstances related to time constraints described in para. 3, it might now be useful to secure P&B's response to this information and to re-consider whether the proposal could be reviewed by the Board in absence of the general criteria for Bank financial support of research programs. This would not only expedite the Bank's decision on this particular proposal, but also could suggest elements for consideration in developing general criteria. It would be desirable to consider a timetable that would enable a decision by the Board before the Annual Meeting, perhaps in late August following the Board recess or in early September.

cc: Dr. Evans, PHN

AFonaroff:tw

OFFICE MEMORANDUM

IRE (on) Nov 4/17 (B)

TO: Regional Vice Presidents

DATE: April 16, 1980

FROM: Warren C. Baum

SUBJECT: A Proposal for World Bank Participation in International Health Research Programs

In agreement with Mr. Stern, I am circulating the attached paper on "A Proposal for World Bank Participation in International Health Research Programs" for your information. There will not be a discussion of the paper at an Operational Vice Presidents meeting, but if you have any comments I would be pleased to receive them by May 2nd.

WCBaum:rma

cc: Mr. Stern
Mr. Benjenk
Mr. Gabriel
Dr. Evans/Ms. Fonaroff

FORM NO. 75
(9–78)

THE WORLD BANK

ROUTING SLIP

DATE: 4/10/80

NAME	ROOM NO.
Mr. Baum	E1023

	APPROPRIATE DISPOSITION		NOTE AND RETURN
	APPROVAL		NOTE AND SEND ON
	CLEARANCE		PER OUR CONVERSATION
	COMMENT	X	PER YOUR REQUEST
	FOR ACTION		PREPARE REPLY
	INFORMATION		RECOMMENDATION
	INITIAL		SIGNATURE
	NOTE AND FILE		URGENT

REMARKS:

Would you like me to sit in on the meeting with Mr. Stern in order to facilitate any possible revisions?

AF

4/15/80. Baum advises this has been approved by Stern for distribution to Reg'l. V.P. for their info. & comment. Baum said he will [illegible] he'd like to [illegible]

FROM:	ROOM NO.:	EXTENSION:
Arlene Fonaroff	N544	61518

Baum will draft memo & his office will circulate it. He will send copy of same & details on the proposals. [illegible] (4/16)

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File Title	Barcode No.
Population, Health, and Nutrition [PHN] - Special Programme for Research and Training in Tropical Diseases [TDR] - Bank Participation and Joint Coordinating Board [JCB] Health Research	1103228

Document Date	Document Type
25 November, 1980	Transcript

Correspondents / Participants
Mr. Mentre, Mr. Stern, Mr. Zaborski

Subject / Title
IBRD/IDA Joint Directors' Meeting - November 25, 1980. Excerpt from Transcript of the Meeting. Seminar on World Bank Technical Assistance.

Exception(s)

Additional Comments
Declassification review of this record may be initiated upon request.

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Withdrawn by	Date
Tonya Ceesay	13-Jul-15

WORLD BANK / INTERNATIONAL FINANCE CORPORATION

Fonaroff

OFFICE MEMORANDUM

TO: John North, PHN

DATE: June 4, 1980

FROM: Arlene Fonaroff, PHN

SUBJECT: Bank Participation in International Health Research Programs

1. Per our conversation yesterday, attached are:

   (a) Historical materials on the Bank's cosponsorship of the TDR (Special Programme for Research and Training in Tropical Diseases) including the Memorandum of Understanding between Cooperating Parties and the Tropical Diseases Research Fund Agreement between WHO and the Bank; and the 1979 request for Bank financial support to TDR;

   (b) the current proposal and management's response to date re. a proposal for a Bank initiative to participate in, cosponsor and financially contribute to a Joint Coordinating Board for International Health Research Programs (JCBHR) that includes Diarrheal Diseases and Health Services research as well as TDR;

   (c) historical and current status of the WHO/UNDP/Bank collaboration in a research program on the control of diarrheal diseases (CDD).

2. Please let me know if I can provide you with any additional information.

Attachments

AFonaroff:rk

CC: Dr. Evans

Historical Material

(A)

OFFICE MEMORANDUM

TO: Dr. John Evans, Director, PHN

DATE: November 6, 1979

FROM: Arlene Fonaroff, PHN

SUBJECT: Special Programme for Research and Training in Tropical Diseases (TDR)

1. The Bank has been requested by the Joint Coordinating Board (JCB) of the TDR to make a financial contribution to the Special Programme during CY 1979 in order to meet expected financial needs and demonstrate further the Bank's confidence in TDR. Subsequently, WHO has proposed instead that the Bank consider (a) establishing some type of financing arrangement to assure uninterrupted cash flow during a budget period; and (b) assistance in fund raising.

2. This memorandum (a) reviews the background of Bank cosponsorship of the TDR; (b) summarizes technical and financial performance to date; (c) recommends a modest financial contribution commencing in CY80; (d) recommends against establishing cash flow assistance unless consideration could be given to using the proposed financial contribution in a manner similar to the reserve employed by CGIAR; and (e) recommends against active fund raising by the Bank. A critical path of action is included.

Bank Cosponsorship

3. In February 1978, the Bank entered into a formal agreement with WHO and UNDP to become a cosponsor of the TDR (Attachment 1). The Bank, WHO and UNDP agreed as cosponsors to accept two major responsibilities: (a) membership, along with representatives of contributing governments and organizations and beneficiary countries, in the Joint Coordinating Board (JCB) which is responsibile for the overall management of the Special Programme; and (b) participation as the STanding Committee, which is responsible for developing and/or reviewing plans and budgets prepared for the JCB.

4. In March 1978, a second agreement was signed by the WHO and the Bank (Attachment 2) making the Bank fiscal manager of an international fund, the Tropical Diseases Research Fund, through which the majority of donors were expected to make contributions to the Special Programme.*

5. Mr. McNamara wrote earlier to Dr. Mahler (October 27, 1978) indicating that the Bank's Board of Executive Directors had approved cosponsorship. He enclosed his memorandum to the Executive Directors (SecM77-744) which stated (a) that the Bank would become fiscal agent; (b) it would establish and manage an international fund to which governments and others would contribute; and (c) Bank cosponsorship would be similar to that in the Onchocerciasis Control Programme (OCP), except that unlike its

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* WHO also maintains a TDR trust fund for those countries unable or unwilling to contribute through the Bank-managed fund.

role in OCP, the Bank presently would not be contributing financially to TDR, nor would it be engaged in fund raising. The memorandum noted however, that WHO had suggested that a Bank financial contribution would be welcome, primarily as evidence of the importance the Bank attaches to TDR. Mr. McNamara said that if it should appear that a contribution would be desirable, he would present a specific proposal to the Executive Directors. This position was conveyed by Dr. Lee to the donors at a meeting in February 1978.

6. The possibility that the Bank would actively raise funds for TDR was also mentioned in earlier WHO/Bank correspondence. However, in September 1977 Mr. McNamara wrote to Dr. Mahler that the matter should be left in abeyance. The understanding was that this would present no difficulty to the conduct of TDR at that time.

TDR Financial Experience

7. TDR has been fully operational since February 1978 according to terms of reference specified in the Memorandum of Understanding on Technical and Administrative Structures drawn by the cosponsors and contributing parties (Attachment 1). There is thus only a brief history on which to assess difficulties that may be encountered in securing funds to meet approved budgets; as well as potential problems in assuring liquidity throughout a budget period. These appear to be the main concerns in assuring financial stability. Securing adequate resources is the major concern expressed by the JCB. While WHO shares this concern, it also appears equally concerned that preventive measures be established to offset potential cash flow problems.

8. Securing Funds to Meet Approved Budgets: A CY 1979 budget of US$25.5M was approved by the JCB at its first meeting in December 1978, despite a shortfall of US$1.7M in relation to estimated resources. In order to meet this expected gap, the JCB requested that the Bank make a financial contribution to the TDR. It was also felt that this financial contribution would demonstrate further the Bank's confidence in the TDR and its commitment to the Programme.

9. In response to a JCB mandate to constrain spending in relation to anticipated resources, WHO has behaved conservatively. Estimated expenses against the CY79 budget of US$25.5M through year end are now estimated at US$23M. As of September 30, total estimated income for 1979 was US$25.4M: 22.4M in pledges(including US$4.4M in CY 1978 pledges paid in CY 1979) plus about US$3M cash carry-over of unexpended CY 1978 contributions. Rather than the anticipated shortfall of US$1.7M, it now appears that unexpended items will result in an estimated cash carry-over of US$6.8M to CY 1980.

Add Table

10. Is there need for additional income for the biennial budget period 1980-81? * In light of the high cost of inflation and the need to maximize potential scientific leads, the Standing Committee is recommending to the JCB approval of a US$26.4M budget for 1980, which provides essentially no growth, yet is $2M short of presently anticipated contributions. In 1981, the recommended budget increases to US$32-35M, which appears to be 30% over 1979 but in real terms accounts for only a 10% increase. To meet these needs, the Standing Committee has urged that JCB donors be encouraged to increase their financial commitments and that new contributors be sought. WHO has requested Bank assistance in fund raising in order to expand its spheres of influence beyond Ministries of Health to Ministries of Planning and Finance, and to potential new donors.

11. To evaluate the adequacy of TDR financial resources in meeting approved budgets, however, requires additional information to that provided above; namely an examination of how WHO treats receipts, expenditures and unliquidated obligations:

(a) Receipts: A major factor to assure uninterrupted program activity is the timing on payment of annual pledges. WHO has expressed continual concern throughout CY 1979 that program liquidity might be jeopardized due to unpredictable arrival of paid pledges. This has not occurred. Problems were predicated on uneven receipt of CY78 pledges, with many arriving late in the year and over US$4M not received until early in CY79. Pledges made at the JCB and at other times during the year do not indicate expected payment dates. Receipt of pledges is tied to legislative appropriation calendars and in no way reflects lack of donor confidence in support of the TDR. Encouragement for prompt payment is made by WHO and the Bank in discussions and correspondence with donors to the respectively managed trust funds. In 1979, the range of total payments on pledges received at the Bank and WHO managed trust funds was from US$7M by the end of January to none in October. Information provided to the Bank by WHO on cash on hand/ month does not present a true picture of total monthly resources available to the Special Programme. WHO records only the total amount in Geneva; it does not include income availabe to the Special Programme which is on deposit in the Bank-managed TDR Fund awaiting call by the Executing Agency. This is an essential consideration in assessing financial need. On August 31, 1979, for example, WHO reported a debit figure of over US$900,000; at the same time, however, there was approximately US$4.9M at the Bank in the TDR Fund available for call by WHO. WHO is informed by the Bank of each receipt made to the TDR Fund.

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* The JCB approved biennial budgeting for TDR beginning January 1, 1980 to conform with overall WHO procedures; however, annual pledging for TDR will likely continue.

(b) Expenditures and Unliquidated Obligations: WHO calculates monthly expenditures on both actual amounts disbursed and unliquidated obligations.* From information supplied by WHO, the highest monthly expenditure reported was US$1.8M. On average, WHO estimates that it incurs an additional US$1.7M in unliquidated obligations/month.

12. Assuring Liquidity. The JCB was advised by the Executing Agency that cash flow might become a problem in 1979, both because of the anticipated financial gap and because, judging from 1978 experience, uneven payment on pledges could be anticipated. The JCB, however, did not agree to a proposal to establish a program reserve or working capital fund. The JCB also did not accept a WHO/Bank proposal to approach the Bank for assistance with potential temporary shortfall in lieu of its request for a Bank financial contribution. The Standing Committee was delegated to prepare a report on the subject and has analyzed four possible options:

(a) Establishing a working capital fund or program reserve by using donor contributions. (This was poorly received by donors at the JCB meeting because it immobilizes operational disbursements for substantial periods during the year.)

(b) Using commercial banking or financial institutions to provide interim financing or overdrafts, with reimbursements made on receipt of donor contributions. (Interest rates, however, must be considered in light of the estimated duration and order of overdrafts.)

(c) Requesting the Bank to use its own resources to provide temporary overdraft or similar facilities. (This is a policy decision which would require action by the Bank's Executive Directors, and it is questionable whether support could be obtained.)

(d) Reducing the level of program operations when expenditures reach the point of exhausting cash on hand. (This is highly undesirable as it would disrupt scientific operations which cannot be turned on and off on a monthly basis.)

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* Unliquidated obligations include primarily (a) staff salaries obligated as of January 1, and disbursed monthly by payroll; (b) contractual technical service agreements between WHO and institutions receiving awards for projects. (CTS agreements are obligated throughout the year by Steering Committees of Scientific Working Groups but are not disbursed until WHO receives the signed agreement from the institution.)

WHO and UNDP both are urging that the Bank, as part of its fiscal agent role, consider establishing temporary financing by advancing relatively modest sums of money during periods of late payment on pledges by JCB members, on the understanding that these funds would be immediately repaid on receipt of pledges to the TDR Fund.

13. Will cash flow problems develop in CY80? Because of the brief history of the TDR, it is not possible to predict the extent to which the CY78/79 pattern of receipts on pledges will be repeated in subsequent years. However, information provided by WHO on receipts and disbursements in 1979 and estimates for 1980 do not support WHO's current anticipation that cash flow problems will emerge in CY80. *

Requests before the Bank

14. Three requests are before the Bank:

(a) The JCB has requested a direct financial contribution to the TDR Fund to reinforce to the JCB the degree of Bank commitment to its cosponsorship role and to the goals of the TDR.

(b) WHO has requested a line of credit or program reserve to assure liquidity during short periods when cash flow problems might arise.

(c) WHO has requested that the Bank assist in fund-raising.

15. As indicated above, the information provided by WHO shows that the estimated shortfalls and liquidity problems which motivated the JCB and WHO requests for Bank financial assistance have not materialized as problems in CY79; nor does it appear likely that they will materialize in CY80, although as in CY79 a shortfall of US$2M is again anticipated. In strictly financial terms, it appears difficult to justify a recommendation for Bank financial participation. The decision therefore must be considered on the performance of the TDR; the potential effect on TDR if the Bank were to reject appeal for assistance in any form; and on the types of research programs the Bank determines it should support.

16. Performance and Potential of the TDR. The Bank agreed to become a cosponsor because of the high potential and high payoff to social and economic development in countries affected by the six diseases under investigation by TDR. Until more effective tools are available for prevention and treatment of these diseases, development in tropical countries will continue to be impeded. The Bank's operations in many sectors (e.g., agriculture, rural and urban development, hydroelectric power generation, irrigation) can be expected to benefit significantly from improvements in the technology

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* WHO estimates 2 months operating capital (US$4M) would be needed several times in 1980.

of disease control being developed by TDR. These new technologies will also have direct impact on the Bank's activities in health care.

17. The TDR Scientific and Technical Advisory Committee (STAC) has commended both technical and managerial accomplishments, particularly, in leprosy and malaria vaccine development and the screening of new drugs for onchocerciasis. It also recognized progress in activities to strengthen research institutions in countries affected by the diseases. Over 600 research projects have now been funded in over 66 countries; over half were awarded to scientists in developing countries. While TDR is not expected to achieve all of its goals for 20 years or more, some benefits are expected within the decade.

18. The extent to which both short- and long-range goals are achieved depends to a large degree on the effectiveness of TDR management. The Bank's initial concerns about the system's delivery capability, as well as the administrative capacity of WHO, led the Bank to insist on certain managerial and organizational arrangements that would strengthen the technical and administrative relationships between the TDR and WHO. This required changes in WHO's original plans, but the issues were considered of such importance that the Bank conditioned its participation on their acceptance. The Bank's proposals were subsequently accepted by WHO. There is now a complex but efficient administrative/management system for TDR's global scientific and technical activities.

19. The Bank has closely observed TDR for more than a year through participation at all operational levels and through liaison with the co-sponsors. While monitoring of fiscal and technical components of projects needs to be and will be further strengthened, the TDR mechanism is generally functioning well. The Standing Committee has approved the Bank's recommendation that an internal audit system be developed to assure that funds are being used as intended. Scientific working groups have instituted procedures for project funding in accordance with the JCB mandate that the financial demands of TDR activities should not exceed the estimated donor contributions.

20. Potential Effect of a Bank Decision on TDR. A negative decision by the Bank would likely (a) diminish the Bank's role as cosponsor both in the Standing Committee and the JCB, thereby minimizing the Bank influence in the overall management of the Programme; (b) affect level of contributions, as some donors would likely interpret the Bank's action as indicating lack of confidence in the TDR: and (c) reduce contributions to the TDR Fund, which might bring into question the necessity for the Bank's role as fiscal manager.

(a) Overall Management Role: If the Bank continues to be a non-contributor to the TDR, its influence on the overall management of the Programme could be diminished both in the Standing Committee and in the JCB. When the Standing Committee met last October, both WHO and UNDP

expressed disappointment in the Bank's unwillingness to provide financial resources for TDR, and stressed that the JCB response to the Bank's position was likely to be even stronger than that of the two cosponsors. The cosponsors both urged that the Bank seriously reconsider its position, particularly in regard to cash flow. The Bank was to be assured that this situation was not like that presented by the UNDP emergency request for cash flow assistance; nor was it due to improper management of the WHO TRust Fund for TDR or the Bank-managed TDR Fund, but by factors beyond the control of the cosponsors.

(b) Commitment as Cosponsor: Within the JCB a number of donors share the view that the Bank's demonstrated commitment as cosponsor should be backed by a financial commitment. Some governments believe it necessary to induce additional donors.

(c) Fiscal Management Role: Some JCB donors have said that if the Bank fails to contribute to the TDR, their contributions would be directed to the WHO-administered trust fund rather than the Bank-managed Fund. That could hurt TDR, since some major donors initially conditioned participation on the Bank's becoming fiscal agent, and their insistence was a principal factor in our decision to accept that role. While it was recognized that some governments would be unable, for legal or political considerations to contribute through the Bank, amounts deposited with WHO were expected to represent only a small proportion of total TDR resources. The Bank agreed to be fiscal agent on the understanding that it would be administering the bulk of the TDR funds. If that were no longer so, the administrative and other burdens of a fiscal agent role would probably not be justified. Should this occur, donors which had earlier insisted on the Bank's participation might well reduce their support. In any case, to require WHO to take on the major fiscal management function (which it does not want to accept) would divert it from its responsibilities as the technical executing agency and could impair the effectiveness of its performance in the latter role. As of September 30, 1979, 66% of CY79 deposits have been made to the TDR Fund, representing 11 of 23 contributors.

21. Bank Criteria for Research Support: The Bank currently is cosponsor of three research projects: CGIAR, OCP and TDR; TDR alone receives no financial input. The request for a financial contribution to the TDR was discussed at the President's Council on May 21. The major issue raised by the Council was that Bank support of CGIAR, OCP and TDR was based on ad hoc decisions, and that it was now appropriate for the Bank to establish objective criteria to determine financial support for TDR as well as other possible new opportunities that come before the Bank. The President's Adviser for Science and TEchnology is assigned to this task.

22. No action on TDR was taken by the President's Council. Mr. McNamara, however, subsequently accepted a recommendation from the Vice President, Finance, that decisions in this area be delayed (probably until the end of the next fiscal year) to enable the Board of Directors to

agree upon criteria for allocating future new income in support of requests for research grants. Mr. McNamara at the same time informed Mr. Stern to advise if immediate action was necessary in regard to TDR.

23. We are in full agreement with the position to establish criteria for Bank support of non-lending operations before making commitments against future new income. The Bank cannot and ought not to try to fund all research which would support its activity. However, as Mrs. Boskey noted in an April 20 memorandum to Mr. McNamara: "... that does not seem to be a sufficient reason to decline to support a program to which the Bank is already committed, which is of high priority and which is proceeding satisfactorily. The fact that the Bank supports OCP and CGIAR has not prevented it from rejecting requests to fund other likewise meritorious research. If we think TDR does not deserve support, or if we cannot afford to support it, that is one thing. But we ought not to say 'no' in this case because we cannot say 'yes' to all others."

Recommendations

24. The Special Programme has demonstrated ability to attract and manage high quality scientific involvement. Its leadership has attracted other institutions to accelerate scientific investigations for tropical diseases control. The potential for biomedical breakthroughs for controlling leprosy, schistosomiasis, onchocerciasis and malaria may now realistically be expected in the decade ahead. The Bank has played a major developmental role in moving TDR to this position, and future progess could be hampered if the donor community, in particular, associates a reduction in Bank commitment to TDR with its non-contribution status. In view of the above considerations, and the forthcoming JCB meeting on December 12-13 in Geneva, the urgency of Bank financial participation in the TDR should be brought to Mr. McNamara's attention.

25. Recommendation: Financial Contribution: The most expeditious method for Bank financial participation in the TDR and the most realistic response in relation to financial and political considerations, would be for Mr. McNamara to accept the recommendation made by the Vice President, Operations (August 4, 1979). He proposed that Mr. McNamara request that the Board of Directors approve a financial contribution of US$1.5M to TDR commencing in CY80, with continuation in future years not expected to exceed 10% of the total budget. Mr. Stern has suggested that such financing could be derived from the net income transfer out of the FY 1980 earnings. We would expect that Bank acceptance of this recommendation would be well-received by both the JCB and the two cosponsors, although as noted earlier the cosponsors would prefer Bank assistance in a form which could offset potential cash flow problems.

26. Recommendation: Cash Flow Assistance: The brief financial experience in TDR provides little evidence to support actual need for this option. However, as the problems anticipated by the Executing Agency are

not unlike those faced by CGIAR, I would suggest that you discuss with Mr. Baum whether the recommended financial contribution proposed above for TDR might be used in a manner similar to that of CGIAR. In CGIAR, a portion of the Bank's contribution is not committed for disbursement until the second half of the calendar year, but is available up to that time on a short-term loan basis to offset temporary cash flow problems resulting from uneven receipt of donor contributions due to the timing of donor's internal procedures and fiscal years. This suggestion does not require either Messrs. Baum or Stern to reconsider their rejection of larger issues of providing cash flow assistance to TDR. It merely suggests that deposit of the proposed contribution to the TDR Fund be delayed until July 1, so that during the calendar year the full amount be available if necessary for short-term accommodation (not to exceed 60 days) to offset the potential late payment of donor pledges. We would expect acceptance of this recommendation to be well received by the two cosponsors, but perhaps with minimal enthusiasm by the JCB since it had rejected a proposal to establish a reserve. We would expect, however, that a well-documented WHO presentation of need for a Bank contribution-cum-reserve at the 1979 JCB meeting would offset potential adverse response by the JCB.

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27. Recommendations: Fund-raising: Since financial participation by the Bank will be seen as demonstrating Bank support for and confidence in the TDR, it can be expected to attract new donors and would indirectly serve as a form of fund raising. Therefore, we suggest that the Bank does not agree to engage in fund raising at this time. We would hope, however, that the Bank might assist WHO with some potential donors, such as the OPEC countries, with which the Bank's ties are presumed to be closer than the WHO's. This assistance would take the form of assisting WHO in acquainting potential donors with technical and administrative aspects of TDR. Each request from WHO for assistance would be considered on its merits and in consultation with interested parts of the Bank.

Action Required

28. In order to obtain a Board decision on the Bank's financial participation in TDR for presentation at the JCB meeting on December 12-13, the following steps and timetable are required. The schedule is developed on the assumption of approval of recommendations through Mr. Stern. There is little flexibility to account for inevitable delays, particularly in Mr. McNamara's office.

CRITICAL PATH FOR BANK CONTRIBUTION TO TDR

Action	Actor	Deadline
Review and approval of recommendations	Dr. Evans	Nov. 7
Submission of recommendation to Mr. Baum	Dr. Evans/Ms. Fonaroff	Nov. 9
Review of recommendations for Mr. Stern	Mr. Baum	Nov. 9
Submission of recommendations to Mr. Stern	Mr. Baum	Nov. 12
Review and recommendations for Mr. McNamara	Mr. Stern	Nov. 12
Submission of recommendations to Mr. McNamara	Mr. Stern	Nov. 12
Review and recommendation	Mr. McNamara	Nov. 14
Circulation of paper to Board	Mr. McNamara / Dr. Evans / Ms. F.	Nov. 20
Presentation to Board	Mr. McNamara Dr. Evans	Dec. 4

Attachments

cc: Dr. James A. Lee, OEA
Mr. Robert Jones, CTR

AFonaroff:va

WORLD BANK

OFFICE OF THE PRESIDENT

3/23

To Messrs Cargill
Stern

1. May I have your views.
2. If we were to contribute to TDR, how would we justify not contributing to the host of other development related activities.

[illegible]

OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara, President (through Mr. Warren C. Baum, Vice President, Projects Staff)

DATE: March 20, 1979

FROM: James A. Lee, Office of Environmental and Health Affairs

SUBJECT: The WHO/UNDP/World Bank Special Programme for Research and Training in Tropical Diseases (TDR)

1. At its November 1978 meeting in Geneva, the Joint Coordinating Board (JCB) of the Special Programme for Research and Training in Tropical Diseases (TDR) voted unanimously to request the Bank to make a financial contribution to TDR during calendar year 1979 in order to meet expected financial needs and demonstrate further the Bank's confidence in TDR. Subsequently, WHO proposed instead that the Bank consider establishing some form of an operational reserve or temporary financing arrangement to assure uninterrupted flow of cash during a budget period. (Reimbursement terms were unspecified). WHO also requested the Bank to assist in fund-raising.

2. This memorandum a) reviews the background of Bank co-sponsorship of the TDR; b) summarizes the TDR performance to date; c) recommends a modest financial contribution to the TDR; and d) recommends against active fund-raising by the Bank.

Bank Co-sponsorship

3. On October 27, 1977 you informed Dr. Mahler that the Bank's Executive Directors had approved co-sponsorship of the TDR. Accompanying this letter was your memorandum to the Executive Directors (SecM77-744) which stated that the Bank would become fiscal agent, and would establish and manage an international fund, The Tropical Diseases Research Fund, to which governments and others would contribute. The Bank's role was described as being similar to its role in the Onchocerciasis Control Program. The major differences are that at present the Bank does not contribute financially to TDR, nor does it engage in fund-raising.

4. Your memorandum further noted that WHO had suggested that a Bank financial contribution would be welcome, primarily as evidence of the importance the Bank attaches to TDR. You said that if it should appear that a contribution would be desirable, you would present a specific proposal to the Executive Directors. This position was conveyed to the donors at a meeting in February 1978.

5. The possibility that the Bank would actively raise funds for TDR was mentioned in earlier WHO/Bank correspondence, and in September 1977 you wrote to Dr. Mahler that the matter should be left in abeyance. Your understanding was that this would present no difficulty to the conduct of TDR at the time.

6. The expanded co-sponsorship role now proposed by actions of the JCB and WHO should be examined in light of the performance and potential of the TDR.

TDR Performance and Potential

7. Until more effective tools for the prevention and treatment of the diseases being investigated by TDR are available, development in tropical countries will continue to be impeded by these diseases. The Bank's operations in many sectors such as agriculture, rural and urban development, hydroelectric power generation, irrigation, and others can be expected to benefit significantly from improvements in the technology of disease control being developed by TDR. These new technologies will also have direct impact on the Bank's proposed activities in health care.

8. While TDR is not expected to achieve all of its goals for 20 years or more, some benefits are expected within five years. The extent to which both short and long-range goals are achieved depends to a large degree on the effectiveness of TDR management. The Bank was initially concerned about the system's delivery capability as well as the administrative capacity of WHO. Accordingly, the Bank insisted on certain managerial and organizational arrangements, requiring changes in WHO's original plans. These issues were considered of such importance that the Bank conditioned its participation on a strengthening of the technical and administrative relationships between the TDR and WHO. The Bank's proposals were subsequently accepted by WHO. There is now a complex but efficient administrative/management system for TDR's global scientific and technical activities.

9. The Bank has closely observed TDR for more than a year, through participation at all operational levels, and through liaison with the co-sponsors. While monitoring of fiscal and technical components of projects needs to be and will be further strengthened, the TDR mechanism is generally functioning well. The Standing Committee has approved the Bank's recommendation that an internal audit system be developed to assure that funds are being used as intended. WHO has recently recruited a highly qualified financial/management analyst. This year the various scientific and technical groups will institute procedures for project funding in accordance with the JCB mandate that the financial demands of TDR activities should not exceed the estimated contributions from donors. TDR management will be further strengthened now that the Chief Executive Officer is resident full time in Geneva.

10. At its first meeting in November 1978, the JCB approved a CY 1979 budget of US$25,539,000. As of January 31, 1979, total estimated income for CY 1979 was $21,284,397. This included $4,645,397 in pledges made but not paid in 1978 and $16,741,000 in new pledges for CY 1979. Carry-over of unexpended 1978 contributions ($2,440,000) brings total estimated resources to $23,826,397. Thus, if all proposed projects were fully funded during 1979 the estimated shortfall would be on the order of $1.7 million.

Recommendation: Bank Financial Contribution

11. A Bank decision to contribute to the TDR Fund will have long-range implications. A significant financial contribution would demonstrate to the donor community that the Bank is confident of the Programme's potential. Additional funds from other sources might therefore be attracted. The Bank's co-sponsorship per se does not fully serve this purpose; the donors consider the Bank's present position, while welcome, as only a partial commitment to the TDR. Moreover, while the Bank has an active role in TDR management, its effectiveness would be greater if it also contributed financially. The Bank has been making a modest contribution-in-kind through its technical, administrative and management activities. However, both WHO and UNDP, the other co-sponsors, have made similar in-kind contributions and each has in addition pledged 6-7% of this year's estimated budget.

12. A Bank contribution is likely to induce more contributions to the TDR Fund. That Fund was established, you will recall, at the request of the original group of TDR Contributing Parties, with the expectation that the majority of donors would contribute to it. Countries either unable or unwilling to contribute to a Bank-administered fund may make their contributions to the WHO Voluntary Fund for Health Promotion. WHO would prefer the Bank to have complete responsibility for management of all financial contributions to TDR, leaving WHO to concentrate on its role as the technical, executing agency. However, while we would welcome this move, it would be more difficult to achieve if the Bank maintains its current non-contributor status. A number of important donors have said they are not willing to direct their contributions to the TDR Fund unless and until the Bank contributes. Contributions from these donors would substantially increase the Fund. Of estimated new pledges for CY 1979 ($16,741,000), 42% (US$7,055,600), are now specifically designated for the Fund representing contributions of eight donors.

13. On the basis of progress to date, and the importance of TDR to social and economic development in the affected countries, I urge that you recommend to the Executive Directors that they approve an annual Bank contribution to the TDR Fund commencing in CY 1979. I suggest that the contribution be 5% of each year's estimated annual budget, not to exceed $1.5 million. For CY 1979 this would imply a Bank contribution of $1.2 million. I would recommend that the Bank's commitment to this level of financial contribution should be carefully reviewed each year in light of TDR performance and projected needs.

Recommendation: WHO Request for Bank Fund-Raising

14. As indicated earlier, a financial contribution will be seen as demonstrating Bank support for and confidence in TDR and can be expected to attract new donors. It thus would indirectly serve as a form of fund-raising. Therefore, I suggest the Bank should not agree to engage in fund-raising directly. Indeed, in asking that the Bank consider fund-raising,

WHO does not have in mind that the Bank should directly approach donors as it does in the Onchocerciasis Control Program, but rather that it should assist WHO with some potential donors, such as the OPEC countries, with which the Bank's ties are presumed to be closer than WHO's. I hope you will see no objection, therefore, to our assisting WHO in acquainting potential donors with the technical and management aspects of TDR. Each request from WHO for assistance would of course be considered on its merits and in consultation with the interested parts of the Bank.

Response of Donors and WHO to Recommendations

15. If the above recommendations are adopted they will be welcomed by both the full membership of the JCB and by WHO. While WHO initially dissented from the JCB recommendation that a Bank financial contribution be sought, and instead proposed that the Bank simply arrange to assure the Programme's liquidity, WHO is aware a) that the donors remain less than enthusiastic about this idea; and b) that we also are negative toward a proposal which could lead to the Bank's incurring a potentially large, open-ended obligation. WHO has therefore left the issue of assuring cash flow for further study. In any case, WHO is fully supportive of the position set forth in this memorandum.

16. A paper detailing the progress of TDR is being prepared for the information of the Executive Directors.

AFonaroff/JALee:va

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL FINANCE CORPORATION

OFFICE OF THE PRESIDENT

TO: Members of President's Council

Mr. McNamara would like to discuss the attached memoranda (by Mrs. Boskey and Messrs. Baum, Cargill and Stern) on Bank contribution to the WHO/UNDP/World Bank Special Program for Research and Training in Tropical Diseases (TDR) at the PC meeting on May 21.

cc: Mrs. Boskey

Caio Koch-Weser
April 25, 1979

OFFICE MEMORANDUM

TO: Mr. McNamara (through Mr. Warren C. Baum) DATE: April 20, 1979

FROM: Shirley Boskey, Director, IRD

SUBJECT: Bank Contribution to the Special Program for Research and Training in Tropical Diseases (TDR)

I have seen the Stern and Cargill responses to your request for reactions to Dr. Lee's March 20 proposal that the Executive Directors be asked to approve a Bank contribution to the TDR program. I have also seen your note to Warren Baum, saying that you are "inclined" to share their view. Since I had something to do with the Bank's current degree of involvement with TDR, and on the assumption that an inclination is not quite a decision, I am taking the liberty of adding some (admittedly unsolicited) comments to those which Warren has already given you.*

The Bank has not until now been presented with a clear request to help fund TDR. WHO, when it asked the Bank to serve as co-sponsor and fiscal agent, also invited financial support but did not press the point. As the Lee memorandum recalls, when you recommended that the Executive Directors approve Bank association with TDR, you said that you had made no funding commitment and that if it should later appear that a contribution would be "desirable", you would present a specific proposal to the Board.

The request now before the Bank does not come from WHO. It comes from representatives of governments, meeting as the Joint Coordinating Board of TDR. These representatives come, not from Ministries of Health, but from aid ministries, and they presumably speak on instruction. The Nordic countries, Switzerland and the Federal Republic of Germany took the lead on this point in the JCB. However, the request was supported by all JCB members, i.e., representatives of contributing governments and organizations as well as of beneficiary countries. WHO, in fact, while not averse to a financial contribution by the Bank, had proposed to the JCB that the Bank be asked only to assure the program's liquidity.

A second relevant consideration is that it appears that there will be a $1.7 million shortfall in TDR funding for CY79. Implementation of the Lee proposal would not fully bridge the gap but would go most of the way. For the future, the Lee suggestion that Bank support be limited to 5% of the TDR budget, not to exceed $1.5 million, coupled with the fact that the Bank, as one of the co-sponsors, reviews all TDR budget proposals, would assure relatively modest Bank support. Moreover, the level of commitment would be reviewed annually in the light of the program's performance and need.

It would be reasonable, I think, to conclude that we are now presented with a situation in which a Bank contribution would be

cont....

* Carries copy of attachment.

"desirable". And I would note that Ernie has not flatly recommended against a contribution. He suggests that if the Bank contributes it should at the outset stipulate that its participation will be short-term and progressively reduced. (But surely if we do contribute, it would be by reason of the merit/potential of the program, its need for funds, the perceived significance of monetary support by the Bank, etc. To announce that we intend in any event to cease funding after a stated date and to contribute less each year would be inconsistent with any of these considerations, and arbitrary. The annual review might lead to a reduction in level or an end to support, but then that consequence would reflect a considered judgment).

Of course, as Peter and Ernie point out, the Bank cannot and ought not to try to fund all research which would support its activity. But that does not seem to be a sufficient reason to decline to support a program to which the Bank is already committed, which is of high priority and which is proceeding satisfactorily. The fact that the Bank supports the onchocerciasis control program and CGIAR activities has not prevented it from rejecting requests to fund other likewise meritorious research. If we think TDR does not deserve support, or if we cannot afford to support it, that is one thing. But we ought not to say "no" in this case because we cannot say "yes" to all others.

I must add that I do not understand why governments should feel that the Bank's demonstrated commitment to TDR requires the reinforcement of a financial contribution. But apparently that view is held. Some governments have said that a Bank contribution is needed to induce additional contributions. Others have said they will not contribute to the Bank-managed fund in the absence of a Bank contribution; they will instead direct their contributions to a fund administered by WHO.

Suppose they do.

That could hurt the program.

Some major donors initially conditioned their participation in the program on the Bank's becoming fiscal agent. Their insistence was a principal factor in our decision to accept that role. While it was known that some governments would not be able, for legal or political considerations, to contribute to a Bank-managed fund, the amounts to be deposited with WHO were expected to represent only a small proportion of total TDR resources. The Bank, for its part, agreed to be fiscal agent on the understanding that it would be managing the bulk of the program's funds. If that were no longer to be so, the administrative and other burdens of a fiscal agent role would probably not be justified. Yet if the Bank ceased to be fiscal agent, donors which had earlier insisted on Bank management might well reduce their support for

cont....

the program. In any case, to require WHO to take on a major fiscal management function (which it does not want to accept) would divert it from its responsibilities as the program's technical executing agency and could impair the effectiveness of its performance in the latter role.

One final consideration: each of the other co-sponsors -- UNDP and WHO -- provides a measure of financial support to TDR, a slightly larger percentage of the annual budget than is proposed for the Bank. The Standing Committee, composed of the co-sponsors, reviews plans and budgets prepared for presentation to the JCB. If, notwithstanding the JCB request, the Bank continues to be a non-contributor, its influence, both in the Standing Committee and in the JCB, on the overall management of the program may be weakened.

For all these reasons, I hope that you will agree, after all, to recommend a financial contribution to the Executive Directors. If you are not fully persuaded to do so, would you agree that Warren or Jim might explore with some key Executive Directors how they would react to such a recommendation? At the very least, would you agree that we might say to the JCP that the timing of the request is awkward, but that it will be put before the Directors once the negotiations for a capital increase and for IDA replenishment are concluded?

SEBoskey:jfh

c.c. Mr. Cargill
Mr. Stern
Dr. Lee

4/9 To Mr. Baum

WORLD BANK / INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara

DATE: April 4, 1979

FROM: I.P.M. Cargill

SUBJECT: The WHO/UNDP/World Bank Special Programme for Research and Training in Tropical Diseases (TDR)

Considering the demands on the Bank's budget for regular operations, I could not support committing funds for this special programme. Extending Bank financial assistance to TDR would open us to other equally justifiable requests. Moreover, I am not convinced that a contribution by the Bank to TDR would help attract funds from other sources. We have already demonstrated our support for TDR by co-sponsoring the programme and acting as its fiscal agent.

cc: Mr. Baum

4/3

Warren, I am inclined to share Peter's + Frank's views. Therefore I do not believe we should contribute to the TDR Fund.

Lyn

WORLD BANK / INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara DATE: March 30, 1979

FROM: Warren C. Baum

SUBJECT: Tropical Disease Research Program:
Mr. Stern's Note of March 29th

I would like to clarify or comment briefly on some of the points raised by Mr. Stern.

1. We have indeed been involved in this program for a long time, and it has a considerable history, with which you are familiar. It is important to note that no additional staff resources will be required to carry out the activities in question, beyond the staff which you authorized early in 1978.

2. A number of the principal donors to the program are looking to the Bank for financial as well as technical support. A short-term or declining contribution from the Bank would not sit well with them and could lead them to reconsider their own participation. We also question the ability of WHO to raise the necessary funds without our support.

3. There are indeed a host of research problems that could command our support, and we cannot finance them all. This, of course, does not mean that we should not finance any of them, and I suspect that the TDR program would rank high on any list. But I agree that we need a clearer policy and set of priorities as to what research we will or will not finance; Mr. Weiss has a paper under preparation on the subject.

WCBaum:rma

cc: Mr. Stern
Mr. Lee

Mr. Robert S. McNamara

March 29, 1979

Ernest Stern, Vice President, Operations

The WHO/UNDP/World Bank Special Program for
Research and Training in Tropical Diseases (TDR)

1. We seem to be quite far in already. I think this diverts very scarce time and talent. I am amazed that CPS, notoriously short of staff, would suggest yet a further burden.

2. If we contribute, it should be with the clear understanding that it will be on a declining scale, to be ended in three years.

3. There is no difference between this and a host of other research problems, whose resolution would support Bank activities. We cannot, nor should we try to, fund them all.

4. While we are apparently committed to managing the Fund, we should minimize other involvement.

5. In the present climate, I do not believe WHO could have serious difficulty in raising $1.7 million from other donors.

cc: Mr. Baum
EStern/ls

WORLD BANK / INTERNATIONAL FINANCE CORPORATION

AF

OFFICE MEMORANDUM

TO: Files

DATE: February 24, 1980

FROM: Arlene Fonaroff, PHN

SUBJECT: Diarrheal Diseases Control (CDD) Technical Advisory Group Meeting, WHO, Geneva, January 28 - 31, 1980

1. This was the second meeting of the WHO Technical Advisory Group (TAG II) for the expanded program of diarrheal diseases control (CDD) and was convened for approval of the WHO Mid-term Plan (MTP) for CDD. The first TAG met in 1978 and recommended research needs, objectives, and five strategies approved in 1979 by the WHO/ACMR Subcommittee on Research in Diarrheal Diseases: improved clinical management through oral rehydration therapy; improved maternal and child health practices; improved environmental sanitation and food practices; epidemiologic surveillance and control; and health education as a component of all delivery strategies with focus on family health care.

2. TAG II terms of reference included review and evaluation of current status and progress of scientific, administrative and budgetary matters; and recommendations on future plans and priorities for programs of implementation and programs of basic and operational research. TAG II members were primarily from developing countries, with major expertise in clinical management, health services delivery and epidemiology. Representatives of WHO Regional offices and of the WHO Secretariat also participated. UNDP, UNICEF and the Bank were represented (Attachement 1). The following summarizes concerns expreseed, priorities and objectives formulated for the CDD mid-term plan.

Program Balance

3. Balance must be maintained between operational and basic research. The MTP is built on expressed needs at ~~country/regional~~ levels. Its limitations relate to lack of available country-level expertise for implementation.

Global Priorities

4. Strategies established by TAG I were reinforced. Progress since TAG I and current status revealed that technical assistance and training for implementation, delivering oral rehydration therapy and improving MCH and water/sanitation practices remain priority concerns. The CDD Secretariat reported that three scientific groups had been formed to focus on bacterial and viral research and drug development. Research advances in applying new cholera vaccine for enterotoxigenic E. coli was noted; along with developments related to rotovirus and other viral agents (e.g., Norwalk agents, astrovirus). Emphasis was placed on continued research in immunology and the ecology of agents, and epidemiology. The importance of early involvement of the pharmaceutical sector in VDD was stressed by UNDP and the Bank. Reference to the priority for primary prevention in CDD through vaccine and drug development was identified by UNDP and the Bank, noting that their collaboration with WHO resulted in a 5-year $5M grant from UNDP to WHO for VDD.

Country/Regional Priorities

5. Reflecting the composition of its membership, TAG II discussions focused on development, implementation and evaluation of regional/country control strategies (particularly oral rehydration) rather than basic global research and development. Country-level requirements and constraints for implementing CDD were identified to reduce mortality, with morbidity reduction seen as a long-term goal. Major emphasis in both short and long-term goals require improved health services delivery. Requirements and constraints in goal achievement were discussed in depth:

Requirements	Constraints
Identification of CDD as country-level priority in health planning with appointment of National Coordinator for country and regional CDD activities.	At January 1980, 97 countries expressed interest in implementing country-level CDD programs, 18 of which had formed national or ministerial committees; and 47 of which had designated a national coordinator or manager (Attachment 2).
Country-level oral rehydration solution (ORS) production.	Lack of available local products such as salt.
	Lack of logistic and supervisory skills for production, marketing and delivery.
ORS delivery through primary health care (PHC) with/integrated as basic component in PHC, EPI and environmental health and health education programs.	Need for strengthening institutional delivery capability.
	Lack of trained personnel, including midwives and nurses.
Evaluation of safety and efficacy of ORS including development of surveillance methods.	Lack of trained personnel and baseline information.

/CDD

Implementation

6. CDD will require continued active bilateral and multilateral collaboration and commitment specifically from UNICEF, UNDP and the Bank; the creation of new involvements, with such agencies as FAO, UNIDO, UNFPA and the pharmaceutical industry. Problems in implementing CDD were considered to differ from those of TDR in that well-defined interventions are already available for immediate delivery through PHC. Interventions include ORS and such other well-known methods as improved breast-feeding practices, family planning, hygiene and child care practices. More effective community involvement/participation/health education strategies to maximize these opportunities

are needed; as well as the development of new and improved vaccines and drugs for rotovirus, enterotoxigenic E. coli and other pathogenic agents. TAG II made no attempt to establish an hierarchical order to implementing these priority strategies, although UNDP and the Bank noted that available funds for CDD from UNDP were designated to VDD because the WHO/UNDP/Bank collaboration indicates priority on primary prevention.

Management

7. This discussion focused on the total CDD effort, noting the need both to differentiate between and to link VDD, national capability strengthening and country-level operational research programs. The following management issues were identified: (a) developing more precise definitions of objectives and strategies; (b) developing criteria and procedures for integrating CDD components in country and regional-level PHC programs; (c) identifying commonalities in linkage relationships between CDD, EPI and MCH and water decade and other delivery outlets; and (d).improving training, logistics and supervisory systems.

8. TAG II appeared uneasy about country and regional inputs in the proposed organization/management of VDD and expressed concern on maintaining research balance between representation of developed vs. developing countries, despite the emphasis on conduct of basic epidemiological research in countries affected by diarrheal diseases, training and exchange of research workers.

Financial Resources and Management

9. UNDP noted that priorities established by TAG II were constrained by the reality of limited administrative and financial resources. Both UNDP and the Bank recommended clarification of global (e.g., VDD) vs. national goals and activities (e.g., health care delivery) to enable clear formulation of organization, management and financial needs. UNDP emphasized that to elicit the necessary long-term financial and moral commitment from donors, it would be essential to assure donors that an efficient scientific and administrative system was intact for CDD management. This was currently lacking, as were clearly articulated goals, timetables and scientific budget projections.

10. UNDP introduced the proposition that the JCB mechanism developed for TDR has proved advantageous for eliciting and maintaining donor support, at a level probably comparable to CDD needs. The JCB mechanism enabled the donors systematic review of progress and determination of priorities based on sound management and technical assessments.

11. TAG II and the CDD Secretariat were apprehensive about the JCB for CDD, noting the existing differences in action-oriented national research needs in CDD vs. TDR. Dr. Zahra indicated that the JCB mechanism was raised at the WHO Executive Board to facilitate PHC goals, and that Dr. Mahler had been asked by the Executive Board to resolve whether the JCB or the Health Resources Group (HRG) might be appropriate to manage CDD and other country-level programs that stress delivery through PHC systems. There was no

discussion on separating parts of the CDD effort like VDD, for review under different funding/management mechanisms.

12. The rough budget figures for the MTP were considered to be grossly underestimated (Attachment 3). UNDP and the Bank questioned how the budgets were derived and the omission of administrative and management costs. UNDP recommended the preparation of a 3-year budget forecast.

13. Resources to date include:

Contribution	Item	Duration	Amount
UNDP	VDD	5 years 1979-83	$5,150,400
OPEC (via UNDP)	International Center, Dacca	5 years 1979-83	640,680
UNDP	Regional Training Asia	Over 3 years 1980-83	900,000
UK	Program Planning	Completed CY79	1,000,000

14. In-kind contributions include 4 personnel seconded from the US Communicable Diseases Center and UNICEF country-level ORS activities. Potential new contributors include Sweden and Norway, but no indication was made on whether these funds will be earmarked for specific CDD activities and whether allocation decisions will be made by WHO or the donors.

TAG II Recommendations

15. TAG II defined the primary objective of the MTP as mortality reduction from diarrheal diseases, with morbidity reduction as an equally important but long-term goal. Consistent with this objective the priority recommended strategies included improved methods of ORS production and delivery, seen to reduce mortality from diarrheal diseases by 25% by the end of 1983. Differentiation between basic and applied research priorities were presented as below; this is not ranking, although suggested by UNDP and the Bank. UNDP requested that VDD (Item 8) be placed as Item 1:

(1) to study and compare systems of delivery of oral rehydration solution;

(2) to study and compare systems of delivery of oral rehydration therapy at the primary health care level;

(3) to develop and determine the effectiveness of drugs from the prevention and the treatment of acute diarrhea;

(4) to determine those infant feeding and child care practices which can reduce diarrhea morbidity;

(5) to determine the most effective methods of environmental intervention for the reduction of transmission of diarrheal diseases agents, and to explore methods of enlisting community particiaption;

(6) to determine the etiologic agents responsible for diarrhea and their epidemiological patterns in different geographic, environmental and cultural conditions, with the aim of developing improved measures for interruption of transmission;

(7) to identify "etiologic" agents, including behavioral and environmental "agents" responsible for the remaining diarrheas of unknown etiology;

(8) to develop and improve vaccines against major causes of diarrhea;

(9) to assess effect of the CDD program on diarrhea morbidity and mortality.

16. A number of training priorities were also identified, including development of information dissemination mechanism like the TDR Newsletter.

17. TAG II accepted UNDP's suggested wording on management/finance and "recommended that the DDC Programme be placed under review and for funding and other support through existing mechanisms dealing with extrabudgetary activities established for this purpose by WHO. This recommendation is made with the understanding that the DDC Progamme would retain its own identity and management."

18. TAG II requested more frequent meetings during the MTP (i.e., twice yearly); scheduling of some meetings in developing countries; phasing of meetings with members' availability to participate; phasing meetings with reviews by funding agencies; and active member involvement with events that influence the direction of the CDD.

Implications to the Bank

19. The Bank had not been advised that the TAG II terms of reference were specific to determining the CDD/MTP, which was built on country/regional defined needs and included the full scope of CDD activities. TAG II discussions and outcomes therefore go beyond that of the WHO/UNDP/Bank collaboration for VDD.

20. TAG II did little to establish order in the priorities it recommended for the MTP. Part of the responsibility for this outcome rests with the CDD Secretariat which did not successfully provide TAG II with an holistic framework that linked what appear to be three major components in CDD: (a) primary prevention through basic research in VDD and epidemiology; (b) primary

prevention through improved social behavioral and environmental changes (e.g., integrated health care delivery systems; breast-feeding, water/sanitation practices; available clean water and sanitary facilities); and (c) secondary and tertiary prevention through oral rehydration therapy.

21. Delays in implementing VDD are related to the need for the CDD Secretariat to secure TAG II approval on the organization/management recommendations for VDD and its priority among other CDD activities. VDD staff were needed to prepare the total CDD preparation, thus diluting attention to VDD per se. It is now nine months since UNDP approved VDD funding, yet the technical/administrative staffing remain unclear and budget needs are not defined. UNDP does not appear overly concerned about the delay and appears to believe that if the CDD is presented to the JCB, the JCB itself will establish priorities for support among CDD components. UNDP's recommendation that the CDD be presented to the JCB will require a more well-developed organizational scheme than is now available and clarification of the Bank's role will be sought.

22. The Bank's role identified to the TAG II was as collaborator with UNDP/WHO in developing the VDD component, consistent with the Bank's interest in a major primary preventive thrust in CDD. The Bank identified as a major goal in its new health lending program, the strengthening of health infrastructrues for implementing national primary health care systems. Oral rehydration therapy may become available for delivery through PHC via the Bank's basic health services package of essential drugs.

23. Because of the multiple strategies for CDD, in clarifying its role with WHO and UNDP, the Bank should consider the following issues:

(i) identifying more clearly the specific interest(s) and internal mechanisms the Bank may provide for global basic research and for country-level delivery and operational research;

(ii) determining with the cosponsors how best to present VDD and other CDD strategies for donor support;

(iii) assisting the CDD Secretariat in developing budget, management and organizational systems, perhaps through recommendations to Dr. Mahler on seconding several man-months of TDR input, if TDR staff time were available; or hiring of a management consultant on recommendation by the TDR Standing Committee.

cc: Dr. John R. Evans, PHN

Attachments

AFonaroff:va

Budget

Travel 20-25

- 1 staff position for TDR + related activities

- Probably follow 9 wks

		Sr staff/Team Travel	Local
TDR	4 × 2 days 1 × 3 days	11 days	10-12 days
CDS	3 × 2 days	6	2-3
HRG	3 × 2 1 × 3	9	2-3
		6	2-3
Others	3 × 2.		
	- Urban - Drug - HSR		
Mahler re chaos	3×1	3	2-3
		35	22

KK HRP

K. Kanagaratnam
January 26, 1981

Anticipated Time Use Related to Global Programs

United Nations

Including UN Secretariat, Pop. Commission, UNFPA, UN Economic Commission (esp. Asia) and other UN Agencies (excl. WHO).

4 weeks

World Health Organization

Human Reproduction Program, Service Research Group and Family Health Programs.

3 weeks

Bilateral Foundations, NGO's, incl. Population Council, Ford, IPPF, and special groups ICOMP etc.

4 weeks

Professional Institutions, Academic Centers. etc.

3 weeks

Total 14 weeks

Divided between office -- 7 weeks
field and travel) -- 7 weeks

effective mechanism has been organized to manage the scientific network and financial resources, and Bank participation provides ~~mechanism could perform~~ the vital services of strengthening management and attracting and sustaining the confidence and commitment of other donors.

11. The health research programs selected for Bank support ~~would be those~~ that aim to control diseases which significantly impede economic and social progress in a large number of developing countries, and which do not now receive adequate attention from the scientific community. The Bank should stress efforts to accelerate the discovery of simple, cost-effective interventions for use in the primary health care programs now being considered for its financing in many developing countries.

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Population, Health, and Nutrition [PHN] - Special Programme for Research and Training in Tropical Diseases [TDR] - Bank Participation and Joint Coordinating Board [JCB] Health Research	1103228

Document Date	Document Type	
21 January, 1981	UNDP Agenda Item	

Correspondents / Participants
Governing Council

Subject / Title
Country and Intercountry Programmes and Projects
Project Recommendation of the Administrator

Exception(s)
Information Provided by Member Countries or Third Parties in Confidence

Additional Comments

The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information. This Policy can be found on the World Bank Access to Information website.

Withdrawn by	Date
Tonya Ceesay	13-Jul-15

TDR

c. Verpeaux

March 5, 1981

Mr. Baum:

Subject: Bank Participation in TDR

I attach a draft memorandum which will be the basis for your discussion with Dr. Evans tomorrow morning. P&B (Vergin) have participated in drafting the memorandum, but have not yet obtained Mr. Qureshi's clearance due to his absence from Washington. I understand that Mr. McNamara has not yet discussed this matter with Mr. Qureshi. A Board memorandum is being prepared on the basis of the one which was drafted in 1980, but not sent to the Board.

John D. North

Attachment

cc: Dr. Evans ✓

DRAFT
March 2, 1981
JREvans:plo

TO: Mr. Robert S. McNamara

FROM: Warren C. Baum

SUBJECT: Bank Participation in the Program for Research and Training in Tropical Diseases

1. The health of the poor in developing countries will be improved both by the general process of social and economic development and through providing basic health services. Since development is slow, particularly in the poorest countries, and its benefits unequally distributed, there is reason to address health status directly through measures to control commonly occuring diseases. This requires first, the establishment of a system to bring currently available technology to those who do not have access to health services and secondly, the development of safer and less expensive ways to prevent or treat common disabling diseases such as malaria, schistosomiasis, onchocerciasis, tryponosomiasis and leprosy which have been neglected by the scientific community as well as the pharmaceutical industry. Recent scientific advances in immunology and molecular biology offer powerful new tools to be applied to the diseases of the developing world if the attention of the research community can be attracted.

2. Discovery of a new drug or vaccine and the steps leading to its ultimate use involve a sequence of time-consuming activities before distribution for general use: laboratory discovery; animal trial testing to confirm such factors as safety and efficacy; clinical trial in humans; research to achieve product stability, predictable potency and low-cost production methods. Two things could shorten this process by several years: (a) organization,

coordination and management of a network of scientific groups whose individual projects are linked in successive stages to a goal-oriented plan; and (b) the regular, timely and assured provision of necessary financial support. Success depends on maintaining the commitment of scientists and the support of donors over 10-15 years.

3. The Special Program for Research and Training in Tropical Diseases (TDR), cosponsored by UNDP, WHO and the Bank is an example of a large-scale health research effort directed to six disabling diseases which are endemic in many developing countries. The program has made substantial progress towards meeting its two principal objectives during the first four years of operation: to develop and evaluate new methods to control these diseases; and to strengthen the ability of those countries to apply the relevant technology. As a cosponsor of TDR, the Bank has participated actively in its development but has not so far supported it financially.

4. Bank involvement in this large-scale, mission-oriented health research and training program has helped focus the attention of the international health and development community on the rational allocation and management of scarce resources for developing appropriate biomedical and socio-economic technologies to control disease problems which limit social and economic progress. The TDR has excellent potential for developing products having important implications for Bank lending, particularly through improved vector control in water and irrigation projects and vaccines and drugs in primary health care. In a broader context, reduction of infectious diseases and parasitic infestations will increase worker productivity, educability of students, general health status and longevity. Furthermore, strengthening

national research capability develops national self-reliance in coping with disease control.

5. The significance of full participation by the Bank in TDR far exceeds the value of the proposed financial contribution. Bank support is considered important to sustain the commitment of other donors over the extended period necessary to achieve the benefits of the program and to mobilize increased support from them and others as required by the evolution of the program, for example, during the stage of field trials of new vaccines. The Bank's economic perspective and multisectoral approach to development will contribute to necessary program balance. Its independence of political interference helps to ensure that expert, independent scientific advice is obtained and used for scientific management decisions. Its reputation for careful analyses, efficient organization and sound financial management lends credibility to programs within the development community. As major development institutions, the Bank and UNDP increase donor confidence that programs selected will be governed by the need to accelerate social and economic progress in developing countries.

6. Looking to the future, there will be other important opportunities for health research, similar to TDR which the Bank may wish to consider supporting. A case in point is the global research program for Control of Diarrhoeal Diseases now under consideration by a consortium of donors. At this time no clearing house for health research proposals exists in which to assess priorities and evaluate competing claims for support from the donor

Annex - no of donors in FY 81 contributing to a program. Budget gap.

Paragraphs on management
- consideration -
- reception by Bank + UNDP of program

community. Bank financial support for TDR would give it added leverage to discuss with interested parties the establishment of a Joint Board for Health Research with an ancillary organizational structure which could ensure the proper screening, efficient administration and timely phase-out of individual international health research and training programs. [As we see it Bank support for Tropical Disease Research should be contingent upon the establishment of such a structure.] The TDR program should come under its jurisdiction.

delete

7. In light of the above I recommend:

1. that you approve an initial Bank financial contribution to TDR; amounting to 10% of the approved budget and related to donor pledges
2. that you ~~make~~ recommend that the Bank's continued support of TDR contingent ~~on the effective operation of~~ be established a Joint Board and ancillary organizational structure so as to ensure proper screening, efficient administration and timely phase-out of ~~individual~~ TDR and other international health research and training programs;
3. that our support be limited to 10% of the total donor pledges in support of the TDR program. On this basis the Bank's annual contribution might rise to about $3.0 million in 1984 if donor pledges match the forecast of growth in program expenditures;
4. that you authorize preparation of a Board paper seeking approval ~~of a contribution~~ these proposals. The of up to $2 million in FY81 (subject to the 10% ceiling) out of the $118 million already approved for transfer to IDA and the two other grant programs.

DRAFT
AFonaroff:mlo
2/23/81

A PROPOSAL FOR A WORLD BANK FINANCIAL CONTRIBUTION TO THE WHO/UNDP/BANK SPECIAL PROGRAMME ON RESEARCH AND TRAINING IN TROPICAL DISEASES

Prepared by: Population, Health and Nutrition Department
Central Projects Staff

I. Needs for Improved Technology in the Health Sector

4. The health status of the poor in developing countries may be improved through both the general process of social and economic development and the provision of access to basic health services. Because development proceeds at a slow rate and its benefits are inequitably distributed, the impact of the development process per se on the health status of the poor is limited. The most immediate impact will be through the control of commonly occurring diseases.

5. To improve the health of the poor we must first, establish a system to bring currently available technology to those who have no access to health services, and, second, develop safer, simpler and less expensive measures to prevent or treat serious common diseases such as malaria, schistosomiasis and onchocerciasis.

6. The Bank is already tackling the first through its lending for health care delivery, although there is a need for research on health services to improve effectiveness and to develop measures of impact on health and economic productivity. To tackle the second problem, however, requires ~~recognizing~~ refocussing the world's health science research community on the search for appropriate technologies to control the major infectious and parasitic diseases of the developing world.

7. Because of its experience in the operation and management of development programs, the active participation of the Bank is considered important in gaining the commitment and support of multilateral and bilateral donors as well developing countries. Substantial longterm, financial support is required to stimulate promising lines of research in scientific laboratories throughout the world, to coordinate the succeeding stages of experimental and clinical trial leading to implementation, and to strengthen research capability in developing countries to adapt technology and to implement programs.

8. Until recently, research on the major diseases endemic in developing countries was neglected by the scientific community and the pharmaceutical industry.

Investment in the search for drugs for tropical diseases has been limited by the high cost of drug development in relation to anticipated financial returns in developing countries. The overwhelming emphasis of biomedical research has been on cancer, cardiovascular disorders and the other major diseases of the industrialized world. The scientific techniques in immunology and molecular biology developed in the course of this research offer powerful new tools to be applied to the diseases of the developing world, if the attention of the research community can be attracted.

9. Under the sponsorship of WHO, UNDP and the Bank, the scientific community, donors and developing countries have launched or developed several major goal-oriented health programs. The Onchocerciasis Control Program (OCP) is an action-oriented regional program to control the black fly vector in the Volta River watershed. OCP requires financial resources well beyond the means of the countries affected and control techniques which must be applied across national borders. The Special Programme for Research and Training in Tropical Diseases (TDR) is

designed to produce simple, low-cost and effective vaccines, drugs and pesticides; to develop new methods for delivery of disease-control technology and to strengthen research capabilities in countries where the diseases are endemic.

12. The case for investing in health research is strong because of the heavy burden of illness in developing countries and the expense incurred in the use of currently available technology to control prevalent infectious and parasitic diseases. These diseases not only directly cause death and disability but lower resistance to other common causes of death and disability. Over a billion people in the developing countries suffer from the effects of tropical diseases. Malaria, once under control, is now in resurgence. Schistosomiasis is more widespread as a result of irrigation, hydroelectric power and other economic development activities. Present control technology is difficult, complex and costly. For example, Bank projects in Upper and Middle Egypt, Giza and West Nubariya for schistosomiasis control reach only approximately one-third of Egypt's population. Between 1973-79, the total component cost was US$28.7M, of which Bank financing totaled US$21.9M. 85% of the investment was in molluscicides for vector control, the remainder in chemotherapy. In the absence of more cost-effective alternative technologies, annual recurrent costs could amount to approximately US$18M.

13. Between 1971 and 1979, 43% of health component expenditures by the Bank were devoted to vector control, chiefly for malaria and schistosomiasis. This amounted to US$145M, almost 58% of the total expended for health components; recurrent costs during this period were US$14M. These are necessary, but interim and costly steps for future technology is needed to prevent and treat vector borne diseases more effectively. Presently, where such diseases are endemic, human productivity is reduced; and during epidemics, entire workforces may be disabled. The high risk of contracting malaria, schistosomiasis, trypanosomiasis and onchocerciasis in Africa, Asia and the Amazon region of South America dictates population distribution and patterns of human settlement. Animal husbandry and other economic ventures are similarly affected. In Africa alone, the tsetse fly (the trypanosomiasis vector) infests over 10M square km of land which, if cleared, could support a potential cattle population of 125M.

14. Appropriate biomedical technology does exist to control measles, whooping cough, diptheria, tetanus and poliomyelitis. These diseases, however, continue to be major causes of mortality and morbidity in developing countries because the majority of the population lacks access to health services. It is estimated that only one-tenth of the 800,000,000 children at risk have been immunized.

15. The implementation of control measures such as vaccines, drugs or pesticides is dependent on effective systems of health services delivery. One of the most important areas of health research is concerned with the development, management and evaluation of health services to improve their effectiveness and efficiency.

II. TDR: A Model for Coordinating Donor Support

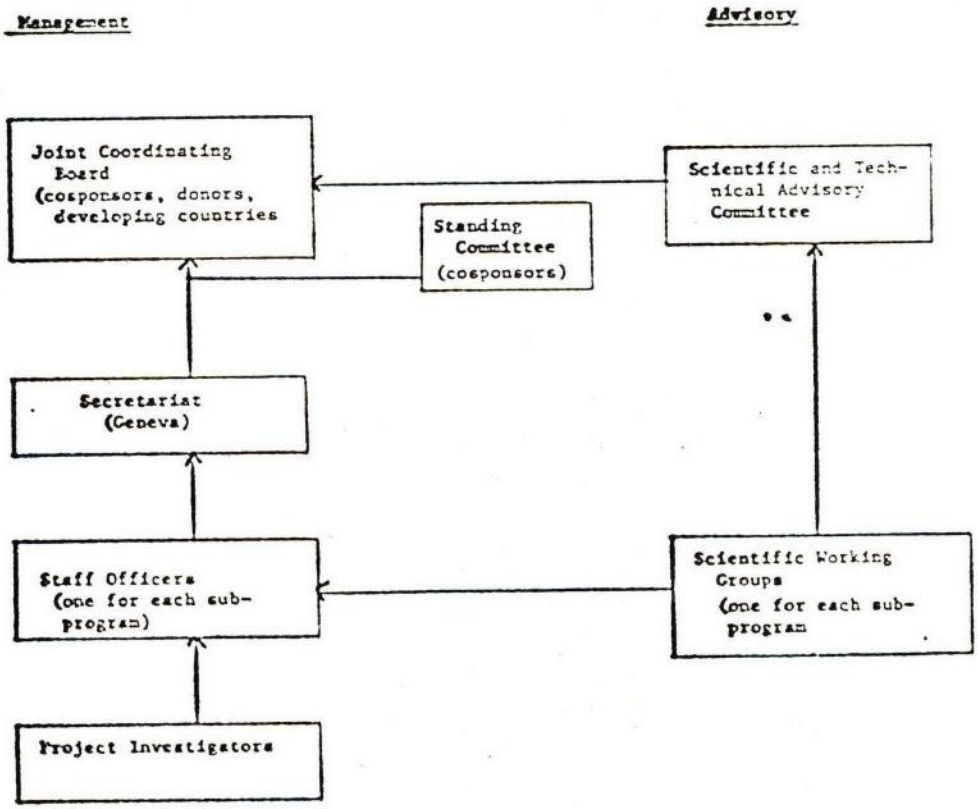
16. The Special Programme for Research and Training in Tropical Diseases (TDR) is a health research program to develop control measures for six major tropical diseases and to strengthen research capability in the developing countries where the diseases are endemic. Supported jointly by contributions from multilateral and bilateral donors and from countries whose populations will directly benefit from results, TDR is now in its fourth year under WHO/UNDP/Bank cosponsorship. The financial resources made available through the TDR, and the research and administrative supports developed to manage this investment, have resulted in participation by leading scientists and institutions throughout the world. Though still in its early stages, TDR is internationally regarded both by scientists and by donors and LDC governments as the major research opportunity for developing new, improved and cost-effective controls for malaria, schistosomiasis, filariasis (including onchocerciasis), trypanosomiasis, leprosy and leishmaniasis. Each disease constitutes a major public health problem for which there is no available control technology which can be implemented at a cost affordable by developing countries or can be delivered dependably through the country's primary health care systems.

17. TDR is organized as a network of research teams located in many different countries. The large number of widely dispersed research activities complicates management of the program but the network approach has been successful in stimulating leading biomedical and health scientists to reorient their research to the six tropical diseases. It has also strengthened research centers in developing countries by linking them with established institutions in the developed world. The lare number of technical and advisory committees to guide the program appears administratively cumbersome but the breadth of scientific involvement has helped mobilize the interest of research workers. Other programs for global health research are reviewing the applicability of the TDR structure for their goal-oriented activities.

Management and Technical Advisory Bodies

18. The technical and administrative structures for the organization and management of TDR are described in a Memorandum of Understanding signed by the cosponsors and cooperating parties in 1978 WHO as Executing Agency, provides the TDR secretariat responsible for overall program management and for serving the advisory bodies. The Secretariat includes a Scientific Director, Program Manager and Staff Officers for each of the six disease sub-programs.

Figure 1: TDR Management and Advisory Bodies



The staff officers are responsible for the administration of research grants to the project investigators according to a plan prepared by the advisory committee (Scientific Working Group) for that sub-program.

19. The Joint Coordinating Board (JCB) which meets annually in Geneva is responsible for the establishment of priorities for the scientific program, and the approval of policies, budgets and appointments. The annual meeting also serves as a pledging session for financial contributions. The JCB is composed of 30 members: 3 cosponsors; 12 representatives of governments selected by donors; 12 representatives of governments selected by WHO Regional Committees to represent countries where the six diseases occur; and 3 representatives of agencies selected by the JCB itself because of their activities in tropical diseases research and training.

20. The JCB is served by a Standing Committee composed of the three cosponsors and by a Scientific and Technical Advisory Committee (STAC). The Standing Committee meets three times each year to authorize actions by the Secretariat between meetings of the JCB and to prepare recommendations for the annual meeting of the JCB on the following matters:

i) priorities and budget

ii) appointments to the Secretariat and STAC;

iii) fiscal and program management matters

iv) quinquennial reviews of the performance of each sub-program.

21. The senior technical advisory body, STAC, is a group of 15-18 distinguished scientists appointed by the JCB on the recommendation of the Standing Committee. STAC guides scientific planning, assesses priorities; and evaluates progress on an annual basis and arranges for regular in-depth review of each of the sub-programs.

22. In addition, each sub-program of TDR has an advisory body, the Scientific Working Group (SWG), which consists of senior scientists from the relevant disciplines appointed for a three-year term by the TDR secretariat. There is one SWG for each of the six diseases under investigation, four for areas that pertain to all the diseases (biomedical research, vector biology control, epidemiology, and social and economic research), and one on strengthening of research institutions. Within the context of overall policy and priorities set by the JCB, each SWG defines research objectives, devises a strategic plan to achieve them and monitors and revises both the plan and its priorities on a regular basis. The SWG arranges peer review groups to select proposals for funding on the basis of scientific merit and relevance to the strategic plan.

23. A satisfactory administrative relationship has been established between TDR and WHO. Technical, administrative and financial operations of TDR are kept essentially separate from those of WHO and, where they interact, the interests of TDR have been effectively represented within WHO by the Special Programme Coordinator who holds the rank of Assistant Director-General and serves as the WHO member of the Standing Committee. Whilst WHO administrative procedures for recruitment have imposed some delays on appointments, they have not seriously handicapped progress; on the other hand there are advantages to the location of the TDR Secretariat in the lead international agency for health. TDR staff have close contact with the technical departments of WHO and benefit from the back-up of WHO field staff for liaison with research scientists in developing countries and for project site visits. In addition, through WHO, TDR has ready access to the highly qualified technical specialists and health research institutions of the international health science community.

Progress

24. TDR is meeting standards established by STAC and expectations of the cosponsors and the JCB. Highly qualified scientists from leading institutions in the industrialized world have turned their attention from the health problems of affluent societies to participate with researchers in developing countries in research directed toward the six neglected diseases. In addition, the US National Institutes of Health, the Rockefeller Foundation and the Wellcome Trust have been stimulated to increase their annual appropriations to tropical diseases research, thereby accelerating and broadening the scientific knowledge base for the control of tropical diseases.

25. Since the inception of TDR, 900 projects have been funded in 78 countries. In 1980, almost half ot these projects represented new efforts, demonstrating the rapid rate of program development. More significant, however, is that while the program is now only in its third year, new technology has been developed for five of the six diseases under investigation. There are promising leads for vaccines against malaria and leprosy; improved drug therapy for schistosomiasis; drug screening for more effective compounds to treat onchocerciasis; and a more accurate diagnostic test for trypanosomiasis.

26. The resources to produce these results would not have been available without the TDR stimulus. Though complex, the administration and management of the global network appears to be working well. The WHO Advisory Committee on Medical Research has cited the achievements of TDR as an example of outstanding research management; it has also commended the balance between activities in basic research and those in the strengthening of research institutions. It regards TDR as a model for other WHO extrabudgetary efforts.

27. Donor response confirms these assessments. TDR financial resources have grown from about US$3.2M in 1976 to over US$20.0M in CY80. TDR is being supported by two of its three cosponsors, one development bank, three foundations and 18 bilateral donors including four LDCs.1/ While financial contributions from developing countries are modest, they indicate the importance attributed to TDR's objectives. The JCB approved a CY81 budget at US$30.0M. The program is entering the more costly stages of clinical trial and evaluation of new discoveries, and substantial increases in funds will be required to bring new technology to affected populations. The Secretariat and cosponsors have encouraged current donors to increase their contributions, and are seeking new funding sources.

1/ See Attachment 1

Role of the Bank

28. The Bank was invited to cosponsor TDR in order to increase donor confidence that the program would be properly managed and administered. The Bank was also asked to establish and provide fiscal management of a Tropical Diseases Research Fund in which most of the TDR contributions are deposited.1/

29. The Bank also influences program management through participation in the Standing Committee and the JCB. It initiated a proposal for internal audit of projects and analyzed cash flow issues. It maintains close and constant contact with its cosponsors and with the TDR Secretariat.

1/ Some governments are unable for political reasons to contribute funds through the Bank and therefore WHO also administers a trust fund to receive these funds. However, over 80% of CY80 contributions were deposited to the Bank-administered fund.

30. The Bank accepted cosponsorship because the potential contributions of the program are central to the Bank's overall objectives. Some major donors were reluctant to participate unless the Bank became fiscal agent. The Bank conditioned its participation on the acceptance of the recommendations for strengthening research management and clarifying administrative relationships between TDR and WHO. The arrangements for technical and administrative structures were subsequently accepted by WHO and are incorporated in the Memorandum of Understanding between cooperating parties.

31. From the inception of TDR, there have been proposals through JCB that the Bank should also contribute financially. Whilst in principle the Bank has always been prepared to consider this, but it has not so far agreed to donate and it has not until now been felt appropriate to formulate a firm proposal for Board consideration. The Bank's failure to contribute has not been prompted by any lack of confidence in TDR. Indeed, the program has already made important contributions and its potential to accelerate the development of simpler, more effective methods of controlling the six diseases remains great.

32. Even though the Bank has not contributed, cosponsors and other donors have insisted that it continue its role as cosponsor and administrator of the funds. It is increasingly difficult to remain in this role as a non-contributor. First, the financial needs of the program are increasing with its movement into the application phase of new discoveries;

and the Bank's financial commitment is required to sustain donors' support at a time when competing priorities for scarce resources exist. Second, the Bank's position will be strengthened in its management role by adding a financial contribution to its cosponsorship. Now is the time for the Bank to demonstrate its support for TDR in a concrete and timely manner by contributing financially. This will undoubtedly serve as a stimulus to other concerned agencies and governments.

Implications for Future Health Research Programs

34. It can be expected that there will be other important research opportunities that may warrant Bank consideration of support along the lines of TDR. A specific case in point is the global research program for Control of Diarrhoeal Diseases now under consideration by a consortium of donors. The Bank may wish to establish with other agencies a broader framework within which to consider specific programs that would insure appropriate establishment of priorities and scarce resource allocation among these and other such programs. ~~The TDR would fit logically within such a framework.~~ The Bank would of course expect to take an active part in this.

Advantages of Bank Financial Participation

35. The Bank's support is considered important to sustain the current commitment of other donors over the ~~extra~~ 10-15 years of life of the program and to support of other donors and to encourage increased support from them and others as required by the evolution of the program. Its involvement is regarded by others as assures the proper management of those funds. As major development institutions, the Bank and UNDP increase donor confidence that criteria for program selection will accelerate social and economic progress in developing countries to the greatest extent possible.

36. The Bank's involvement in TDR strengthens the system's potential in several important ways:

37
~~36.~~ In participating financially in TDR, the Bank should recognize that it is embarking on a long-term effort implying continued financial support. The level of support would be determined annually, with funds allocated from the Bank's annual net income and on approval of the Bank's Executive Directors. This outlay would:

i) reinforce the Bank's efforts to meet basic needs of the poorest populations of the developing world through the development of new and appropriate technology and increased national capability to provide cost-effective health services; and

ii) reinforce the Bank's collaborative effort with WHO, UNDP and other UN agencies, bilateral donors and the developing countries toward integrating health activities more closely into overall development activities as a means of accelerating social and economic progress in the developing world.

WORLD BANK · INTERNATIONAL FINANCE CORPORATION

file TDR ~~Ford~~/Scaffe Requests for Prop. Bank Cont.

OFFICE MEMORANDUM

TO: Mr. Robert S. McNamara DATE: September 12, 1980

FROM: Ernest Stern

SUBJECT: Bank Participation in International Health Research Programs

The question of Bank financial support for international health research programs was put to the Finance Committee in May this year on the basis of the attached CPS proposal. At that time, you, Mr. Qureshi and I agreed to defer a decision pending a review of criteria for Bank support of such programs to be prepared by PAB. In the light of discussions since then I believe it appropriate to reconsider our position essentially because of three factors:

1. The Bank became a co-sponsor when the first of the international health research programs, the Program for Research and Training in Tropical Diseases (TDR) was established. Although we stated that this did not imply any commitment to a financial contribution it is clear, in retrospect, that this is not (and was not at the outset) a viable position. We cannot co-sponsor a program and refuse to participate in financing what we endorse as a high priority, technically sound operation. Our choice was, and is, to co-sponsor and to finance or to withdraw.

2. While we have been concerned about the proliferation of such requests for financing, and how we can deal with them in the absence of criteria, the financial support for international health research presents a special case: we are establishing a management structure which will serve as a clearing house for international health research and training programs and which will be our best insurance against future, uncoordinated request for Bank financial support in this important field of research. For the moment we can therefore reasonably argue that we will not finance any new activity until we have agreed general criteria except those where we are already actively engaged in the management of the entire international program. Moreover, no additional requests outside the health area are on the horizon.

3. I have discussed this matter at length with Dr. Evans who feels strongly that Bank failure to contribute would put the Bank as well as him personally in a very awkward position with WHO and the health community concerned about development, at a time when we need to rely increasingly on both to get our health program off the ground. He notes that he will be expected to present the Bank's position at the upcoming meeting of the Joint Coordinating Board on December 10, 1980.

In light of these factors I recommend:

1. that you approve Bank financial support for TDR and for other high priority international health research and training programs such as Control of Diarrheal Diseases (CDD) and Health Services Research (HSR) which are currently being considered for coordination and management by a joint coordinating board for health research;

2. that you make our continued support of TDR and other priority health research and training programs contingent on the effective operation of a Joint Board and ancillary organizational structure so as to ensure proper screening, efficient administration and timely phase-out of individual international health research and training programs;

3. that our support be limited to 10% of the respective program budgets;

4. that you authorize preparation of a Board paper seeking approval of a contribution of up to $3 million in FY81 (subject to the 10% ceiling) out of the $118 million already approved for transfer to IDA and the two other grant programs.

Mr. Qureshi concurs.

Attachment

cc: Mr. Qureshi
Mr. Gabriel
Dr. Evans ✓

ES/HV:omc

For TDR Standley Committee ~~SRE/JDN/AF~~ file TDR JCSHR proposal

O.R 9/24. D1

Mr. Warren C. Baum, Vice President, CPS

September 23, 1980

Ernest Stern, Senior Vice President, Operations

Financing of the Tropical Disease Research Program

The Finance Committee, in its meeting of September 23, considered the proposal for financing of the tropical disease research program. The Committee did not endorse the recommendation that we seek Board approval for a Bank financial contribution to TDR, or to a general body designed to screen, approve and supervise health research programs.

It was decided that WHO should be informed as follows:

- The World Bank does not normally finance research programs. It has made only two exceptions--the CGIAR and the Onchocerciasis Program. It does not foresee at this time any possibility of making further exceptions.

cc: Mr. McNamara
Dr. Evans ✓

EStern:dpw

JRE: Is this to be a letter or a memo? I think should be a memo.

cc Stern and Baum??

JREvans/rmf
DRAFT
9/29/80

Mr. McNamara:

Warren Baum has advised me of the decision not to recommend financial support for the program for Research and Training in Tropical Diseases and the international framework for research on top priority health problems.

The credibility of the Bank's entry into the health field will be seriously weakened by this decision. These global research and development programs are perhaps the most important ~~o~~pportunity for shared responsibility among the donor community in the health field. ~~At~~ This action together with the indicative level of 1% of overall lending for indicative programs the next five years suggests that the Bank does not attach ~~very~~ much significance ~~priority to its new venture.~~ to meeting basic human needs through its population health and nutrition programs

~~Equally important is the view that the~~ full involvement of the Bank in these programs will be of real consequence to their effective management and to sustaining the interest of the donor community. ~~And~~ These ~~purposes are worth pursuing since the~~ programs are an important ~~vehicle~~ means for making available to the developing world simpler and more effective measures to control the principal causes of morbidity and mortality.

I deeply regret that I have been unable to convince you of the importance of full Bank support for these programs.

Yours sincerely,

A PROPOSAL FOR WORLD BANK PARTICIPATION IN INTERNATIONAL HEALTH RESEARCH PROGRAMS

Prepared by: Population, Health and Nutrition Department
Central Projects Staff

April 9, 1980

A PROPOSAL FOR WORLD BANK PARTICIPATION IN INTERNATIONAL HEALTH RESEARCH PROGRAMS

Summary

1. This paper recommends that the World Bank participate in the organization and funding of research programs designed to achieve two principal objectives: first, to develop and evaluate new methods to control major health problems which are widespread in developing countries; and second, to strengthen capabilities in these countries to adapt technology and implement programs to alleviate the problems.

2. The Special Programme for Research and Training in Tropical Diseases (TDR), cosponsored by UNDP, WHO and the Bank is an example of a large-scale health research effort directed to six disabling diseases which are endemic in many developing countries. The program has made substantial progress towards both objectives during the first three years of operation. The Bank is a cosponsor of TDR and has participated actively in its development. It is now recommended that the Bank initiate financial support of the TDR in CY80 with a contribution of US$2.0M, which is 10% of the anticipated donor support of the approved CY80 budget.

3. A second large-scale health research program, the Control of Diarrheal Diseases (CDD), is in an advanced stage of preparation through UNDP/WHO/Bank collaboration. Financial and management support from the Bank will be called for in CY81, and it is recommended that the Bank provide this support if the program continues to develop as now foreseen.

4. CDD could be incorporated into the existing management structure of TDR. Looking to the future, however, there is need for an umbrella mechanism under which TDR, CDD and other large-scale health research programs could be managed. This broader framework could also provide a useful forum in which to evaluate competing claims for health research support and to assess priorities. The Bank should therefore discuss with interested parties the establishment of a Joint Coordinating Board for Health Research responsible for a portfolio of global health research programs and consider bringing it into operation at the time CDD is added.

5. Bank participation in large-scale, mission-oriented health research programs directed to the control of disease and more effective methods of providing health services will contribute to the development of cost-effective primary health care for underserved populations in the developing world. The mechanism proposed will focus the attention of the international health and development community on the rational allocation and management of scarce resources to address health problems which limit social and economic progress.

I. Needs for Improved Technology in the Health Sector

6. The health status of the poor in developing countries may be improved through both the general process of social and economic development and the provision of basic health services. Because development proceeds at a slow rate and its benefits are inequitably distributed, the impact of the development process per se on the health status of the poor is limited. Health improvements may be accelerated through access to basic health services that control commonly occurring diseases.

7. Two obstacles must be overcome in order to achieve direct improvements in health. First, a system must be established to bring currently available technology to those who have no access to health services. Second, safe, simple and inexpensive measures must be developed to prevent or treat serious common diseases such as malaria, schistosomiasis and onchocerciasis, for which current tools are inadequate.

8. The Bank has initiated activities to eliminate the first obstacle by establishing direct lending to countries for health care delivery. However, there is a critical need for research on health services to accelerate innovation, improve their effectiveness and to measure the operational impact on health status and economic productivity. Overcoming the second obstacle requires mobilization of the world's health science research community to focus attention on the major infectious and parasitic diseases of the developing world in order to discover appropriate technologies for their control.

9. Because of its experience in the operation and management of development programs, the active participation of the Bank is considered important in gaining the commitment and support of multilateral and bilateral donors as well as developing countries. Support on a considerable scale and over an extended period is required to stimulate promising lines of research in scientific laboratories throughout the world, to coordinate the succeeding stages of experimental and clinical trial leading to implementation, and to strengthen research capability in developing countries to adapt technology and to implement programs.

10. Research on the major diseases endemic in developing countries has so far been neglected by the scientific community and the pharmaceutical industry. Investment in the search for drugs for tropical diseases has been limited by the high cost of drug development in relation to anticipated financial returns in developing countries. The overwhelming emphasis of biomedical research has been on cancer, cardiovascular disorders and the other major diseases of the industrialized world. The scientific techniques in immunology and molecular biology developed in the course of this research offer powerful new tools to be applied to the diseases of the developing world, if the attention of the research community can be focused in this direction.

11. Under the sponsorship of WHO, UNDP and the Bank, the scientific community, donors and developing countries have launched or developed several major goal-oriented health programs. The Onchocerciasis Control Program (OCP) is an action-oriented regional program to control the black fly vector in the Volta River watershed. OCP requires financial resources well beyond the means of the countries affected and control techniques which must be applied across national borders. The Special Programme for Research and Training in Tropical Diseases (TDR) and the Diarrheal Diseases Control Programme (CDD) are research efforts designed to produce simple, low-cost and effective vaccines, drugs and pesticides; to develop new methods for delivery of disease-control technology and to strengthen research capabilities in countries where the diseases are endemic.

12. Discovery of a new drug or vaccine and the steps leading to its ultimate use are normally carried out by different scientific groups and involve a sequence of time-consuming activities: laboratory discovery; animal trial testing to confirm such factors as safety and efficacy; research to achieve product stability, predictable potency and low-cost production methods; and evaluation of cost-effective disease detection and delivery methods. Two elements could shorten this process by several years: (a) organization, coordination and management of a network of scientific groups whose individual projects are linked in successive stages to a goal-oriented plan; and (b) the regular and timely provision of necessary financial support. Success in any one program depends on maintaining the commitment of scientists and the support of donors over 10-15 years. An effective mechanism is needed to organize and manage the scientific network and financial resources. Bank participation in such a mechanism could perform the vital services of strengthening management and attracting and sustaining the confidence and commitment of donors to high priority programs.

13. The health research programs selected for Bank support should be those that aim to control diseases which significantly impede economic and social progress in a large number of developing countries, and which do not now receive adequate attention from the scientific community. The Bank should stress efforts to accelerate the discovery of simple, cost-effective interventions for use in the types of primary health care programs now being considered in many developing countries and which are the main focus of the Bank's health lending programs. It should also emphasize health services research to improve the quality and effectiveness of the health delivery systems.

14. The case for investments in health research is strong because of the heavy burden of illness in developing countries and the expense incurred in the use of currently available technology to control prevalent infectious and parasitic diseases. Technology does not yet exist to control common causes of death and disability such as diarrheal diseases, respiratory tract infections, hepatitis and parasitic infestations. Over a billion people in the developing countries suffer from poor health attributed to tropical diseases. Malaria, once under control, is now in resurgence. Schistosomiasis is more widespread as

a result of irrigation, hydroelectric power and other economic development activities. Present control technology is difficult, complex and costly. For example, Bank projects in Upper and Middle Egypt, Giza and West Nubariya for schistosomiasis control reach only approximately one-third of Egypt's population. Between 1973-79, the total component cost was US$28.7M, of which Bank financing totaled US$21.9M. 85% of the investment was in molluscicides for vector control, the remainder in chemotherapy. In the absence of more cost-effective alternative technologies, annual recurrent costs could amount to approximately US$18M.

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17. The implementation of control measures such as vaccines, drugs or pesticides is dependent on effective systems of health services delivery. One of the most important areas of health research is concerned with the development, management and evaluation of health services to improve their effectiveness and efficiency. Strengthening of the capability for health services research is required in all developing countries.

II. TDR: A Model for Coordinating Donor Support

18. The Special Programme for Research and Training in Tropical Diseases (TDR) is a goal-oriented health research program to develop control measures for six major tropical diseases and to strengthen research capability in the developing countries where the diseases are endemic. Supported jointly by contributions from multilateral and bilateral donors, and countries whose populations will directly benefit from results, TDR is now in its third year under WHO/UNDP/Bank cosponsorship. The financial resources made available through the TDR, and the research and administrative supports developed to manage this investment, have resulted in participation by leading scientists and institutions throughout the world. Though still in its early stages, TDR is internationally regarded both

by scientists, and by donors and LDC governments as the major research opportunity for developing new, improved and cost-effective controls for malaria, schistosomiasis, filariasis (including onchocerciasis), trypanosomiasis, leprosy and leishmaniasis. Each disease constitutes a major public health problem for which there is no available control technology which can be implemented at a cost affordable by developing countries and which is simple enough to be delivered through the country's primary health care system.

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Management and Technical Advisory Bodies

20. The technical and administrative structures for the organization and management of TDR are described in a Memorandum of Understanding signed by the cosponsors and cooperating parties in 1978 (Fig. 1). WHO as Executing Agency, provides the TDR secretariat responsible for overall program management and for serving the advisory bodies. The Secretariat includes a Scientific Director, Program Manager and Staff Officers for each of the six disease sub-programs.

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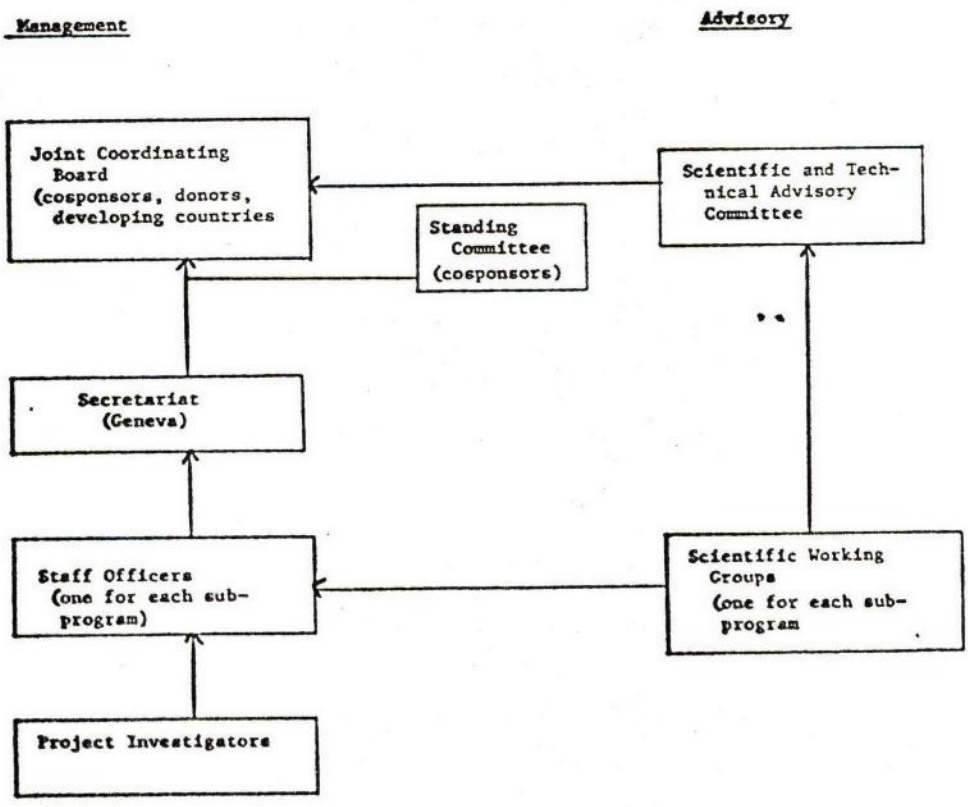

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i) priorities and budget based on substantive program review and advice by STAC;

ii) appointments to the Secretariat and STAC;

iii) fiscal and program management matters such as cash flow/liquidity, internal audit and allocation of staff resources;

iv) terms of reference for quinquennial reviews of the performance of each sub-program.

23. The senior technical advisory body, STAC, is a multidisciplinary group of 15-18 distinguished scientists appointed by the JCB on the recommendation of the Standing Committee. STAC guides scientific planning, assesses priorities; and evaluates progress on an annual basis and arranges for regular in-depth review of each of the sub-programs. Three reviews have already been completed and the total scientific program will be evaluated at five-year intervals.

24. In addition, each sub-program of TDR has an advisory body, the Scientific Working Group (SWG), which consists of senior scientists from the relevant disciplines appointed for a three-year term by the TDR secretariat. There is one SWG for each of the six diseases under investigation, four for areas that pertain to all the diseases (biomedical research, vector biology control, epidemiology and social and economic research), and one on strengthening of research institutions. Within the context of overall policy and priorities set by the JCB, each SWG defines research objectives, devises a strategic plan to achieve them and monitors and revises both the plan and its priorities on a regular basis. The SWG arranges peer review groups to select proposals for funding on the basis of scientific merit and relevance to the strategic plan. SWG members may participate in project site visits and through their broad

scientific contacts stimulate interest in research among investigators in developing countries.

25. A satisfactory administrative relationship between TDR and WHO has been established. Technical, administrative and financial operations of TDR are handled separately from those of WHO for most matters. Where interaction does exist, the interests of TDR have been effectively represented in the senior decision-making bodies of WHO by the Special Programme Coordinator who holds the rank of Assistant Director-General and serves as the WHO member of the Standing Committee. Some difficulties have arisen between WHO departments and TDR staff where departments have pressed to establish different priorities for a TDR sub-program. There has also been lack of clear definition in what circumstances TDR funds can be used by WHO back-up staff, as in the case of attending scientific meetings related to the six diseases. TDR/WHO staff relations are now under review by TDR senior management. Finally, WHO administrative procedures for recruitment have imposed some delays on appointments. These do not appear to have handicapped progress, but do impose extra workloads on staff and can delay funding of projects. On the other hand there are advantages to the location of the TDR Secretariat in the lead international agency for health. TDR staff have close contact with the technical departments of WHO and benefit from the back-up of WHO field staff for liaison with research scientists in developing countries and for project site visits. In addition, through WHO, TDR has ready access to the highly qualified technical specialists of the international health science community and to the health research institutions of WHO member countries.

Progress

26. TDR is meeting standards established by STAC and expectations of the cosponsors and the JCB. Approximately half of TDR resources are spent in developing countries on research, training of personnel and strengthening of research institutions. The scope of activity includes not only biomedical, but also environmental, epidemiologic, socio-economic and health services research. Highly qualified scientists from leading institutions in the industrialized world have turned their attention from the health problems of affluent societies to participate in research directed toward the six neglected diseases. In addition, the US National Institutes of Health, the Rockefeller Foundation and the Wellcome Trust have been stimulated to increase their annual appropriations to tropical diseases research, thereby accelerating and broadening the scientific knowledge base for the control of tropical diseases.

27. Since the inception of TDR, 600 projects have been funded in 66 countries. In 1979, almost half of these projects represented new efforts, demonstrating the rapid rate of program development. More significant, however, is that while the program is now only in its third year, new technology has been developed for five of the six diseases under investigation. There are extremely promising leads for vaccines against malaria and leprosy; improved drug therapy for schistosomiasis; drug screening for more effective compounds to treat onchocerciasis; and a more accurate diagnostic test for detecting and treating trypanosomiasis.

28. It is unlikely that necessary resources to produce these results would have been available without the TDR stimuli. Though complex, the administration and management of the global network appears to be working well. The WHO Advisory Committee on Medical Research has cited the progressive scientific achievements of TDR as an example of outstanding research management; it has also commended the balance between activities in basic research and those in the strengthening of research institutions. It regards TDR as a model for other WHO extrabudgetary efforts.

29. Donor response confirms these assessments. TDR financial resources have grown from about US$3.2M in 1976 to over US$20.0M in CY80. TDR is being supported by two of its three cosponsors, one development bank, three foundations and 18 bilateral donors including four LDCs. 1/ While financial contributions from developing countries are modest, allocation of their scarce resources to TDR is indicative of the value attributed to potential gains. The JCB approved a CY80 budget at US$26.6M. Recognizing that donors will be approached to support activities in addition to TDR, concern is being expressed about sustaining the level of support required as the program enters the expensive stages of clinical trial and evaluation of new discoveries. The JCB recognized that substantial increases in funds will be required to bring new technology to affected populations. It responded favorably to the Standing Committee's suggestion that a five year budget forecast would be desirable for planning purposes.

Role of the Bank

30. The Bank was invited to become a cosponsor in order to increase donor confidence in effective program management and administration. The Bank was also asked to establish and provide fiscal management of a Tropical Diseases Research Fund in which most of the TDR contributions are deposited. 2/

31. The Bank also influences program management through participation in the Standing Committee and the JCB. It initiated a proposal for internal audit of projects and analyzed liquidity issues affecting cash flow. The Bank's representative to thse bodies exercises independent judgements through staff assistance of a Public Health Officer responsible for (a) liaison with pertinent Bank departments, cosponsors and cooperating parties; (b) review and analysis of program documentation; (c) representation of UNDP/Bank cosponsorship as an observer to the STAC annual program review, and (d) preparation of documents relating to the Bank's managerial role.

..

1/ See Attachment 1

2/ Some governments are unable for political reasons to contribute funds through the Bank and therefore WHO also administers a trust fund to receive these funds. However, over 65% of 1979 contributions were deposited to the Bank-administered fund.

32. The Bank accepted cosponsorship because the potential contributions of the program are central to the Bank's overall objectives. Some major donors were reluctant to participate unless the Bank became fiscal agent. The Bank conditioned its participation on the acceptance of the recommendations for strengthening research management and clarifying administrative relationships between TDR and WHO. The arrangements for technical and administrative structures were subsequently accepted by WHO and are incorporated in the Memorandum of Understanding between cooperating parties.

33. The Bank has been twice requested to make a financial contribution to the TDR. The first request was made by the JCB in 1978 and was deferred pending review of Bank policy on allocation from the Bank's net annual income. At its 1979 meeting, the JCB repeated its request. In view of TDR progress, the Bank should now provide financial support to the program. TDR potential is high for delivery of products which have important implications for Bank lending, particularly through improved vector control in water and irrigation projects and for vaccines and drugs in primary health care. In a broader context, reduction of infectious diseases and parasitic infestations will increase worker productivity, educability of students, general health status and longevity. Future progress of TDR could be impeded if the Bank does not provide financial support. Several major donors will interpret lack of Bank support as indicating doubts on TDR potential to meet its goals and this could seriously erode the amount of financial resources for TDR. Conversely, more active Bank involvement will make it possible to effectuate further improvements in administrative mechanisms as the program evolves.

34. It is recommended that the Bank's financial contribution be fixed at 10% of the projected budget support of all TDR donors. On this basis, the Bank's contribution would be approximately US$2.0M in CY80 and can be expected to approximate US$3.5M per annum in CY80 dollars at periods of maximum expenditure. Continuation of the Bank's annual support would be reviewed each year on the basis of the program's technical achievements and prospects for future development.

III. Recommendations for Establishing a Joint Coordinating Board for Health Research (JCBHR)

35. The Joint Coordinating Board for TDR was established as a forum to enable donors to adopt a programmatic approach to the control of six major diseases rather than supporting isolated health research projects. The mechanism seems to be working sufficiently well to consider its application to other priority programs. Sine the Bank was instrumental in formulating the management structure of TDR, it will be approached in the launching of similar large-scale health research programs.

36. The second program would be the WHO expanded effort for diarrheal diseases control (CDD). Diarrheal diseases are the leading causes of death in infancy and early childhood throughout the developing world. There are now encouraging leads in the development of vaccines against two common bacterial

and viral causes of acute diarrhea, and in the use of simple oral rehydration techniques which could reduce mortality by 30%. There have also been improvements in educational methods of health promotion and disease prevention. WHO/UNDP/Bank collaboration resulted in a five-year US$5M UNDP grant to WHO to initiate a global research program for vaccine and drug development in 1979. WHO is seeking continued UNDP/Bank collaboration and it is expected that the BAnk will be asked to serve as cosponsor of CDD and to contribute financially in CY81.

37. It has been suggested that the JCB for TDR also serve as the coordinating authority for the organization, management and financing of CDD. This would be feasible. Looking to the future, however, other large-scale health research programs may be expected to emerge, for example, health services research to improve the planning and management of the process of developing health care. While CDD could be incorporated into the existing management structure for TDR, it would be preferable to consider an umbrella mechanism under which the TDR, CDD and other new health research programs might be effectively managed. It is proposed, therefore, that the Bank explore with interested parties the establishment of a Joint Coordinating Board for Health Research responsible for an evolving portfolio of large-scale health programs, with a view to bringing it into operation at the time CDD is added.

38. The purposes, composition and mode of operation of the JCBHR would follow the model established for the JCB of the TDR program. Its principal functions would be to approve policies and programs, determine appropriate levels of overall investment and allocate available resources to programs in relation to priorities which it established. The JCBHR would be advised by one STAC with subcommittees of STAC for each of the component programs. SWGs would advise on each sub-program. The staff directing each program would be responsible to the JCBHR secretariat which could be strengthened to provide more effective management and at the same time achieve some economies through sharing of administrative and technical services.

39. The Bank as a cosponsor would serve on the JCBHR Executive Committee with the same responsibilities as it has as a member of the TDR Standing Committee. In order to discharge these responsibilities effectively and exercise independent judgement on the functioning of the system, the Bank's representation should be supported by a staff of two individuals experienced in research management and the health sciences, who would prepare technical, administrative and financial assessments of the programs for Bank use. The Bank would also establish and administer a JCBHR Trust Fund 1/ for the pooling of funds annually allocated to programs.

1/ This fund would dissolve and replace the TDR Trust Fund.

40. The proposal that the Bank establish and cosponsor a JCBHR would imply financial contributions for programs accepted in the system. However, through membership in the JCB and the Executive Committee, the Bank could play an important role in ensuring that only strong and suitable programs are accepted by the JCBHR.

Advantages of Bank Participation

41. The Bank's presence is considered important to attract funds from donors and to assure their proper management. As development institutions, the Bank along with UNDP increase donor confidence that criteria for program selection are directed toward disease control that will accelerate social and economic progress in developing countries.

42. The Bank's involvement in the JCBHR would strengthen the system's potential in several important ways:

i) the Bank is more independent of political interference than most UN agencies and, therefore, is in a much stronger position to ensure that expert, independent scientific advice is obtained and used for scientific management decisions;

ii) the Bank's reputation for careful analysis, efficient organization and sound financial management lends credibility to programs within the development community;

iii) the Bank's economic perspective and broad multisectoral approach to development should reduce the danger of programs falling into narrow compartments corresponding to the sector responsibility of one technical agency;

iv) the Bank has the capacity to introduce new approaches and to adapt them to changing circumstances, thus providing more effective and flexible leadership than most UN agencies.

43. In participating in the JCBHR, the Bank should recognize that it is embarking on a long-term effort requiring continual support. The level of investment would be determined annually, with funds allocated from the Bank's annual net income and on approval of the Bank's Executive Directors. The benefits to be derived from this form of investment in the health sector would include:

i) reinforcement of the Bank's activities in meeting basic needs of the poorest populations of the developing world through support of health research in currently neglected areas that would produce new and appropriate technology critical to the success of Bank operational interventions to provide cost-effective health services;

ii) reinforcement of the Bank active collaboration with WHO, UNDP and other UN agencies, bilateral donors and the developing countries toward integrating health activities more closely into overall development activities as a means of accelerating social and economic progress in the developing world.

JREvans/AFonaroff:va

Attachment 1

CONTRIBUTIONS TO THE SPECIAL PROGRAMME FOR RESEARCH AND TRAINING IN TROPICAL DISEASES AS AT 30 DECEMBER, 1979

(EXPRESSED IN US$ 1000)

Contributor	1973-1975	1976	1977	1978	1979	Pledges 1980
Multinational						
United Nations Development Programme (UNDP)	-	50	50	969	1 787	1 948
World Health Organization (WHO)	175	331	903	1 50	1 592	1 050
Total	175	381	953	2.470	3.379	2.998
Banks						
African Development Bank	-	-	-	-	250	250
Total	-	-	-	-	250	250
Foundations						
International Federation of Anti-Leprosy Associations	78	36	63	62	67	65
Japan Shipbuilding Industry Foundation	51	500	400	400	400	400
Lepers' Trust Board, New Zealand		-		10	7	10
WellcomeTrust, United Kingdom	25	-	-	-	—	—
Total	154	536	473	472	474	475

Contributor	1973-1975	1976	1977	1978	1979	Pledges 1980
Bilateral: Developing Countries						
Bahamas	.5	0.5	-	-	—	—
Cuba	—	—	—	—	2	2
Cyprus	-	-	0.2	-		
India	-	-	-	-	103	100
Iraq	5	-	-	-	—	—
Niger	-	-	-	2	2	2
Nigeria	-	80	81	81	80	80
Romania	-	2	-	-	—	—
Total	6	83	81	83	187	184
Bilateral: Developed Countries						
Australia	-	-	-	260	257	253
Austria	5	23	31		38	40
Belgium	64	272	-	1.533**	450	500
Canada	-	309	-	535	609	700
IDRC/Canada	75	491	178	63	-	-
Denmark	-	-	4.933	2.934	2.863	1.900
land	-	-	72	96	125	125
France	-	-	-	-	227	225
Germany, Federal Republic of	-	-	-	333	1.168	1.100
Netherlands	100	400	1 000	1.000	955	1,000
Norway	71	109	456	966	1.090	1.110
Sweden	805	404	1 351	1.928	2.530	2.530
Switzerland	-	102	422	554	747	750
United Kingdom	-	133	470	992	1.232	1.934*
United States of America/USAID	-	-	25.	24	1.5	4.0
Total	1.120	2.243	8.838	11.323	13.792	16.157
GRAND TOTAL	1.455	3.243	10.345	14.348	18.081	20.064

* Includes final part of CY79 to be paid in CY80
** Includes 1977 contribution

WORLD BANK / INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: Files

DATE: May 29, 1980

FROM: Arlene Fonaroff, PHN

SUBJECT: Request for Bank Financial Support of International Health Research Programme (JCBHR)

1. The Finance Committee considered the JCBHR proposal at its May 20 meeting. It was decided that a decision could not be taken until a full set of criteria were available for evaluating all proposals requesting research support. The Weiss criteria were considered insufficient for the purpose, and P&B will form a task force to prepare such criteria. Estimated completion is late September or early October, but meeting this target date is questionable because it conflicts with assignments related to the Bank's annual meeting (week of September 29).

2. Because of the above action, the JCBHR proposal will not be included in the paper on uses of Bank income scheduled for Board presentation July 29. While the JCBHR proposal was considered to be more fully developed than other research proposals considered by the Finance Committee, its review would have benefited by having information on budget implications to the Bank. The latter are contained in the May 23 memo from Mr. Baum to Mr. Gabriel.

3. P&B actions place time constraints on the Bank's position vis-a-vis TDR. While the Bank's decision on a financial contribution to TDR will not be presented officially until the December 10-11 meeting of the JCB, delay on favorable action will likely affect response to Bank input on critical management issues to be discussed at Standing Committee meetings of the TDR cosponsors (June 19-20, October 6-7).

4. We may wish to alert senior management to these time constraints, and to explore with management the possibility of treating the JCBHR proposal in the characteristic Bank manner of appraising specific items on their own merits. The Regional Vice Presidents have all had the opportunity to review the JCBHR proposal circulated by Mr. Baum with Mr. Stern's agreement. Mr. Gabriel has been provided with answers to the questions presented to Mr. Baum on costs and effectiveness of administering TDR and the budgetary implications of the proposed JCBHR. In light of extenuating circumstances related to time constraints described in para. 3, it might now be useful to secure P&B's response to this information and to re-consider whether the proposal could be reviewed by the Board in absence of the general criteria for Bank financial support of research programs. This would not only expedite the Bank's decision on this particular proposal, but also could suggest elements for consideration in developing general criteria. It would be desirable to consider a timetable that would enable a decision by the Board before the Annual Meeting, perhaps in late August following the Board recess or in early September.

cc: Dr. Evans, PHN

AFonaroff:tw

WORLD BANK / INTERNATIONAL FINANCE CORPORATION

OFFICE MEMORANDUM

TO: K. Georg Gabriel, Director, P&B

DATE: May 23, 1980

FROM: Warren Baum, CPSVP

SUBJECT: Proposal for World Bank Participation in International Health Research Programs

1. The following information addresses the questions raised in your May 1 Memorandum on costs and effectiveness of administering the Special Programme for Research and Training in Tropical Diseases (TDR) and the budgetary implications of the Bank's proposed role in management and administration of international health research programs.

TDR Administration Costs

2. Administrative costs at WHO headquarters and regional offices associated with operations of scientific, financial and administrative bodies of the Secretariat, technical officers, and the scientific working group structure are estimated at 18% of the total approved budget for 1980. This includes personnel services, 11%; meetings, 3%; duty travel, 1%; and information systems services, scientific and public information, administrative support and common services, supplies and equipment at 3%. It is difficult to measure the level of administrative efficiency. The network approach has been adopted as the most effective means of achieving the program's objectives in scientific development and in strengthening research capabilities in developing countries. The research management system for network activities is, however, complex and may be expected to involve relatively high administrative costs.

3. WHO, not the Bank, is the Executing Agency for TDR. All administrative expenses are shared pro rata by all donors. If the Bank made a financial contribution to TDR, it would share administrative costs pro rata with other donors. WHO makes a direct financial contribution to the program; it has not charged overhead for its role as executive agency.

4. From the outset there has been an expectation on the part of donors that the Bank, as a cosponsor, would perform a valuable service in the administration and financial management of TDR. The Bank's position with the donors had been weakened, however, because unlike the other cosponsors it has not provided financial support to the program. The Bank's influence on the administrative efficiency of the program is needed and would be welcomed by the donor community. However, exercising its influence on program management will be much more difficult for the Bank if it does not provide financial support.

5. The proposed contribution to TDR is 10% of donor pledges to the approved annual budget. This would be $2.0M in CY80, increasing to about $3.5M at the peak level of expenditure when field trials and clinical evaluations would be carried out, as indicated in para. 29 of the proposal.

The approved TDR budget for the 1981-82 biennium calls for a 20% real growth in operations. Donor contributions are expected to increase by 10% per annum in real terms. The Bank's projected contributions for TDR over the five year period 1980-1984 assumes annual (real) increments of 10% (Table 1).

6. In addition to TDR, the proposed JCBHR portfolio is expected to include two additional programs within this period: Control of Diarrheal Diseases (CDD), and Health Services Research (HSR). The rate of growth of the CDD and HSR cannot be predicted with confidence at this early stage of their development; a 10% real growth rate has been used in Table 1. The five year projection of estimated contributions presented in the table is calculated on 10% of total estimated donor contributions to approved annual budgets and is expressed in 1980 dollars.

Table 1

Projected Bank Resources
for JCBHR Programs

Program	1980	1981	1982	1983	1984	5-Year Total
TDR	$2.0 M	$2.2 M	$2.4 M	$2.7 M	$2.9 M	$12.2 M
CDD	--	1.5	1.7	1.8	2.0	7.0
HSR	--	--	1.0	1.1	1.2	3.3
Total	$2.0 M	$3.7 M	$5.1 M	$5.6 M	$6.1 M	$22.5 M

7. Bank Special Support Staff In addition to the proposed Bank resources for JCBHR programs, the Bank should also expect to incur costs to support the Bank's representation as cosponsor. Since 1978, the Bank has incurred one full-time staff position for this program, plus travel and secretarial expenses. Adequate support would require two full-time staff from FY82 onward, and about 12 consultants weeks each year, plus travel and secretarial expenses. No provision in this estimate has been made for promotion and fund raising. If the Bank assumed this responsibility, it is estimated that 20 staff weeks would be required during the start-up period and 10 staff weeks p.a. thereafter, based on OCP experience.

8. Table 2. presents estimated Bank resources for required staffing CY80-84.

Table 2

Bank Resources for JCBHR
Estimated Staffing Required

Estimated Staffing Requirements	CY81	CY82	CY83	CY84
Total Number Staff Positions	1	2	2	2
Total Number Consultant Weeks	8	20	12	12

Position	CY80	CY81	CY82	CY83	CY84	5-Year Total*
Staff	$91,000	$145,600	$320,320	$352,352	$387,587	$1,296,859
Consultant	---	9,240	25,880	17,088	18,798	71,006
Total	$91,000	$154,840	$346,200	$369,440	$406,385	$1,367,865

* Estimates are in 1980 dollars and on recommendations from P&B assume a 12% inflationary rate in CY81 and 10% p.a. for CY82-84.

cc: Evans/Fonaroff, PHN
van der Tak, CPSVP

JREvans/ AFonaroff:tw

file

TELEX
3272

APRIL 18, 1980
61518

INHOTELCOR

NEW DELHI, INDIA

THREE. FOR DR. EVANS, WORLD BANK OFFICIAL. FURTHER PROGRESS. STERN APPROVED PROPOSAL FOR DISTRIBUTION REGIONAL VICE PRESIDENTS. REGARDS, FONAROFF, INTBAFRAD.

PHN/HEALTH RESEARCH PROGRAMS

AFonaroff:va

Mrs. Arlene Fonaroff

Population, Health and Nutrition

TELEX
3496

APRIL 9, 1980
61518

MANIL HOTEL

MANILLA, PHILIPPINES

1 FOR DR. JOHN EVANS, WORLD BANK OFFICIAL. CHEERS. BAUM APPROVED DRAFT AND WILL DISCUSS DISTRIBUTION WITH STERN. REGARDS. FONAROFF, INTBAFRAD.

PHN/HEALTH RESEARCH

AFonaroff:va

Mrs. Arlene Fonaroff

Population, Health and Nutrition

OFFICE MEMORANDUM

JRE (on) Hun 4/17

TO: Regional Vice Presidents

DATE: April 16, 1980

FROM: Warren C. Baum

SUBJECT: A Proposal for World Bank Participation in International Health Research Programs

In agreement with Mr. Stern, I am circulating the attached paper on "A Proposal for World Bank Participation in International Health Research Programs" for your information. There will not be a discussion of the paper at an Operational Vice Presidents meeting, but if you have any comments I would be pleased to receive them by May 2nd.

WCBaum:rma

cc: Mr. Stern
Mr. Benjenk
Mr. Gabriel
Dr. Evans/Ms. Fonaroff

FORM NO. 75 (9–78) THE WORLD BANK

ROUTING SLIP	DATE: 4/10/80

NAME	ROOM NO.
Mr. Baum	E1023

	APPROPRIATE DISPOSITION		NOTE AND RETURN
	APPROVAL		NOTE AND SEND ON
	CLEARANCE		PER OUR CONVERSATION
	COMMENT	X	PER YOUR REQUEST
	FOR ACTION		PREPARE REPLY
	INFORMATION		RECOMMENDATION
	INITIAL		SIGNATURE
	NOTE AND FILE		URGENT

REMARKS:

Would you like me to sit in on the meeting with Mr. Stern in order to facilitate any possible revisions?

af.

FROM:	ROOM NO.:	EXTENSION:
Arlene Fonaroff	N544	61518

FORM NO. 759
(11-73)

WORLD BANK GROUP

ROUTING SLIP	DATE

FROM THE VICE PRESIDENT, PROJECTS STAFF

NAME	ROOM NO.
Ms Arlene Fourgoff	

	APPROPRIATE DISPOSITION		NOTE AND RETURN
	APPROVAL		NOTE AND SEND ON
	COMMENT		PER OUR CONVERSATION
	FOR ACTION		PER YOUR REQUEST
	INFORMATION		PREPARE REPLY
	INITIAL		RECOMMENDATION
	NOTE AND FILE		SIGNATURE

REMARKS

Please type in final
& send back to me.

W C Baum
4/8

April 4, 1980

Mr. Baum:

Attached please find two copies of draft 17 (14, 15 and 16 are in the wastebasket)! Its only merit may that it is shorter. On the other hand possibly the important items are the ones left out.

Arlene Fonaroff would be pleased to clean up minor changes if this would be of any assistance. The only copy other than the two sent to you has been sent to Chuck Weiss. I will be back here on the morning of April 28.

John R. Evans

A PROPOSAL FOR WORLD BANK PARTICIPATION IN INTERNATIONAL HEALTH RESEARCH PROGRAMS

Prepared by: Population, Health and Nutrition Department
Central Projects Staff

April 9, 1980

A PROPOSAL FOR WORLD BANK PARTICIPATION IN INTERNATIONAL HEALTH RESEARCH PROGRAMS

Summary

1. This paper recommends that the World Bank participate in the organization and funding of research programs designed to achieve two principal objectives: first, to develop and evaluate new methods to control major health problems which are widespread in developing countries; and second, to strengthen capabilities in these countries to adapt technology and implement programs to alleviate the problems.

2. The Special Programme for Research and Training in Tropical Diseases (TDR), cosponsored by UNDP, WHO and the Bank is an example of a large-scale health research effort directed to six disabling diseases which are endemic in many developing countries. The program has made substantial progress towards both objectives during the first three years of operation. The Bank is a cosponsor of TDR and has participated actively in its development. It is now recommended that the Bank initiate financial support of the TDR in CY80 with a contribution of US$2.0M, which is 10% of the anticipated donor support of the approved CY80 budget.

3. A second large-scale health research program, the Control of Diarrheal Diseases (CDD), is in an advanced stage of preparation through UNDP/WHO/Bank collaboration. Financial and management support from the Bank will be called for in CY81, and it is recommended that the Bank provide this support if the program continues to develop as now foreseen.

4. CDD could be incorporated into the existing management structure of TDR. Looking to the future, however, there is need for an umbrella mechanism under which TDR, CDD and other large-scale health research programs could be managed. This broader framework could also provide a useful forum in which to evaluate competing claims for health research support and to assess priorities. The Bank should therefore discuss with interested parties the establishment of a Joint Coordinating Board for Health Research responsible for a portfolio of global health research programs and consider bringing it into operation at the time CDD is added.

5. Bank participation in large-scale, mission-oriented health research programs directed to the control of disease and more effective methods of providing health services will contribute to the development of cost-effective primary health care for underserved populations in the developing world. The mechanism proposed will focus the attention of the international health and development community on the rational allocation and management of scarce resources to address health problems which limit social and economic progress.

I. Needs for Improved Technology in the Health Sector

6. The health status of the poor in developing countries may be improved through both the general process of social and economic development and the provision of basic health services. Because development proceeds at a slow rate and its benefits are inequitably distributed, the impact of the development process per se on the health status of the poor is limited. Health improvements may be accelerated through access to basic health services that control commonly occurring diseases.

7. Two obstacles must be overcome in order to achieve direct improvements in health. First, a system must be established to bring currently available technology to those who have no access to health services. Second, safe, simple and inexpensive measures must be developed to prevent or treat serious common diseases such as malaria, schistosomiasis and onchocerciasis, for which current tools are inadequate.

8. The Bank has initiated activities to eliminate the first obstacle by establishing direct lending to countries for health care delivery. However, there is a critical need for research on health services to accelerate innovation, improve their effectiveness and to measure the operational impact on health status and economic productivity. Overcoming the second obstacle requires mobilization of the world's health science research community to focus attention on the major infectious and parasitic diseases of the developing world in order to discover appropriate technologies for their control.

9. Because of its experience in the operation and management of development programs, the active participation of the Bank is considered important in gaining the commitment and support of multilateral and bilateral donors as well as developing countries. Support on a considerable scale and over an extended period is required to stimulate promising lines of research in scientific laboratories throughout the world, to coordinate the succeeding stages of experimental and clinical trial leading to implementation, and to strengthen research capability in developing countries to adapt technology and to implement programs.

10. Research on the major diseases endemic in developing countries has so far been neglected by the scientific community and the pharmaceutical industry. Investment in the search for drugs for tropical diseases has been limited by the high cost of drug development in relation to anticipated financial returns in developing countries. The overwhelming emphasis of biomedical research has been on cancer, cardiovascular disorders and the other major diseases of the industrialized world. The scientific techniques in immunology and molecular biology developed in the course of this research offer powerful new tools to be applied to the diseases of the developing world, if the attention of the research community can be focused in this direction.

11. Under the sponsorship of WHO, UNDP and the Bank, the scientific community, donors and developing countries have launched or developed several major goal-oriented health programs. The Onchocerciasis Control Program (OCP) is an action-oriented regional program to control the black fly vector in the Volta River watershed. OCP requires financial resources well beyond the means of the countries affected and control techniques which must be applied across national borders. The Special Programme for Research and Training in Tropical Diseases (TDR) and the Diarrheal Diseases Control Programme (CDD) are research efforts designed to produce simple, low-cost and effective vaccines, drugs and pesticides; to develop new methods for delivery of disease-control technology and to strengthen research capabilities in countries where the diseases are endemic.

12. Discovery of a new drug or vaccine and the steps leading to its ultimate use are normally carried out by different scientific groups and involve a sequence of time-consuming activities: laboratory discovery; animal trial testing to confirm such factors as safety and efficacy; research to achieve product stability, predictable potency and low-cost production methods; and evaluation of cost-effective disease detection and delivery methods. Two elements could shorten this process by several years: (a) organization, coordination and management of a network of scientific groups whose individual projects are linked in successive stages to a goal-oriented plan; and (b) the regular and timely provision of necessary financial support. Success in any one program depends on maintaining the commitment of scientists and the support of donors over 10-15 years. An effective mechanism is needed to organize and manage the scientific network and financial resources. Bank participation in such a mechanism could perform the vital services of strengthening management and attracting and sustaining the confidence and commitment of donors to high priority programs.

13. The health research programs selected for Bank support should be those that aim to control diseases which significantly impede economic and social progress in a large number of developing countries, and which do not now receive adequate attention from the scientific community. The Bank should stress efforts to accelerate the discovery of simple, cost-effective interventions for use in the types of primary health care programs now being considered in many developing countries and which are the main focus of the Bank's health lending programs. It should also emphasize health services research to improve the quality and effectiveness of the health delivery systems.

14. The case for investments in health research is strong because of the heavy burden of illness in developing countries and the expense incurred in the use of currently available technology to control prevalent infectious and parasitic diseases. Technology does not yet exist to control common causes of death and disability such as diarrheal diseases, respiratory tract infections, hepatitis and parasitic infestations. Over a billion people in the developing countries suffer from poor health attributed to tropical diseases. Malaria, once under control, is now in resurgence. Schistosomiasis is more widespread as

a result of irrigation, hydroelectric power and other economic development activities. Present control technology is difficult, complex and costly. For example, Bank projects in Upper and Middle Egypt, Giza and West Nubariya for schistosomiasis control reach only approximately one-third of Egypt's population. Between 1973-79, the total component cost was US$28.7M, of which Bank financing totaled US$21.9M. 85% of the investment was in molluscicides for vector control, the remainder in chemotherapy. In the absence of more cost-effective alternative technologies, annual recurrent costs could amount to approximately US$18M.

15. Between 1971 and 1979, 43% of health component expenditures by the Bank were devoted to vector control, chiefly for malaria and schistosomiasis. This amounted to US$145M, almost 58% of the total expended for health components; recurrent costs during this period were US$14M. These are necessary, but interim steps awaiting future technology that will more effectively prevent and treat vector borne diseases. Presently, where such diseases are endemic, human productivity is reduced; and during epidemics, entire workforces may be disabled. The high risk of contracting malaria, schistosomiasis, trypanosomiasis and onchocerciasis in Africa, Asia and the Amazon region of South America affects population distribution and patterns of human settlement. Animal husbandry and other economic ventures are similarly affected. In Africa alone, the tsetse fly (the trypanosomiasis vector) infests over 10M square km of land which, if cleared, could support a potential cattle population of 125M.

16. Appropriate biomedical technology does exist to control measles, whooping cough, diptheria, tetanus and poliomyelitis. These diseases, however, continue to be major causes of mortality and morbidity in developing countries because the majority of the population lacks access to health services. It is estimated that only one-tenth of the 800,000,000 children at risk have been immunized.

17. The implementation of control measures such as vaccines, drugs or pesticides is dependent on effective systems of health services delivery. One of the most important areas of health research is concerned with the development, management and evaluation of health services to improve their effectiveness and efficiency. Strengthening of the capability for health services research is required in all developing countries.

II. TDR: A Model for Coordinating Donor Support

18. The Special Programme for Research and Training in Tropical Diseases (TDR) is a goal-oriented health research program to develop control measures for six major tropical diseases and to strengthen research capability in the developing countries where the diseases are endemic. Supported jointly by contributions from multilateral and bilateral donors, and countries whose populations will directly benefit from results, TDR is now in its third year under WHO/UNDP/Bank cosponsorship. The financial resources made available through the TDR, and the research and administrative supports developed to manage this investment, have resulted in participation by leading scientists and institutions throughout the world. Though still in its early stages, TDR is internationally regarded both

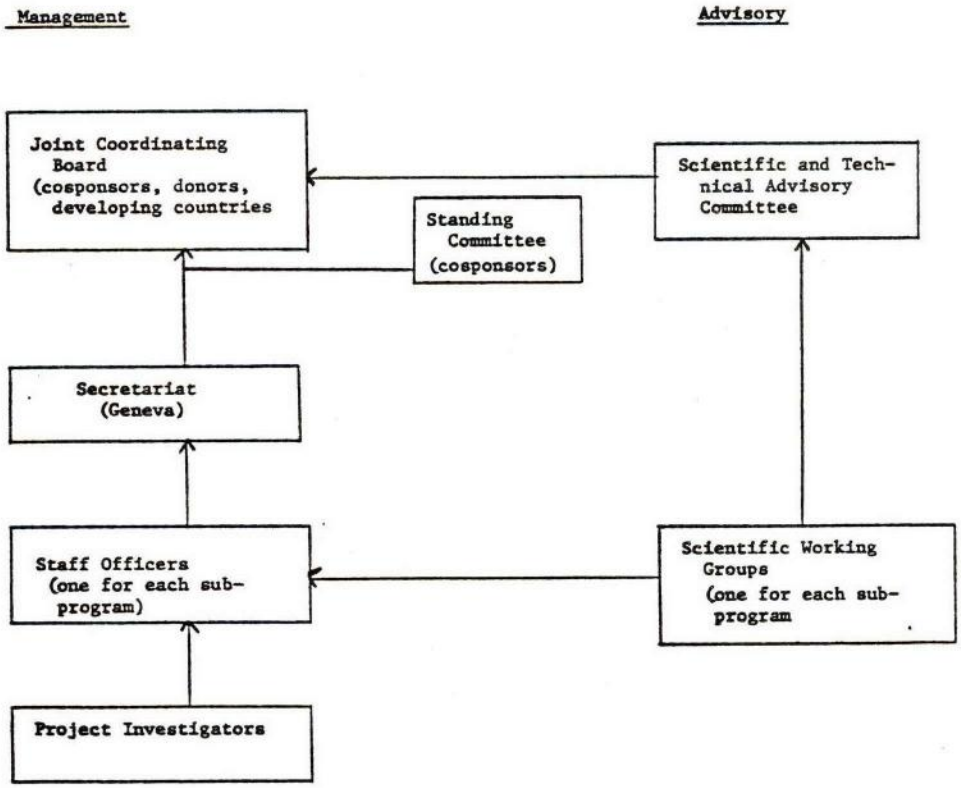
by scientists, and by donors and LDC governments as the major research opportunity for developing new, improved and cost-effective controls for malaria, schistosomiasis, filariasis (including onchocerciasis), trypanosomiasis, leprosy and leishmaniasis. Each disease constitutes a major public health problem for which there is no available control technology which can be implemented at a cost affordable by developing countries and which is simple enough to be delivered through the country's primary health care system.

19. TDR is organized as a network of research teams located in many different countries. The large number of widely dispersed research activities complicates management of the program but the network approach has been successful in stimulating leading biomedical and health scientists to reorient their research to the six tropical diseases. It has also strengthened research centers in developing countries by linkages with established institutions in the developed world. The large number of technical and advisory committees to guide the program appears administratively cumbersome but the breadth of scientific participation has been an asset in mobilizing the interest of research workers in the program and in achieving quality control.

Management and Technical Advisory Bodies

20. The technical and administrative structures for the organization and management of TDR are described in a Memorandum of Understanding signed by the cosponsors and cooperating parties in 1978 (Fig. 1). WHO as Executing Agency, provides the TDR secretariat responsible for overall program management and for serving the advisory bodies. The Secretariat includes a Scientific Director, Program Manager and Staff Officers for each of the six disease sub-programs.

Figure 1: TDR Management and Advisory Bodies



The staff officers are responsible for the administration of research grants to the project investigators according to a plan prepared by the advisory committee (Scientific Working Group) for that sub-program.

21. The Joint Coordinating Board (JCB) which meets annually in Geneva is responsible for the establishment of priorities for the scientific program, and the approval of policies, budgets and appointments. The annual meeting also serves as a pledging session for financial contributions. The JCB is composed of 30 members: 3 cosponsors; 12 representatives of governments selected by donors; 12 representatives of governments selected by WHO Regional Committees to represent countries where the six diseases occur; and 3 representatives of agencies selected by the JCB itself because of their activities in tropical diseases research and training.

22. The JCB is served by a Standing Committee composed of the three cosponsors and by a Scientific and Technical Advisory Committee (STAC). The Standing Committee meets three times each year to authorize actions by the Secretariat between meetings of the JCB and to prepare recommendations for the annual meeting of the JCB on the following matters:

i) priorities and budget based on substantive program review and advice by STAC;

ii) appointments to the Secretariat and STAC;

iii) fiscal and program management matters such as cash flow/liquidity, internal audit and allocation of staff resources;

iv) terms of reference for quinquennial reviews of the performance of each sub-program.

23. The senior technical advisory body, STAC, is a multidisciplinary group of 15-18 distinguished scientists appointed by the JCB on the recommendation of the Standing Committee. STAC guides scientific planning, assesses priorities; and evaluates progress on an annual basis and arranges for regular in-depth review of each of the sub-programs. Three reviews have already been completed and the total scientific program will be evaluated at five-year intervals.

24. In addition, each sub-program of TDR has an advisory body, the Scientific Working Group (SWG), which consists of senior scientists from the relevant disciplines appointed for a three-year term by the TDR secretariat. There is one SWG for each of the six diseases under investigation, four for areas that pertain to all the diseases (biomedical research, vector biology control, epidemiology and social and economic research), and one on strengthening of research institutions. Within the context of overall policy and priorities set by the JCB, each SWG defines research objectives, devises a strategic plan to achieve them and monitors and revises both the plan and its priorities on a regular basis. The SWG arranges peer review groups to select proposals for funding on the basis of scientific merit and relevance to the strategic plan. SWG members may participate in project site visits and through their broad

scientific contacts stimulate interest in research among investigators in developing countries.

25. A satisfactory administrative relationship between TDR and WHO has been established. Technical, administrative and financial operations of TDR are handled separately from those of WHO for most matters. Where interaction does exist, the interests of TDR have been effectively represented in the senior decision-making bodies of WHO by the Special Programme Coordinator who holds the rank of Assistant Director-General and serves as the WHO member of the Standing Committee. Some difficulties have arisen between WHO departments and TDR staff where departments have pressed to establish different priorities for a TDR sub-program. There has also been lack of clear definition in what circumstances TDR funds can be used by WHO back-up staff, as in the case of attending scientific meetings related to the six diseases. TDR/WHO staff relations are now under review by TDR senior management. Finally, WHO administrative procedures for recruitment have imposed some delays on appointments. These do not appear to have handicapped progress, but do impose extra workloads on staff and can delay funding of projects. On the other hand there are advantages to the location of the TDR Secretariat in the lead international agency for health. TDR staff have close contact with the technical departments of WHO and benefit from the back-up of WHO field staff for liaison with research scientists in developing countries and for project site visits. In addition, through WHO, TDR has ready access to the highly qualified technical specialists of the international health science community and to the health research institutions of WHO member countries.

Progress

26. TDR is meeting standards established by STAC and expectations of the cosponsors and the JCB. Approximately half of TDR resources are spent in developing countries on research, training of personnel and strengthening of research institutions. The scope of activity includes not only biomedical, but also environmental, epidemiologic, socio-economic and health services research. Highly qualified scientists from leading institutions in the industrialized world have turned their attention from the health problems of affluent societies to participate in research directed toward the six neglected diseases. In addition, the US National Institutes of Health, the Rockefeller Foundation and the Wellcome Trust have been stimulated to increase their annual appropriations to tropical diseases research, thereby accelerating and broadening the scientific knowledge base for the control of tropical diseases.

27. Since the inception of TDR, 600 projects have been funded in 66 countries. In 1979, almost half of these projects represented new efforts, demonstrating the rapid rate of program development. More significant, however, is that while the program is now only in its third year, new technology has been developed for five of the six diseases under investigation. There are extremely promising leads for vaccines against malaria and leprosy; improved drug therapy for schistosomiasis; drug screening for more effective compounds to treat onchocerciasis; and a more accurate diagnostic test for detecting and treating trypanosomiasis.

28. It is unlikely that necessary resources to produce these results would have been available without the TDR stimuli. Though complex, the administration and management of the global network appears to be working well. The WHO Advisory Committee on Medical Research has cited the progressive scientific achievements of TDR as an example of outstanding research management; it has also commended the balance between activities in basic research and those in the strengthening of research institutions. It regards TDR as a model for other WHO extrabudgetary efforts.

29. Donor response confirms these assessments. TDR financial resources have grown from about US$3.2M in 1976 to over US$20.0M in CY80. TDR is being supported by two of its three cosponsors, one development bank, three foundations and 18 bilateral donors including four LDCs. 1/ While financial contributions from developing countries are modest, allocation of their scarce resources to TDR is indicative of the value attributed to potential gains. The JCB approved a five-year budget forecast recommended by the Standing Committee. The CY80 budget was approved at US$26.6M with annual budgets not exceeding US$35.0M (CY80 dollars) thereafter. Recognizing that donors will be approached to support activities in addition to TDR, concern is being expressed about sustaining the level of support required as the program enters the expensive stages of clinical trial and evaluation of new discoveries.

Role of the Bank

30. The Bank was invited to become a cosponsor in order to increase donor confidence in effective program management and administration. The Bank was also asked to establish and provide fiscal management of a Tropical Diseases Research Fund in which most of the TDR contributions are deposited. 2/

31. The Bank also influences program management through participation in the Standing Committee and the JCB. It initiated a proposal for internal audit of projects and analyzed liquidity issues affecting cash flow. The Bank's representative to thse bodies exercises independent judgements through staff assistance of a Public Health Officer responsible for (a) liaison with pertinent Bank departments, cosponsors and cooperating parties; (b) review and analysis of program documentation; (c) representation of UNDP/Bank cosponsorship as an observer to the STAC annual program review, and (d) preparation of documents relating to the Bank's managerial role.

1/ See Attachment 1

2/ Some governments are unable for political reasons to contribute funds through the Bank and therefore WHO also administers a trust fund to receive these funds. However, over 65% of 1979 contributions were deposited to the Bank-administered fund.

32. The Bank accepted cosponsorship because the potential contributions of the program are central to the Bank's overall objectives. Some major donors were reluctant to participate unless the Bank became fiscal agent. The Bank conditioned its participation on the acceptance of the recommendations for strengthening research management and clarifying administrative relationships between TDR and WHO. The arrangements for technical and administrative structures were subsequently accepted by WHO and are incorporated in the Memorandum of Understanding between cooperating parties.

33. The Bank has been twice requested to make a financial contribution to the TDR. The first request was made by the JCB in 1978 and was deferred pending review of Bank policy on allocation from the Bank's net annual income. At its 1979 meeting, the JCB repeated its request. In view of TDR progress, the Bank should now provide financial support to the program. TDR potential is high for delivery of products which have important implications for Bank lending, particularly through improved vector control in water and irrigation projects and for vaccines and drugs in primary health care. In a broader context, reduction of infectious diseases and parasitic infestations will increase worker productivity, educability of students, general health status and longevity. Future progress of TDR could be impeded if the Bank does not provide financial support. Several major donors will interpret lack of Bank support as indicating doubts on TDR potential to meet its goals and this could seriously erode the amount of financial resources for TDR. Conversely, more active Bank involvement will make it possible to effectuate further improvements in administrative mechanisms as the program evolves.

34. It is recommended that the Bank's financial contribution be fixed at 10% of the projected budget support of all TDR donors. On this basis, the Bank's contribution would be approximately US$2.0M in CY80 and can be expected to approximate US$3.5M per annum in CY80 dollars at periods of maximum expenditure. Continuation of the Bank's annual support would be reviewed each year on the basis of the program's technical achievements and prospects for future development.

III. Recommendations for Establishing a Joint Coordinating Board for Health Research (JCBHR)

35. The Joint Coordinating Board for TDR was established as a forum to enable donors to adopt a programmatic approach to the control of six major diseases rather than supporting isolated health research projects. The mechanism seems to be working sufficiently well to consider its application to other priority programs. Sine the Bank was instrumental in formulating the management structure of TDR, it will be approached in the launching of similar large-scale health research programs.

36. The second program would be the WHO expanded effort for diarrheal diseases control (CDD). Diarrheal diseases are the leading causes of death in infancy and early childhood throughout the developing world. There are now encouraging leads in the development of vaccines against two common bacterial

and viral causes of acute diarrhea, and in the use of simple oral rehydration techniques which could reduce mortality by 30%. There have also been improvements in educational methods of health promotion and disease prevention. WHO/UNDP/Bank collaboration resulted in a five-year US$5M UNDP grant to WHO to initiate a global research program for vaccine and drug development in 1979. WHO is seeking continued UNDP/Bank collaboration and it is expected that the BAnk will be asked to serve as cosponsor of CDD and to contribute financially in CY81.

37. It has been suggested that the JCB for TDR also serve as the coordinating authority for the organization, management and financing of CDD. This would be feasible. Looking to the future, however, other large-scale health research programs may be expected to emerge, for example, health services research to improve the planning and management of the process of developing health care. While CDD could be incorporated into the existing management structure for TDR, it would be preferable to consider an umbrella mechanism under which the TDR, CDD and other new health research programs might be effectively managed. It is proposed, therefore, that the Bank explore with interested parties the establishment of a Joint Coordinating Board for Health Research responsible for an evolving portfolio of large-scale health programs, with a view to bringing it into operation at the time CDD is added.

38. The purposes, composition and mode of operation of the JCBHR would follow the model established for the JCB of the TDR program. Its principal functions would be to approve policies and programs, determine appropriate levels of overall investment and allocate available resources to programs in relation to priorities which it established. The JCBHR would be advised by one STAC with subcommittees of STAC for each of the component programs. SWGs would advise on each sub-program. The staff directing each program would be responsible to the JCBHR secretariat which could be strengthened to provide more effective management and at the same time achieve some economies through sharing of administrative and technical services.

39. The Bank as a cosponsor would serve on the JCBHR Executive Committee with the same responsibilities as it has as a member of the TDR Standing Committee. In order to discharge these responsibilities effectively and exercise independent judgement on the functioning of the system, the Bank's representation should be supported by a staff of two individuals experienced in research management and the health sciences, who would prepare technical, administrative and financial assessments of the programs for Bank use. The Bank would also establish and administer a JCBHR Trust Fund 1/ for the pooling of funds annually allocated to programs.

1/ This fund would dissolve and replace the TDR Trust Fund.

40. The proposal that the Bank establish and cosponsor a JCBHR would imply financial contributions for programs accepted in the system. However, through membership in the JCB and the Executive Committee, the Bank could play an important role in ensuring that only strong and suitable programs are accepted by the JCBHR.

Advantages of Bank Participation

41. The Bank's presence is considered important to attract funds from donors and to assure their proper management. As development institutions, the Bank along with UNDP increase donor confidence that criteria for program selection are directed toward disease control that will accelerate social and economic progress in developing countries.

42. The Bank's involvement in the JCBHR would strengthen the system's potential in several important ways:

i) the Bank is more independent of political interference than most UN agencies and, therefore, is in a much stronger position to ensure that expert, independent scientific advice is obtained and used for scientific management decisions;

ii) the Bank's reputation for careful analysis, efficient organization and sound financial management lends credibility to programs within the development community;

iii) the Bank's economic perspective and broad multisectoral approach to development should reduce the danger of programs falling into narrow compartments corresponding to the sector responsibility of one technical agency;

iv) the Bank has the capacity to introduce new approaches and to adapt them to changing circumstances, thus providing more effective and flexible leadership than most UN agencies.

43. In participating in the JCBHR, the Bank should recognize that it is embarking on a long-term effort requiring continual support. The level of investment would be determined annually, with funds allocated from the Bank's annual net income and on approval of the Bank's Executive Directors. The benefits to be derived from this form of investment in the health sector would include:

i) reinforcement of the Bank's activities in meeting basic needs of the poorest populations of the developing world through support of health research in currently neglected areas that would produce new and appropriate technology critical to the success of Bank operational interventions to provide cost-effective health services;

ii) reinforcement of the Bank active collaboration with WHO, UNDP and other UN agencies, bilateral donors and the developing countries toward integrating health activities more closely into overall development activities as a means of accelerating social and economic progress in the developing world.

JREvans/AFonaroff:va

Attachment 1

CONTRIBUTIONS TO THE SPECIAL PROGRAMME FOR RESEARCH AND TRAINING IN TROPICAL DISEASES AS AT 30 DECEMBER, 1979

(EXPRESSED IN US$ 1000)

Contributor	1973-1975	1976	1977	1978	1979	Pledges 1980
Multinational						
United Nations Development Programme (UNDP)	-	50	50	969	1 787	1 948
World Health Organization (WHO)	175	331	903	1 50	1 592	1 050
Total	175	381	953	2.470	3.379	2.998
Banks						
African Development Bank	-	-	-	-	250	250
Total	-	-	-	-	250	250
Foundations						
International Federation of Anti-Leprosy Associations	78	36	63	62	67	65
Japan Shipbuilding Industry Foundation	51	500	400	400	400	400
Lepers' Trust Board, New Zealand		-		10	7	10
WellcomeTrust, United Kingdom	25	-	-	-	—	—
Total	154	536	473	472	474	475

Contributor	1973-1975	1976	1977	1978	1979	Pledges 1980
Bilateral: Developing Countries						
Bahamas	.5	0.5	-	-	—	—
Cuba	—	—	—	—	2	2
Cyprus	-	-	0.2	-		
India	-	-	-	-	103	100
Iraq	5	-	-	-	—	—
Niger	—	-	-	2	2	2
Nigeria	-	80	81	81	80	80
Romania	-	2	-	-	—	—
Total	6	83	81	83	187	184
Bilateral: Developed Countries						
Australia	-	-	-	250	257	253
Austria	5	23	31		38	40
Belgium	64	272	-	1.533**	450	500
Canada	-	309	-	535	609	700
IDRC/Canada	75	491	178	63	-	-
Denmark	-	-	4.933	2.934	2.863	1.900
Finland	-	-	72	96	125	125
. nce	-	-	-	-	227	225
Germany, Federal Republic of	-	-	-	333	1.168	1.100
Netherlands	100	400	1 000	1.000	955	1,000
Norway	71	109	456	966	1.090	1.110
Sweden	805	404	1 351	1,928	2,530	2.530
Switzerland	-	102	422	554	747	750
United Kingdom	-	133	470	992	1.232	1.934*
United States of America/USAID	-	-	25.	24	1.5	4.0
Total	1.120	2.243	8.838	11.323	13.791	16.157
GRAND TOTAL	1.455	3.243	10.345	14.348	18.081	20.064

* Includes final part of CY79 to be paid in CY80

** Includes 1977 contribution

4/7

Valora,

Copy of report after Dr. Evans made minor changes. I have sent copies to Dr. Baum + Dr. Weiss per IRE's instructions.

Rose Marie

Draft (3)
JREvans/AFonaroff:va
April 4, 1980

A PROPOSAL FOR WORLD BANK PARTICIPATION IN INTERNATIONAL HEALTH RESEARCH PROGRAMS

Summary

1. This paper recommends that the World Bank participate in the organization and funding of research programs designed to achieve two principal objectives: first, to develop and evaluate new methods to control major health problems which are widespread in developing countries; and second, to strengthen capabilities in these countries to adapt technology and implement programs to alleviate the problems.

2. The Special Programme for Research and Training in Tropical Diseases (TDR), cosponsored by UNDP, WHO and the Bank is an example of a large scale health research effort directed to six disabling diseases which are endemic in many developing countries. The program has made substantial progress towards both objectives during the first three years of operation. The Bank is a cosponsor of TDR and has participated actively in its development and it is now recommended that the Bank initiate financial support of the TDR in CY80 with a contribution of US$2.0M which is 10% of the anticipated donor support of the approved CY80 budget.

3. A second large scale health research program, the Control of Diarrheal Diseases (CDD), is in an advanced stage of preparation through UNDP/WHO/Bank collaboration. Financial and management support from the Bank will be required in CY81.

4. CDD could be incorporated into the existing management structure of TDR. Looking to the future, however, there is need for an umbrella mechanism under which TDR, CDD and other large scale health research programs are managed. The Bank should discuss with interested parties the establishment of a Joint Coordinating Board for Health Research responsible for the portfolio of global health research programs and consider bringing it into operation at the time CDD is added. The broader framework would provide a useful forum in which to evaluate competing claims for health research support.

5. Bank participation in large scale mission oriented health research programs directed to the control of disease and more effective methods of providing health services will contribute to the development of cost-effective primary health care for underserved populations in the developing world. The mechanism proposed will focus the attention of the international health and development community on the rational allocation and management of scarce resources to address health problems which limit social and economic progress.

I. Needs for Improved Technology in the Health Sector

6. The health status of the poor in developing countries may be improved through both the general process of social and economic development and the provision of basic health services. Because development proceeds at a slow rate and its benefits are inequitably distributed, the impact of the development process per se on health status of the poor is limited. Health improvements may be accelerated through access to basic health services that control commonly occurring diseases.

7. Two obstacles must be overcome in order to achieve direct improvements in health. First, a system must be established to bring currently available technology to those who have no access to health services. Second, safe, simple and inexpensive measures must be developed to prevent or treat serious common diseases such as malaria, schistosomiasis and onchocerciasis, for which current tools are

inadequate.

8. The Bank has initiated activities to eliminate the first obstacle by establishing direct lending to countries for health care delivery. However, there is a critical need for health services research to accelerate innovation and improve the effectiveness of health sector activities and to measure the operational impact on health status and economic productivity. Overcoming the second obstacle requires mobilization of the world's health science research community to focus attention on the major infectious and parasitic diseases of the developing world in order to discover appropriate technologies for their control.

9. The credibility of large-scale, long-term operations in which the Bank is involved is important in gaining the commitment and support of multilateral and bilateral donors as well as developing countries. Support over an extended period is required to stimualte promising lines of research at the stage of discovery in scientific laboratories throughout the world, to coordinate the succeeding stages of experimental and clinical trial leading to implementation and to strengthen in developing countries research capability to adapt technology and to implement programs to alleviate serious health problems.

10. Research on the major diseases endemic in developing countries has been neglected by the scientific community and the pharmaceutical industry. Investments in the search for drugs for tropical diseases has been limited by the high cost of drug development in relation to anticipated financial returns in developing countries. The overwhelming emphasis on biomedical research has been on cancer, cardiovascular disorders and the other major diseases of the industrialized world. The scientific techniques in immunology and molecular biology developed in the course of this research offer powerful new tools to be applied to the diseases of the developing world.

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12. Discovery of a new drug or vaccine and the steps leading to its ultimate use are normally carrried out by different scientific groups and involve a sequence of time-consuming activities: laboratory discovery; animal trial testing to confirm such factors as safety and efficacy; research to achieve product stability, predictable potency and low-cost production methods; and evaluation of cost-effective disease detection and delivery methods. Two elements could shorten this process by several years: (a) organization, coordination and management of a network of scientific groups whose individual projects are linked in successive stages to a goal-oriented plan; and (b) the regular and timely provision of necessary financial support. Success in any one program depends on maintaining the commitment of scientists and the support of donors over 10-15 years. An effective mechanism is needed to organize and manage the scientific network and financial resources. Bank participation in such a mechanism could perform the vital services of strengthening management, as well as attracting and sustaining the confidence and commitment of donors to high priority programs.

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16. Appropriate biomedical technology does exist to control measles, whooping cough, diptheria, tetanus and poliomyelitis These diseases, however, continue to be major causes of mortality and morbidity in developing countries because the majority of the population lack access to health services. It is estimated that only one-tenth of the 800,000,000 children at risk have been immunized.

17. The implementation of control measures such as vaccines, drugs or pesticides is dependent on effective systems of health services delivery. One of the most important areas of health research is concerned with the development, management and evaluation of health services to improve their effectiveness and efficiency. Strengthening of the capability for health services research is required in all developing countries.

II. TDR: A Model for Coordinating Donor Support

18. The Special Programme for Research and Training in Tropical Diseases (TDR) is a goal-oriented health research program to develop control measures for six major diseases and to strengthen research capability in the developing countries where the diseases are endemic. Supported jointly by contributions from multilateral and bilateral donors, and countries whose populations will directly benefit from results, TDR is now in its third year under WHO/UNDP/Bank cosponsorship. The financial resources made available through the TDR, and the research and administrative supports developed to manage this investment, have resulted in participation by leading scientists and institutions throughout the world. Though still in its early stages, TDR is internationally regarded not only by scientists, but by donors and LDC governments as the major research opportunity for developing new, improved and cost-effective controls for malaria, schistosomiasis, filariasis (including onchocerciasis), trypanosomiasis leprosy and leishmaniasis. Each disease constitutes a major public health problem for which there is no available control technology which can be implemented at a cost affordable by developing countries and which is simple enough to be delivered through the country's primary health care system.

19. TDR is organized as a network of research teams located in many different countries. The large number of widely dispersed research activities complicates management of the program but the network approach has been successful in stimulating leading biomedical and health scientists to reorient their research to the six tropical diseases. It has also strengthened research centers in developing countries by linkages with established institutions in the developed world. The large number of technical and advisory committees to guide the program appears administratively cumbersome but the breadth of scientific participation has been an asset in mobilizing the interest of research workers

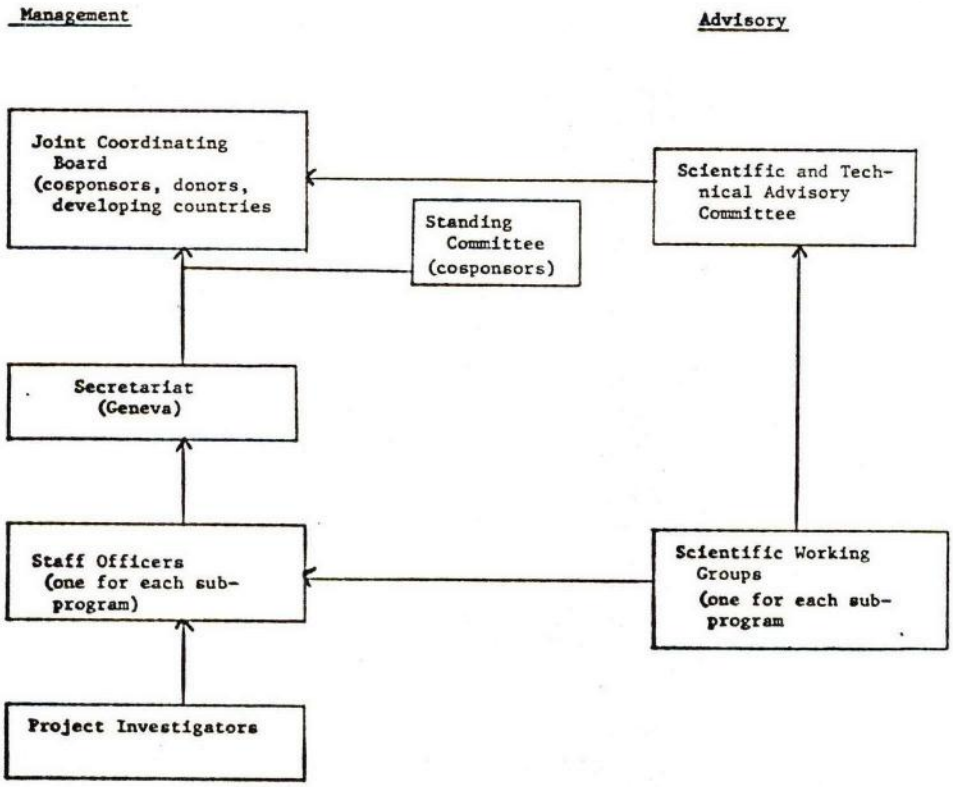
in the program and in achieving quality control.

Management and Technical Advisory Bodies

20. The technical and administrative structrues for the organization and mangement of TDR are described in a Memorandum of Understanding signed by the cosponsors and cooperating parties in 1978 (Fig. 1). WHO as Executing Agency, provides the TDR secretariat responsible for overall program management and for serving the advisory bodies. The Secretariat includes a Scientific Director, Program Manager and Staff Officers for each of the disease sub-programs. The staff officers are responsible for the administration of research grants to the project investigators according to a plan prepared by the advisory committee (Scientific Working Group) for that sub-program.

Figure 1

TDR MANAGEMENT AND ADVISORY BODIES



21. The Joint Coordinating Board (JCB) which meets annually in Geneva is responsible for approval of policies, priorities for the scientific program, budget and appointments. The meeting also serves as a pledging session for financial contributions. The JCB is composed of 30 members: 3 cosponsors; 12 respresentatives of governments selected by donors; 12 representatives of governments selected by WHO Regional Committees to represent countries where the six diseases occur, and 3 representatives of agencies selected by the JCB itself because of their activities in tropical diseasee research training.

22. The JCB is served by a Standing Committee composed of the three cosponsors of TDR and by a Scientific and Technical Advisory Committee (STAC). The Standing Committee meets three times each year to authorize actions by the Secretariat between meetings of the JCB and to prepare recommendations for the annual meeting of the JCB on the following matters:

i) priorities and budget based on substantive program review and advise STAC;

ii) appointments to the Secretariat and STAC;

iii) fiscal and program management matters such as cash flow/liquidity, internal audit and allocation of staff resources;

iv) terms of reference for quinquennial reviews of the performance of each sub-program.

23. The senior technical advisory body, STAC, is a multidisciplinary group of 15-18 distinguished scientists appointed by the JCB on the recommendation of the Standing Committee. STAC guides scientific planning, assesses priorities; and evaluates progress on an annual basis and arranges for regular indepth review of each of the sub-programs. Three reviews have already been completed and the total scientific program will be evaluated at five-year intervals.

24. In addition, each sub-program of TDR has an advisory body, the Scientific Working Group (SWG) ,which consists of senior scientists from the relevant disciplines appointed by the TDR secretariat. There are SWGs, one for each of the six diseases under investigation, four for areas that pertain to all the diseases (biomedical research, vector biology control, epidemiology and social and economic research), and one on strengthening of research institutions. Within the context of overall policy and priorities set by the JCB, each SWG defines research objectives, devises a strategic plan to achieve them; and monitors and revises both the plan and its priorities on a regular basis. The SWG arranges peer review groups to select proposals for funding on the basis of scientific merit and relevance to the strategic plan. SWG members may participate in project site visits and through their broad scientific contacts stimulate interest in research among investigators in developing countries.

25. A satisfactory administrative relationahip between TDR and WHO has been established. Technical, administrative and financial operations of TDR are handled separately from those of WHO for most mattters. Where interaction does exist, the interests of TDR have been effectively represented in the senior decision-making bodies of WHO by the Special Programme Coordinator who holds the rank of Assistant Director-General and serves as the WHO member of the Standing Committee. Some difficulties have arisen between WHO departments and TDR staff where departments have pressed to establish different priorities for a TDR sub-program. There has also been lack of clear definition in what circumstances TDR funds can be used by WHO back-up staff, as in the case of attending scientific meetings related to the six diseases. TDR/WHO staff relations are now under review by TDR senior management. Finally, WHO administrative procedures for recruitment have imposed some delays on appointments. These do not appear

to have handicapped progress, but do impose extra workloads on staff and can delay funding of projects. On the other hand there are advantages to the location of the TDR Secretariat in the lead international agency for health. TDR staff have close contact with the technical departments of WHO and benefit from the back-up of WHO field staff for liaison with research scientists in developing countries and for project site visits. In addition, through WHO, TDR has ready access to the highly qualified technical specialists of the international health science community and to the health research institutions of WHO member countries.

Progress

26. TDR is meeting standards established by STAC and expectations of the cosponsors and the JCB. Approximately half of TDR resources are spent in developing countries on research, training of personnel and strengthening of research institutions. The scope of activity includes not only biomedical, but environmental, epidemiologic, socio-economic and health services research. Highly qualified scientists from leading institutions in the industrialized world have turned their attention from the health problems of affluent societies to participate in research directed toward the six neglected diseases. In addition, the US National Institutes of Health, the Rockefeller Foundation and the Wellcome Trust have been stimulated to increase their annual appropriations to tropical diseases research, thereby accelerating and broadening the scientific knowledge base for the control of tropical diseases.

27. Since the inception of TDR, 600 projects have been funded in 66 countries. In 1979, almost half of these projects represented new efforts, demonstrating the rapid rate of program development. More significant, however, is that while the program is now only in its third year, new technology has been developed for five of the six diseases under investigation. There are extremely promising leads for vaccines against malaria and leprosy; improved drug therapy for schistosomiasis;

drug screening for more effective compounds to treat onchocerciasis; and a more accurate diagnostic test for detecting and treating trypanosomiasis.

28. It is unlikely that necessary resources to produce these results would have been available without the TDR stimuli. Though complex, the administration and management of the global network appears to be working well. The WHO Advisory Committee on Medical Research has cited the progressive scientific achievements of TDR as an example of outstanding research management; it has also commended the balance between activities in basic research and those in the strengthening of research institutions. It regards TDR as a model for other WHO extrabudgetary efforts.

29. Donor response confirms these assessments. TDR financial resources have grown from about US$3.2M in 1976 to over US$20.0M in CY80. TDR is being supported by two of its three cosponsors, one development bank, three foundations and 18 bilateral donors including four LDCs 1/. While financial contributions from developing countries are modest, allocation of their scarce resources to TDR is indicative of the value attributed to potential gains. The JCB approved a five-year budget forecast recommended by the Standing Committee. The CY80 budget was approved at US$26.6M with annual budgets not exceeding US$35.0M (CY80 dollars) thereafter. Recognizing that donors will be approached to support activities in additon to TDR, concern is being expressed about sustaining the level of support required as the program enters the expensive stages of clinical trial and evaluation of new discoveries.

Role of the Bank

30. The Bank was invited to become a cosponsor in order to establish and provide fiscal management of a Tropical Diseases Research Fund in which most of

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1/ See Attachment 1

the TDR contributions are deposited.1/ The Bank presence was felt necessary to increase donor confidence in effective program management and administration.

31. The Bank also influences program management through participation in the Standing Committee and the JCB. It initiated a proposal for internal audit of projects and analyzed liquidity issues affecting cash flow. The Bank's representative to these bodies exercises independent judgements through staff assistance of a Public Health Officer responsible for (a) liaison with pertinent Bank departments, cosponsors and cooperating parties; (b) review and analysis of program documentation; (c) representation of UNDP/Bank cosponsorship as an observer to the STAC annual program review, and (d) preparation of documents relating to the Bank's managerial role.

32. The Bank accepted cosponsorship because the potential contributions of the program are central to the Bank's overall objectives. The Bank was encouraged to become a cosponsor because some major donors were reluctant to participate unless the Bank became fiscal agent. The Bank itself conditioned participation on its recommendations for strengthening research management and clarifying administrative relationships between TDR and WHO. The arrangements for technical and administrative structures were subsequently accepted by WHO and are encorporated in the Memorandum of Understanding between cooperative parties.

33. The Bank has been requested twice to make a financial contribution to the TDR. The first request was made by the JCB in 1978 and was deferred pending review of Bank policy on allocation from the Bank's net annual income. At its 1979 meeting, the JCB repeated its request. In view of TDR progress, the Bank should now provide financial support to the program. TDR potential is high for delivery of products which have important implications for Bank lending, particularly through

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1/ Some governments are unable for political reasons to contribute funds through the Bank and therefore WHO also administers a trust fund to receive these funds. However over 65% of 1979 contributions were deposited to the Bank-administered fun

improved vector control in water and irrigation projects and for vaccines and drugs in primary health care. In a broader context, reduction of infectious diseases and parasitic infestations will increase worker productivity, educability of students, general health status and logevity. Future progress of TDR could be impeded if the Bank does not provide financial support. Several major donors will interpret lack of Bank support as indicating doubts on TDR potential to meet its goals and this could seriously erode the amount of financial resources for TDR.

34. It is recommended that the Bank's financial contribution be fixed at 10% of the projected budget support of all TDR donors. On this basis, the Bank's contribution would be approximately US$2.0M in CY80 and can be expected to approximate US$3.5M per annum in CY80 dollars at periods of maximum expenditure. Continuation of the Bank's annual support would be reviewed each year on the basis of the program's technical achievements and prospects for future development.

III. Recommendations for Establishing a Joint Coordinating Board for Health Research (JCBHR)

35. The Joint Coordinating Board for TDR was established as a forum to enable donors to adopt a programmatic approach to the control of six major diseases rather than supporting isolated health research projects. The mechanism seems to be working sufficiently well to consider its application to other priority programs. Since the Bank was instrumental in formulating the management structure of TDR, it will be approached in the launching of similar large-scale health research programs.

36. The second program would be the WHO expanded effort for diarrheal diseases control (CDD). Diarrheal diseases are the leading causes of death in infancy and early childhood throughout the developing world. There are now encouraging leads in the development of vaccines against two common bacterial and viral causes of acute diarrhoea and in the use of simple oral rehydration techniques

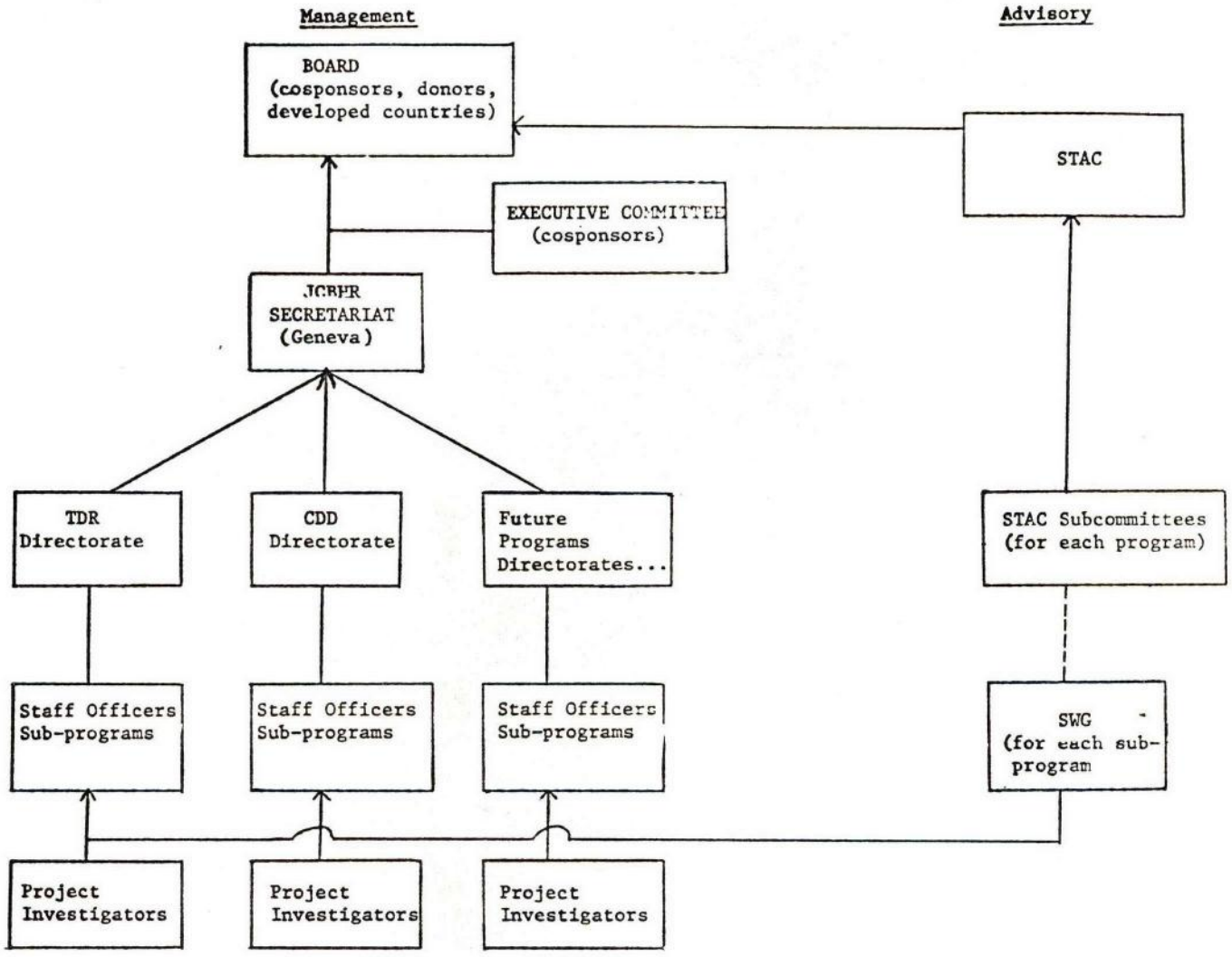
which could reduce mortality by 30% and the better understanding of the educational methods of influence health behavior. WHO/UNDP/Bank collaboration resulted in a five-year US$5M UNDP grant to WHO to initiate a global research program for vaccine and drug development in 1979. WHO is seeking continued UNDP/Bank collaboration and it is expected that the Bank will be asked to serve as cosponsor of CDD and to contribute financially in CY81.

37. It has been suggested that the JCB for TDR also serve as the coordinating authority for the organization, management and financing of CDD. Looking to the future, however, other large-scale health research programs may be expected to emerge, for example, health services research to improve the planning and management of the process of developing health care. CDD could be encorporated into the existing management structure for TDR but it would be preferable to consider an umbrella mechanism under which the TDR, CDD and other new health research programs might be effectively managed. It is propsoed, therefore, that the Bank explore with interested parties the establishment of a Joint Coordinating Board for Health Research responsible for the portfolio of large-scale health programs with a view to bringing it into operation at the time CDD is added.

38. The purposes, composition and mode of operation of the JCBHR would follow the model established for the JCB of the TDR program. A proposed structure is illustrated in Fig. 2. Its principal functions would be to approve policies and programs, determine appropriate level of overall investment and allocate available resources to programs in relation to priorities established by the JCBHR. The JCBHR would be advised by one STAC with subcommittees of STAC for each of the component programs. The staff directing each program would be responsible to the JCBHR Secretariat which could be strengthened to provide more effective management and at the same time achieve some economies through sharing of administrative and technical services.

Figure 2

PROPOSED JCBHR MANAGEMENT AND ADVISORY BODIES



39. The Bank as a cosponsor would serve on the JCBHR Executive Committee with the same responsibilities as it has as a member of the TDR Standing Committee. In order to discharge these responsibilities effectively and exercise independent judgement on the functioning of the system, the Bank's representation should be supported by a staff of two individuals experienced in research management and the health sciences who would prepare technical, administrative and financial assessments of the programs. The Bank would also establish and administer a JCBHR Trust Fund 1/ for the pooling of funds annually allocated to programs.

40. The proposal that the Bank establish and cosponsor a JCBHR would imply financial contribution for programs accepted in the system. However, through

1/ This fund would dissolve and replace the TDR Trust Fund.

membership in the JCB and the Executive Committee, the Bank could play an important role in ensuring that only strong programs consistent with the above criteria are accepted by the JCBHR.

Advantages of Bank Participation

41. The Bank's presence is considered important to attract funds from donors and to assure their proper management. As development institutions, the Bank along with UNDP increase donor confidence that criteria for program selection are directed toward diseases control that will accelerate social and economic progress in developing countries.

42. The Bank's involvement in the JCBHR would strengthen the system's potential in several important ways:

i) the Bank is more independent of political interference than most UN agencies and, therefore, is in a much stronger position to ensure that expert, independent scientific advice is obtained and used for scientific management decisions;

ii) the Bank's reputation for careful analysis, efficient organization and sound financial management lends credibility to programs within the development community;

iii) the Bank's economic perspective and broad multisectoral approach to development should reduce the danger of programs falling into narrow compartments corresponding to the sector responsibility of one technical agency;

iv) the Bank has the capacity to introduce new approaches and to adapt them to changing circumstances, thus providing more effective and flexible leadership than most UN agencies.

43. In participating in the JCBHR, the Bank should recognize that it is embarking on a long-term effort requiring continual support. The level of investment would be determined annually, with funds allocated from the Bank's annual net

income and on approval of the Bank's Executive Directors. The benefits to be derived from this form of investment in the health sector would include:

i) reinforcement of the Bank's activities in meeting basic needs of the poorest populations of the developing world through support of health research in currently neglected areas that would produce new and appropriate technology critical to the success of Bank operational interventions to provide cost-effective health services;

ii) reinforcement of the Bank active collaboration with WHO, UNDP and other UN agencies, bilateral donors and the developing countries toward integrating health activities more closely into overall development activities as a means of accelerating social and economic progress in the developing world.

CONTRIBUTIONS TO THE SPECIAL PROGRAMME FOR RESEARCH AND TRAINING IN TROPICAL DISEASES AS AT 30 DECEMBER, 1979

(EXPRESSED IN US$ 1000)

Contributor	1973-1975	1976	1977	1978	1979	Pledges 1980
Multinational						
United Nations Development Programme (UNDP)	-	50	50	969	1 787	1 948
World Health Organization (WHO)	175	331	903	1 50	1 592	1 050
Total	175	381	953	2.470	3.379	2.998
nks						
African Development Bank	-	-	-	-	250	250
Total	-	-	-	-	250	250
Foundations						
International Federation of Anti-Leprosy Associations	78	36	63	62	67	65
Japan Shipbuilding Industry Foundation	51	500	400	400	400	400
Lepers' Trust Board, New Zealand	-	-		10	7	10
WellcomeTrust, United Kingdom	25	-	-	-	—	—
Total	154	536	473	472	474	475

Contributor	1973-1975	1976	1977	1978	1979	Pledges 1980
Bilateral: Developing Countries						
Bahamas	.5	0.5	-	-	—	—
Cuba	—	—	—	—	2	2
Cyprus	-	-	0.2	-		
India	-	-	-	-	103	100
Iraq	5	-	-	-	—	—
Niger	—	-	-	2	2	2
Nigeria	-	80	81	81	80	80
Romania	-	2	-	-	—	—
Total	6	83	81	83	187	184
lateral: Developed Countries						
Australia	-	-	-	260	257	253
Austria	5	23	31		38	40
Belgium	64	272	-	1.533**	450	500
Canada	-	309	-	535	609	700
IDRC/Canada	75	491	178	63	-	-
Denmark	-	-	4.933	2.934	2.863	1.900
Finland	-	-	72	96	125	125
France	-	-	-	-	227	225
Germany, Federal Republic of	-	-	-	333	1.168	1.100
Netherlands	100	400	1 000	1.000	955	1,000
Norway	71	109	456	966	1.090	1.110
Sweden	805	404	1 351	1,928	2,530	2.530
Switzerland	-	102	422	554	747	750
United Kingdom	-	133	470	992	1.232	1.934*
United States of America/USAID	-	-	25.	24	1.5	4.0
Total	1.120	2.243	8.838	11.323	13.791	16.157
GRAND TOTAL	1.455	3.243	10.345	14.348	18.081	20.064

* Includes final part of CY79 to be paid in CY80

** Includes 1977 contribution

Mr. Warren C. Baum, CPSVP

March 24, 1980

John R. Evans, PHN

Proposal to Establish Bank Participation in Global Health Research Programs

1. Attached for your comments is a revision of the March 10 draft on the proposal that the Bank encourage the establishment of a health research and development group. We have tried to respond to the basic questions you raised on why it is desirable to propose establishment of an umbrella mechanism now, what an appropriate structure would look like, and how boundaries are drawn between basic technical and managerial responsibilities for research programs.

2. We have dropped the "HRDG" label and replaced it with a Joint Coordinating Board for Health REsearch (JCBHR), and distinguished between the structure and functional relationships of technical management and advisory bodies in the JCBHR (see page 18). Because WHO will remain as Executing Agency for most if not all programs, we have placed a JCBHR Secretariat in Geneva for implementation and coordination among programs. The experience with TDR leads us to believe that this arrangement will work with little or no interference from WHO's general modes of operation.

3. We project implementation of the JCBHR in CY82. To facilitate negotiations, we recommend that the concept be presented for approval in principle at this year's December meeting of the TDR/JCB. This would require prior agreement by the Bank, WHO and UNDP cosponsors to the arrangements proposed.

4. The progress made by TDR merits its inclusion as the first program when the JCBHR is implemented. In recommending Bank support to establish the JCBHR, the Bank should also commit itself to financial support of the TDR at the December 1980 JCB meeting. As we discussed, it would be difficult for the Bank to avoid taking a decision on the JCB requests for financial support. It is recommended therefore that the Bank provide a financial contribution in CY80. The proposed level of support is US$2M, approximately 10% of donor contributions in support of the CY80 budget.

Attachment

AFonaroff/JREvans:va

Distribution = Mr. H. G. van der Tak, PAS
Dr. Kanagaratnam, PHN
Mr. C. Weiss, PAS

Draft (2)
AFonaroff/JREvans:va
March 24, 1980

A PROPOSAL TO ESTABLISH WORLD BANK PARTICIPATION IN GLOBAL HEALTH RESEARCH PROGRAMS

Summary

1. This paper recommends that the World Bank encourage the establishment of a Joint Coordinating Board for Health Research (JCBHR) to mobilize global scientific and financial resources for discovery and evaluation of new measures to control the major diseases of developing countries; and to strengthen research capabilities in countries where these diseases occur. The JCBHR would be established as a single system, composed of cosponsors, donors and countries affected by the diseases, and would be responsible for the identification, organization, management and financing of a selected number of global programs that meet the above objectives. Separate administrative units and expert advisory groups would be maintained for individual programs.

2. The concept of the JCBHR expands the JCB mechanism successfully applied in the WHO/UNDP/Bank cosponsored Special Programme for Research and Training in Tropical Diseases (TDR); and under consideration for a second program for the control of diarrheal diseases (CDD).

The JCB mechanism will function well for these two programs. However, as the portfolio of special global health research programs increases, more rigorous technical and advisory controls will be needed, particularly in establishing priorities and resource allocations among programs. It is therefore proposed that the JCBHR be accepted in principle in CY80, for implementation CY82, to include TDR and CDD (in CY81) and such

other global health research programs as are subsequently approved.

3. It is proposed that the Bank, WHO and UNDP act as cosponsors of the JCBHR. The Bank's cosponsorship would include (a) participation in the JCBHR and its Executive Committee; (b) establishment and administration of a Trust Fund to which donors would contribute; and (c) contribution annually to the Fund. Annual apportionment among JCBHR programs would be based on past-year achievements and progress forecasted. Bank financing could be derived as it is for grants to CGIAR and OCP, from the allocation of the annual net income and on approval by the Bank's Executive Directors.

4. It is recommended that the Bank initiate financial support to the JCBHR with a contribution to the TDR in CY80 in the amount of US$2.0M, which is 10% of the anticipated donor support of the approved CY80 budget. It is expected that the Diarrheal Diseases Control Program, in which the Bank/WHO/UNDP have been collaborating, would be reviewed for support as the second program in CY81.

5. The formation of the JCBHR would represent a marked change in the philosophy toward health research support by directing attention of the international health and development community to the rational allocation and management of scarce resources for priority disease control programs that affect social and economic progress. It would reinforce the active collaboration among UN specialized agencies, bilateral and other donors and developing countries in increasing cost-effectiveness of primary health care as a means to upgrad poverty conditions in the developing world. The JCBHR is also a tangible mechanism through which the Bank can extend its own efforts to meet basic needs beyond customary lending operations.

I. Needs for Improved Technology in the Health Sector

6. The health status of the poor in developing countries may be improved both through the general process of social and economic development and through the provision of basic health services. Because development proceeds at a slow rate and its benefits are inequitably distributed, the impact of the development process per se on health status is limited. Improvements in health may be accelerated through basic health care that controls commonly occurring diseases.

7. Two obstacles must be overcome in order to achieve direct improvements in health. First, a system must be established to bring currently available technology to those who have no access to health services. Second, safe, simple and inexpensive measures must be developed to prevent or treat serious common diseases such as malaria, schistosomiasis and onchocerciasis, for which there are currently no effective control technologies. The Bank has initiated activities to eliminate the first obstacle by establishing direct lending to countries for health care delivery. Overcoming the second obstacle however requires the mobilization of scientific and financial resources at the global level toward discovery of appropriate technology to control major infectious and parasitic diseases.

8. The Bank's leadership can stimulate such an effort. As the major development lending institution, multilateral and bilateral donors as well as developing countries attach considerable credibility to the large-scale, long-term operations in which the Bank is involved. This level of credibility is crucial in gaining the long-term support and commitment for health research that require mechanisms:

i) to stimulate, coordinate and finance promising research from early stages of discovery through to trials that assure effective implementation; and

ii) to stimulate and increase country-level skills in research and management of control programs in countries where the diseases are endemic.

Such efforts should draw on the scientific resources of institutions in both the public and private sectors throughout the world.

9. The common causes of mortality and serious morbidity in developing countries include diseases which are rare in the developed world. Public and private funding of research on diseases prevalent in developing countries has been very limited, resulting in neglect by scientists in academic institutions and the pharmaceutical industry. The pharmaceutical industry, for example, has limited its research investments on drugs to control tropical diseases because of the high cost of such drug development in relation to financial returns in developing countries. The focus of biomedical and other research on the control of cardiovascular diseases, cancer and other major causes of death in the industrialized world, has produced recent advances in immunology, molecular pharmacology, epidemiology and social and behavioral sciences. These have broad applicability to the control of major diseases in the developing world that have not been fully exploited.

10. Some steps, however, have been taken in this direction. Under the leadership of WHO, UNDP and the Bank, the scientific and donor communities, and developing countries themselves, several major goal-oriented joint programs have been launched. The Onchocerciasis Control Program (OCP) is an action-oriented regional program focused on the control of the black fly vector in the Volta River watershed. OCP requires financial resources well beyond the means of the countries affected, and control techniques which must be applied across national borders. The Special Programme for Research and Training in Tropical Diseases (TDR) and the Diarrheal Diseases Control Programme (CDD) are basic

research efforts designed to produce simple, low-cost, vaccines, drugs, pesticides and other new methods of disease control; and to strengthen research capabilities in the countries where the diseases are endemic.

11. Discovery of a new drug or vaccine and the steps leading to use are normally carried out by different scientific groups and involve a sequence of time-consuming activities: laboratory discovery; animal trial testing to confirm such factors as safety and efficacy; research to achieve product stability, predictable potency and low-cost production methods; and evaluation of cost-effective disease detection methods and modes of their delivery. Two elements could shorten this process by several years: (a) skillful organization of a network of groups to coordinate the successive stages of work; and (b) the regular and timely provision of necessary financial support. Success is dependent on maintaining the commitment of scientists and support of donors over 10-15 years. An effective mechanism is needed to organize and manage the scientific network and financial resources. Bank participation in a consortium of scientists and donors could perform the vital services of strengthening management, as well as attracting and sustaining the confidence and commitment of donors to high priority programs.

12. The Bank should promote programs that aim to control diseases that significantly impede economic and social progress in developing countries, particularly in research areas that are not receiving adequate attention from the scientific community. The Bank should stress efforts to accelerate the discovery of simple, cost-effective interventions for use in its lending programs of basic health services.

13. Investments in health research programs are modest compared to the costs associated with technologies currently used to control certain infectious

and parasitic diseases. Over a billion people in the developing countries suffer from poor health attributed to tropical diseases. Some tropical diseases once under control, such as malaria, are in resurgence. Others, such as schistosomiasis, are spreading as a result of irrigation, hydroelectric power and other economic development activities. Present control technology is difficult, complex and costly. For example, Bank projects in Upper/Egypt, and Middle Giza and West Nubariya for schistosomiasis control reach only approximately one-third of Egypt's population. Between 1973-79, the total component cost was US$28.7M, of which Bank financing totaled US$21.9M. 85% of the investment was in molluscicides for vector control, with the remainder in chemotherapy. In the absence of more cost-effective alternative technologies, annual recurrent costs could amount to approximately US$18M.

14. Between 1971-79, 43% of health component expenditures by the Bank were devoted to vector control, chiefly for malaria and schistosomiasis. This amounted to US$145M, almost 58% of the total expended for health components; recurrent costs during this period were US$14M. These are necessary, but interim steps awaiting future technology that will more effectively prevent and treat vector borne diseases. Presently, where such diseases are endemic, human productivity is reduced; and during epidemics, entire workforces may be disabled. The high risk of contracting malaria, schistosomiasis, trypanosomiasis and onchocerciasis in Africa, Asia and the Amazon region of South America affects population distribution and patterns of human settlement. Animal husbandry and other economic ventures are similarly affected. In Africa alone, the tstse fly, the trypanosomiasis vector, infests over 10M square km of land which, if cleared, could provide a potential cattle population of 125M.

15. To alleviate such problems, the Bank as part of its program to develop primary health care, should give high priority to the support of research aimed at producing simple, effective and inexpensive technology that will protect

populations in developing countries against the principal causes of mortality and morbidity. Appropriate biomedical technology exists for those major infectious diseases such as measles, smallpox and influenza which seriously affect populations in both the developed and developing world. However, there remain technological gaps to control other major infectious disorders and parasitic diseases that are prevalent in the tropics. These problems contribute to high infant mortality rates throughout the developed world and constrain progress in population control. Improved methods to control fertility and to curb malnutrition are also needed to enhance longevity and quality of life.

II. TDR: A Proven Model for Coordinating Donor Inputs

16. The Special Programme for Research and Training in Tropical Diseases (TDR) provides an excellent example of a goal-oriented global effort designed to meet the needs described. Supported jointly by contributions from major multilateral and bilateral donors, including countries whose populations will directly benefit from results, TDR is now in its third year under WHO/UNDP/Bank cosponsorship. It is acknowledged by scientists, donors and developing countries as the leading research force (a) in developing new, improved and cost-effective products and techniques for the control of six major diseases: leprosy, malaria, schistosomiasis, filariasis (including onchocerciasis), trypanosomiasis and leishmaniasis; and (b) in strengthening research and management capability in developing countries for essential tasks of testing, evaluating and delivering new disease control technologies.

17. Two mechanisms were considered to implement TDR. One was to apply the CGIAR model and establish a select number of centers of excellence to develop new products and techniques for technology transfer. The other was to organize a global network of existing laboratories with sophisticated biomedical expertise in industrialized countries and clinical and research facilities in

countries affected by the diseases. For the following reasons a decentralized global network was selected:

(i) Necessity to stimulate the acceleration of basic discovery in tropical diseases control was unlike the situation when CGIAR was established Significant strides in basic agricultural research permitted centralized foci for applied research to improve the quantity and quality of food production in developing countries. TDR, however, needed to stimulate large numbers of leading basic biomedical scientists to continue basic research in their laboratories with re-emphasis on tropical diseases; and to expedite results of research formulations through linkages with other experts in the public and private sectors for the next stages of evaluation and testing.

ii) Cost-effectiveness in fundamental biomedical research is more likely achieved by drawing on leading scientific teams in immunology, pharmacology and molecular biology in the manner noted above than by starting de novo to assemble new center(s). The network approach also overcomes the costly time constraint of identifying and obtaining sites in endemic areas for clinical evaluation of promising drug compounds. Pharmaceutical companies involved in formulating new schistosomidal drugs, for example, must have collaborative arrangements with multi-center research institutions in the developing world in order to undertake well-designed clinical trials. Linkages between developing country institutions and more developed research centers (e.g. staff exchange and secondment, joint research and training projects) also increases developing country research capabilities for the control of major diseases now and in the future.

iii) Variability in ecological conditions requires that certain phases of research be conducted at country level, as is the case in other situations of technology transfer. Country and regional scientists and

institutions must be involved in defining local problems, identifying environmental and behavioral determinants, developing specifications of new techniques and participating in their trials, and developing appropriate methods for technology transfer.

Technical and Administrative Management

18. The extent to which TDR short and long-range goals are achieved depends not only on the quality of scientists but on the effectiveness of management. A 1978 Memorandum of Understanding on Technical and Administrative Structures agreed upon by cosponsors and cooperating parties defines the organizational/management system to assure global scientific and technical progress. TDR has two separate but related systems, one for technical management performed by a secretariat appointed by WHO, and the other composed of monitoring/advisory bodies at each management level.

19. Program and Project Management: WHO, as Executing Agency, provides a TDR Secretariat in Geneva that is responsible for program implementation. The Secretariat serves all advisory bodies described below. Individual projects in research and institutional strengthening are reviewed and managed by full-time Technical Staff Officers.

20. The relationship between TDR and WHO has been satisfactory. TDR technical, administrative and financial operations are handled separately from those of WHO for most matters. WHO administrative procedures for recruitment do impose some delays on appointments. The TDR Secretariat does receive the benefit of technical back-up support from WHO staff, as for example in site visits to review projects and to identify capable research scientists in developing countries.

21. The senior body to which management reports is the Joint Coordinating Board (JCB). Its membership of 30 includes the cosponsors; representatives of governments financially contributing to the program, governments reflecting interests of countries where the six diseases occur, and agencies selected by the JCB because of their activities in tropical diseases research and training. It meets annually in Geneva to decide upon program budget, program balance, major staff and advisory appointments, and to pledge its continued support.

22. The JCB is served by a Standing Committee composed of the three cosponsors. It meets three times yearly to review progress and to undertake specific functions on behalf of the JCB. The Standing Committee is hosted by the cosponsors in rotation, the host cosponsor acting as chair. Responsibilities include preparation of annual recommendations to the JCB on (a) program and budget based on substantive review by the STAC; (b) major appointments, such as the Programme Coordinator and STAC members; (c) fiscal and program management issues such as internal audit, cash flow/liquidity; allocation of staff resources; and (d) preparation of terms of reference for the Programme's five-year performance review. WHO provides the Secretariat for the Standing Committee and also handles fund-raising. The Bank administers a TDR Trust Fund.

23. Advisory Structure: Expert senior scientists both from within and outside the TDR network are drawn from relevant disciplines and are appointed by the TDR Secretariat to serve as advisors to the technical staff. These advisors are organized into Scientific Working Groups (SWGs), one for each of the six diseases under investigation, four for areas that pertain to all the diseases (biomedical research, vector biology control, epidemiology and social and economic research), and one on strengthening of research institutions.

SWGs define research objectives, devise a strategic plan to achieve them, monitor and revise both the plan and research findings as work progresses. Individual projects are submitted by the Technical Staff Officer for scientific evaluation by a small group elected by the SWG on recommendation from the Secretariat. Individual research projects so submitted are evaluated for relevance to goals, objectives and strategies of the network plan and for scientific method and merit. Great reliance is placed on peer group assessment in the review of TDR mission-oriented research.

24. The total program is evaluated on a yearly basis by a Scientific and Technical Advisory Committee (STAC), a multidisciplinary body of 15 - 18 internationally distinguished scientists which is advisory to the TDR Secretariat. STAC also performs in-depth program reviews of the SWGs. Three reviews have already been completed and the total scientific program will be evaluated at five-year intervals. STAC members are appointed by the JCB on the recommendation of its advisory Standing Committee. Nominations are made by the TDR Secretariat and the cosponsors.

Progress

25. TDR is meeting standards established by STAC and expectations of the cosponsors and the JCB. Approximately half of TDR resources are spent in developing countries on research, training of personnel and strengthening of research institutions. The scope of activity includes biomedical, environmental, epidemiologic, socio-economic and health services research. Highly qualified scientists from leading institutions in the industrialized world have turned their attention from the health problems of affluent societies to participate in research directed toward these neglected diseases. In addition, NIH, the Rockefeller Foundation and the Wellcome Trust have been stimulated to increase their annual appropriations to tropical diseases research, thereby accelerating

and broadening the scientific knowledge base for the control of tropical diseases.

26. Since its inception, 600 projects have been funded in 66 countries. In 1979, almost half of these projects represent new efforts, demonstrating the rapid rate of program development. More significant, however, is the steady progress of technical activities. New technology has been developed for five of the six diseases under investigation: extremely promising leads for vaccines against malaria and leprosy; improved drug therapy for schistosomiasis; drug screening to discover more effective compounds for treating onchocerciasis; and a detection method for more accurate diagnosis and treatment of trypanosomiasis.

27. It is unlikely that necessary resources to produce these results would have been available without the presence of the Special Programme. The administration and management of the global network is effective. The WHO Advisory Committee on Medical Research has cited the scientific achievements of TDR as an example of outstanding research management, and has commended the balance between basic research and the strengthening of research institutions. It regards TDR as a model for other WHO extrabudgetary efforts.

28. Reflecting these assessments, TDR financial resources have grown from about US$3.2M in 1976 to over US$20.0M in CY80, TDR is being supported by two of its three multinational cosponsors, one development bank, three foundations and 18 bilateral donors including four LDCs.[1/] While financial contributions from developing countries are modest, allocation of their scarce resources to TDR is indicative of the value attributed to potential gains. On the

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1/ See Attachment 1

recommendation of the Standing Committee, the JCB approved a Standing Committee, recommendation for a five-year budget forecast. The CY80 budget was approved at US$26.6M with the expectation that annual budgets would not exceed US$35.0M (1980 dollars) in periods of maximum spending. Recognizing that donor interest tends to shift over time, concern is being expressed about sustaining the level of support required as the program enters the expensive stages of clinical trial and evaluation of new discoveries.

Role of the Bank

29. The Bank was invited to become a cosponsor in order to increase donor confidence in effective program management and administration and to establish and provide fiscal management of a Tropical Diseases Research Fund to which the majority of TDR contributions are deposited. There are, however, some governments who are unable for political reasons to contribute their funds through the Bank and who deposit their contributions to a WHO administered trust fund. In 1979, over 65 percent of contributions were deposited to the Bank-administered fund.

30. In addition to its role as fiscal agent, the Bank influences program management through participation in the Standing Committee and the JCB. It initiated a proposal for internal audit of projects and analyzed liquidity issues affecting cash flow. The Bank also provides a Public Health Staff Officer for (a) ongoing management liaison with pertinent Bank departments, cosponsors and cooperating parties; (b) review and analysis of technical and administrative program documentation; (c) representation of UNDP/Bank cosponsorship as an observer to the STAC annual program review, and (d) preparation of documents relating to the Bank's managerial role.

31. The Bank accepted cosponsorship because the potential products of TDR are central to the Bank's mission of improving opportunities for better health and progress in countries affeeted by the diseases. There was reluctance on the part of some major donors to participate in the program unless the Bank became fiscal agent, and the Bank itself conditioned participation on its recommendations for strengthening of technical and administrative relationships between the TDR and WHO. These arrangements were subsequently accepted by WHO and are reflected in the system presented.

32. The Bank has been requested twice to make a financial contribution to the TDR. The first request was made by the JCB in 1978 and was deferred pending review of Bank policy on allocation from the Bank's net annual income. At its 1979 meeting, the JCB repeated its request. In view of TDR progress to date, the Bank should provide financial support to TDR. TDR potential is high for delivery of products essential to Bank lending operations, particularly for vector control in water and irrigation projects; and for vaccines and drugs in primary health care. These outcomes extend beyond sector-specific benefits to general improvements in social and economic development in that reduction of parasitic infection will likely increase worker productivity, general health status and longevity.

33. The recommended level of Bank financial contribution to TDR in CY80 is 10% of the projected budget support of TDR donors. The Bank's contribution would be approximately US$2.0M in CY80 and can be expected to require up to approximately US$3.5M per annum in CY80 dollars at periods of maximum expenditure. Recommendations on the Bank's level of annual support would be based on the program's technical achievements and prospects for short, medium and long-term outcomes.

34. It is also recommended that the Bank consider the support of TDR within the technical and administrative framework for health research described below.

III. Recommendations for Establishing a Joint Coordinating Board for Health Research (JCBHR)

35. The World Bank should join with WHO and UNDP to cosponsor an umbrella mechanism for health research. The formation of a Joint Coordinating Board for Health Research (JCBHR) would represent a departure from the current philosophy toward investment in health research. It would direct attention of the international health and development communities toward the rational allocation of scarce resources among priority goal-oriented programs designed to provide appropriate technology for control of diseases influencing social and economic progress in developing countries. Membership would include the proposed cosponsors and representatives of donors and countries affected by outcomes of sponsored programs.

36. Such a change is necessary. Until TDR was established, WHO had limited success in stimulating broad support of global health research programs. As the technical lead agency in health, WHO has been the primary force in identifying health conditions that require such attention. Since the TDR mechanism has proven successful in mobilizing resources, donors have been presented by WHO with a large number of programs for extrabudgetary funding. WHO can and should provide this stimulus, but donors have critized WHO for not establishing priorities among operational and basic research activities and for not providing sufficient information on administrative and management support systems. In the case of TDR, Bank and UNDP involvement was a critical factor in establishing credibility for donors of the priority for long term investment in tropical diseases research and of the proposed technical and administrative structures to deliver potential products.

37. The JCB established for TDR could accommodate a second program such as the new global program on diarrheal diseases control (CDD). However, the potential portfolio of special global health research programs will increase; and more rigorous technical and management controls will become

necessary, particularly in establishing priorities and resource allocations among programs. The proposed JCBHR offers the following advantages for coping with this situation:

i) It provides a forum for decisions on resources allocations among programs. The same donors will likely be called on for financial support of different disease-control programs. Donors are more willing to provide both top-level representation and greater level of commitment when their responsibilities are focused toward establishing direction for a variety of supported programs;

ii) It increases cost-effectiveness through sharing of common administrative services and scientific resources;

iii) It increases donor confidence that management capability exists for early identification and intervention in the inevitable problems that may occur in long-term research programs;

iv) It facilitates implementation of new global programs based on experience with TDR and CDD.

Technical and Administrative Management

38. The separate technical management and advisory structures established for TDR provide a prototype for the proposed JCBHR. Each program accepted into the system would, like TDR, function according to legal terms of agreement between cosponsors and cooperating parties contained in a Memorandum of Understanding on Technical and Administrative Structures. Proposed alterations in structure and functions of the JCBHR are presented on the following page.

39. Management Structure: As in TDR, the senior body to which management reports would be the Board. Membership criteria would continue as in TDR. In addition to assuming all current functions as in TDR, the Board would assume

the added responsibilities of identifying priority research to include in the system and allocating financial and manpower resources among sponsored programs. It would meet annually at the headquarters of any of its cosponsors to review and decide upon the planning and execution of programs. For this purpose it will be advised of all aspects of program developments and consider reports and recommendations submitted by its Executive Committee and the Bank. Categories of review and action will include:

i) proposed annual plans of action and budgets for the coming financial period;

ii) financial statements, as well as the audit reports thereon, and allocation of financial resources within and among programs;

iii) major appointments to management and advisory bodies (e.g., JCBHR Secretariat, Program Directorate, STAC);

iv) proposed longer-term plans of action, their financial implications and a rolling five-year plan of operation;

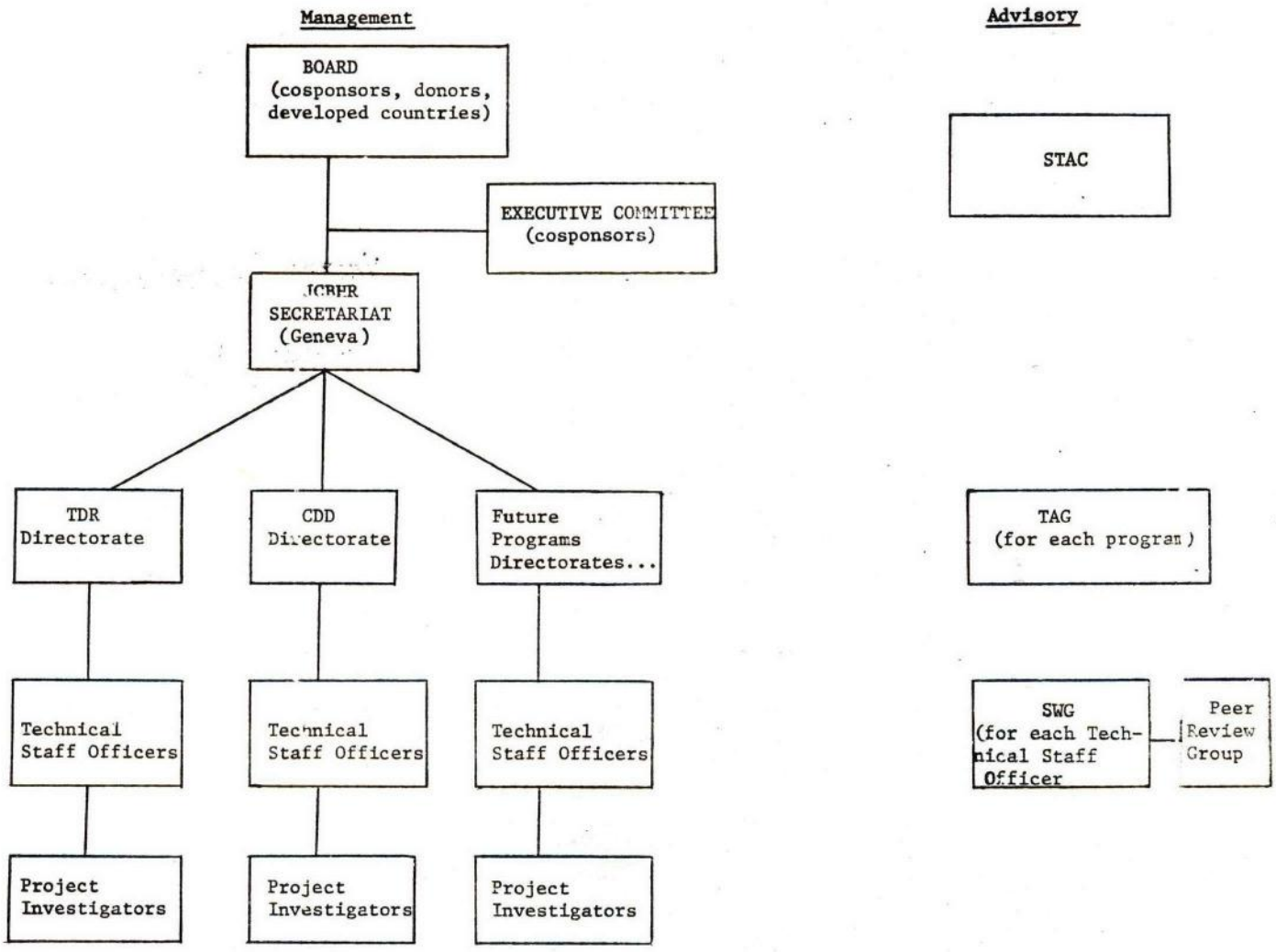
v) other matters as may be referred to it by any Board member.

40. The three cosponsors would constitute an Executive Committee responsible for JCBHR management. The Committee would advise the Board on matters similar to those handled by the TDR Standing Committee (para. 22) with the necessary additional reports and recommendations to assist the Board in carrying out its function as described above. The Committee would also manage a JCBHR Trust Fund to be administered by the Bank and would fund-raise for programs approved by the Board.

41. In carrying out the above functions, the Committee will be assisted by the JCBHR Secretariat and by the Bank. The Bank would be responsible for establishing and administering a JCBHR Trust Fund for the pooling of funds annually allocated for programs. The Bank's role would also include the preparation of technical, administrative and fiscal assessments on each program and the JCBHR Secretariat for annual presentation to the Board. The Bank's representative

PROPOSED JCBHR STRUCTURE AND FUNCTIONS

OF MANAGEMENT/ADVISORY BODIES



This model modifies the TDR structure, enabling the Board to establish priorities, resource allocation and coordination among programs under advisement of an Executive Committee which recommends budgets and priorities; and technical, administrative and management aspects of programs; and conducts fund-raising. The Bank would establish and administer a Trust Fund; and prepare technical, financial and management assessment reports for the Board. WHO would be Executing Agency for most if not all individual programs. The Committee would be advised on establishing priorities by a STAC composed of international scientific experts. A JCBHR Secretariat would be responsible for overall management, coordination of programs and their technical implementation. Each program would have its own Directorate responsible for implementation, reporting to the Secretariat. Each Directorate would be advised by a TAG on goals, priorities and progress; and for in-depth evaluation of SWGs. Technical Staff Officers in each Directorate would review and manage individual projects grouped according to disease-specific and trans-disease areas. Each TSO would be advised by a SWG which develops a goal-oriented strategic plan and monitors its progress. A small peer review panel elected by the SWG would select projects for funding.

to the Executive Committee will require a small support staff to expand the present technical and management functions of the Bank's Responsible Officer for TDR. WHO would be represented by an Assistant Director-General in order to facilitate adminstrative implementation of programs carried out by WHO.

42. A JCBHR Secretariat would be established in Geneva for technical and managerial coordination among programs. The Secretariat would serve the Board and its Executive Committee. Technical, administrative and financial operations would be handled separately from those of WHO, although as in TDR technical back-up support from the WHO Secretariat may be required periodically. This procedure has worked well for TDR.

43. Each JCBHR program would have its own Program Directorate. In most if not all cases WHO would be the Executing Agency. Each Directorate will be responsible to the JCBHR Secretariat and would manage its own budget and administrative activities. Technical Staff Officers (TSO) would perform ongoing administrative and management activities related to individual projects and research capability strengthening activities. TSOs would be responsible to the Program Directorate.

44. Advisory Structure: In establishing priorities among programs, the Board through its Executive Committee will be advised by a Scientific and Advisory Committee (STAC), composed of internationally renowned scientists representing expertise in social and economic development as well as health sciences. Appointments to STAC would be made by the JCBHR on recommendations by the Executive Committee. Each Program Directorate would be advised by a Technical Advisory Group (TAG) and a SWG would be established to advise each Technical Staff Officer. Procedures would parallel those of the TDR/STAC (para. 24) and SWGs (para. 23).

Implementation

45. The proposed JCBHR would be implemented in stages, replacing the JCB mechanism currently used for TDR when two or more global programs are identified for support. Because of the necessary lead time to refine and institute the JCBHR, it is recommended that the Bank propose acceptance in principle at the December 1980 JCB meeting of the TDR in Geneva. Actual implementation is projected by CY82. It is proposed that the TDR mechanism be absorbed as the first program in the JCBHR.

46. The second program would be the WHO expanded effort for diarrheal diseases control (CDD). Diarrheal diseases are the leading cause of death in infancy and early childhood throughout the developing world. In 1979, WHO/UNDP/Bank collaboration resulted in a five-year US$5M UNDP grant to WHO to initiate a global research program for vaccine and drug development. WHO is seeking continued UNDP/Bank collaboration and considering a suggestion that the TDR/JCB also serve as the mechanism for financing, organizing and managing CDD.

47. Future priorities for JCBHR programs might also include: (a) safe and effective fertility reduction techniques of high acceptability to individuals in different clinical and cultural situations; 1/ (b) improved prevention, detection and treatment for nutritional disorders; and (c) improved diagnostic, therapeutic preventive measures to deal with common but serious disorders such as respiratory infections.

48. Proposed criteria for recommending programs to the JCBHR would include:

i) opportunity for providing new or improved cost-effective biomedical or other technology with obvious links between research, application and integration in primary health care to deal with major causes of morbidity and mortality in LDCs;

ii) methods for institutional strengthening to build self-reliance in LDCs for developing, managing and evaluating control programs;

iii) innovative, comprehensive approaches to meeting objectives, logistics and evaluation of scientific task(s);

iv) sound financial and administrative management procedures for monitoring cost-effectiveness;

v) practical and feasible goals to be achieved within defined time periods and available finances;

vi) opportunities which no single bilateral or multilateral donor is able to accomplish by itself but where leadership in development and management of large-scale programs and projects is regarded as essential to attract and sustain a critical mass of donors and scientists.

1/ The WHO Human Reproduction Program (HRP) focuses on this goal but operates within an organizational framework that would require modification for acceptance within the proposed JCBHR.

49. The proposal that the Bank establish and cosponsor a JCBHR would require financial contribution for programs accepted in the system. The first proposed program for the JCBHR is TDR, and the Bank should contribute to its financial support. This recommendation is justified for two major reasons. First, progress to date reinforces the system's capacity to deliver products essential to Bank objectives. Second, future progress could be impeded because several major donors will interpret lack of Bank financial support as indicating doubts on TDR potential to meet its goals. This would seriously erode the amount of donor resources for TDR. As proposed earlier, the Bank financial contribution to TDR in CY80 would be at a level of 10 percent of the projected budget support of donors. The Bank contribution would be approximately US$2.0M in CY80 and can be expected to require up to approximately US$3.5M per annum in CY80 dollars at periods of maximum expenditure. The Diarrheal Disease Control Program would be reviewed for support as the second JCBHR program in CY81.

Comparative Advantages of Bank Participation

50. As a proposed cosponsor, the Bank would be a member of the Management Board, the key JCBHR advisory body. It is expected that the Bank would establish and administer a Trust Fund to which donors would contribute sums annually. The Bank's presence is considered important to attract sufficient funds and to assure their proper management. As development institutions, the Bank along with UNDP increase donor confidence that criteria for program selection are directed toward disease control that will accelerate social and economic progress in developing countries.

51. The Bank's involvement in the JCBHR would strengthen the system's potential in several important ways:

i) the Bank is more independent of political interference than most UN agencies and, therefore, is in a much stronger

position to ensure that expert, independent scientific advice is obtained and used for scientific management decisions;

ii) the Bank's reputation for careful analysis, efficient organization and sound financial management lends credibility to programs within the development community;

iii) the Bank's economic perspective and broad multisectoral approach to development should reduce the danger of programs falling into narrow compartments corresponding to the sector responsibility of one technical agency;

iv) the Bank has the capacity to introduce new approaches and to adapt them to changing circumstances, thus providing more effective and flexible leadership than most UN agencies.

52. The credibility of JCBHR would be further reinforced in developing countries and the donor community if the Bank provided a commitment for financial support on a long-term basis (e.g. 15 years). This is important in order to demonstrate the appropriate level and direction of support for other donors. The financial contribution to JCBHR should be viewed as an investment with delayed returns similar to those expected in Bank lending in those sectors supportive of meeting basic needs. Cost-benefits from simple, low-cost alternative technologies derived through JCBHR would offset the Bank's current investments in disease control, many of which are complex,costly, logistically difficult to manage and do not fully reach the populations affected. The level of investment would be determined annually, with funds allocated from the Bank's annual net income and on approval of the Bank's Executive Directors.

53. JCBHR would provide the Bank with a tangible mechanism that extends the Bank's efforts beyond customary lending operations. There are three outcomes which justify its full participation:

i) reinforcement of the Bank's activities in meeting basic needs of the poorest populations of the developing world through

support of health research in currently neglected areas; this would provide new and appropriate technology critical to the success of Bank operational interventions to provide cost-effective health services;

ii) reinforcement of the Bank's active collaboration with WHO, UNDP and other UN agencies, bilateral donors and the developing countries toward integrating health and development activities as a means of accelerating social and economic progress in the developing world.

ATTACHMENT 1

CONTRIBUTIONS TO THE SPECIAL PROGRAMME FOR RESEARCH AND TRAINING IN TROPICAL DISEASES AS AT 30 DECEMBER, 1979

(EXPRESSED IN US$ 1000)

Contributor	1973-1975	1976	1977	1978	1979	Pledges 1980
Multinational						
United Nations Development Programme (UNDP)	-	50	50	969	1 787	1 948
World Health Organization (WHO)	175	331	903	1 50	1 592	1 050
Total	175	381	953	2.470	3.379	2.998
.ks						
African Development Bank	-	-	-	-	250	250
Total	-	-	-	-	250	250
Foundations						
International Federation of Anti-Leprosy Associations	78	36	63	62	67	65
Japan Shipbuilding Industry Foundation	51	500	400	400	400	400
Lepers' Trust Board, New Zealand	-	-		10	7	10
WellcomeTrust, United Kingdom	25	-	-	-	—	—
Total	154	536	473	472	474	475

Contributor	1973-1975	1976	1977	1978	1979	Pledges 1980
Bilateral: Developing Countries						
Bahamas	.5	0.5	-	-	—	—
Cuba	—	—	—	—	2	2
Cyprus	-	-	0.2	-		
India	-	-	-	-	103	100
Iraq	5	-	-	-	—	—
Niger	-	-	-	2	2	2
Nigeria	-	80	81	81	80	80
Romania	-	2	-	-	—	—
Total	6	83	81	83	187	184
Bilateral: Developed Countries						
Australia	-	-	-	260	257	253
Austria	5	23	31		38	40
Belgium	64	272	-	1.533**	450	500
Canada	-	309	-	535	609	700
IDRC/Canada	75	491	178	63	-	-
Denmark	-	-	4.933	2.934	2.863	1.900
Finland	-	-	72	96	125	125
France	-	-	-	-	227	225
Germany, Federal Republic of	-	-	-	333	1.168	1.100
Netherlands	100	400	1 000	1.000	955	1,000
Norway	71	109	456	966	1.090	1.110
Sweden	805	404	1 351	1,928	2,530	2.530
Switzerland	-	102	422	554	747	750
United Kingdom	-	133	470	992	1.232	1.934*
United States of America/USAID	-	-	25.	24	1.5	4.0
Total	1.120	2.243	8.838	11.323	13.791	16.157
GRAND TOTAL	1.455	3.243	10.345	14.348	18.081	20.064

* Includes final part of CY79 to be paid in CY80

** Includes 1977 contribution

Mr. Warren C. Baum, CPSVP March 11, 1980

John R. Evans, Director, PHN

Proposal to Establish Bank Participation in
Global Health Research and Development Programs

Attached for your comments is a revision of an earlier draft you reviewed on a proposal that the Bank encourage the establishment of a Health Research and Development Group (HRDG). In reviewing the proposal, the following points should be considered:

(1) The Special Programme for Research and Training in Tropical Diseases (TDR), Control of Diarrheal Diseases (CDD) and several others are emerging with very high potential for developing cost-effective interventions in primary health care.

(2) At this time, it would be valuable to establish a mechanism that would provide donors with a technical and managerial review for priority setting among programs, rather than individual treatment for each separate area put forth for consideration. WHO has mixed responses to this suggestion, although at senior level there is recognition of the need for an umbrella mechanism to review and manage research and development programs. UNDP (Mashler) is pushing this concept harder and more broadly than I would recommend at this time. Informal discussions with representatives of German, Swedish and Canadian bilaterals, IDRC and the Ford Foundation strongly endorse the HRDG concept. Ford, in particular, has stressed the strengths which Bank involvement could bring to an HRDG.

(3) Management control is obviously a key issue in the proposed HRDG. WHO has clearly established itself as the lead technical agency through executing the TDR. Unlike the Bank's experience with OCP and the Cooperative Bank/WHO Village Water Supply Program, the technical and administrative structures developed for TDR have provided to date a very effective mechanism for technical and administrative management which is free from undesirable agency influence.

(4) Because the TDR model has proven successful for mobilizing donor support and the highest quality of scientists in the field, it seems desirable to apply it to the HRDG. The Secretariat responsible for technical implementation of the proposed HRDG /would continue to relate to WHO. It is recommended that the Bank exert its influence by accepting responsibility for the preparation of substantive technical overview reports for the donor group each year. This would serve to establish priorities among programs, identify beneficiaries of the research and analyze the management effectiveness with which objectives are being met by HRDG programs.

(5) The progress made by TDR merits its inclusion as the first program in the proposed HRDC. In recommending Bank support to establish the HRDC, the Bank should also commit itself to financial support of the TDR. As you know, there are two pending requests from the Joint Coordinating Board (JCB) requesting Bank financial support of TDR. The expectation is that the Bank will have its decision for presentation at the December 1980 JCB meeting. Since the December 1979 JCB meeting, two Executive Directors have approached me to clarify the Bank's position: both were enthusiastic about Bank support of research of the type being implemented in TDR. It would be difficult for the Bank to avoid once again making [redacted] comment on the JCB's requests. It is recommended therefore that the Bank provide a financial contribution in CY80. The proposed level of support is US$2M, approximately 10% of donor contributions in support of the CY80 budget. As you know, Mr. Stern recommended to Mr. McNamara that Bank financial support of TDR be initiated this year, and the issue was postponed pending decisions on uses of Bank net annual income.

Attachment

AFonaroff/JREvans:va

A PROPOSAL TO ESTABLISH WORLD BANK PARTICIPATION IN GLOBAL HEALTH RESEARCH AND DEVELOPMENT PROGRAMS

Summary

1. This paper recommends that the World Bank encourage the establishment of a Health Research and Development Group (HRDG) to mobilize global scientific and financial resources for discovery and application of new measures to control the major diseases of developing countries; and to strengthen research and delivery capabilities in countries where these diseases occur.

2. The HRDG would be established as a single management system, composed of cosponsors, donors and countries affected by the diseases. It would be responsible for the identification, organization, management and financing of a selected number of global programs that meet the objectives defined above. Separate administrative units and expert advisory groups would be maintained for individual programs. The HRDG portfolio would proceed in incremental stages, beginning in CY80 with the Special Programme for Research and Training in Tropical Diseases (TDR); with a second program the following year for the control of diarrheal diseases (CDD), the major killer of infants and young children.

3. It is proposed that the Bank, WHO and UNDP act as cosponsors of the HRDG. The Bank's cosponsorship would include (a) participation in the HRDG and its management board; (b) establishment and administration of an HRDG Trust Fund to which donors would contribute; and (c) contribution annually to the Fund. Annual apportionment among HRDG programs would be based on past-year achievements and progress forecasted. Such financing could be derived as it is for grants to CGIAR and OCP, from the allocation of the annual net income and on approval by the Bank's Executive Directors. It is proposed that the Bank provide a financial contribution to HRDG in support of the TDR in CY80 in the amount of US$2.0m., which is 10 percent of the anticipated donor support of the approved CY80 budget. It is expected that the diarrheal diseases control program, in which the Bank/WHO/UNDP have been collaborating, would be reviewed for support as the second HRDG program in CY81.

4. The need for the proposed HRDG and the functions it would perform resemble those of CGIAR when it was initiated in 1971 to draw attention to the neglected research areas in the agricultural sector that influence economic development. Like CGIAR, the formation of the HRDG would represent a marked change in the philosophy toward investment in health research. It would direct attention of the international health and development community to the rational allocation and management of scarce resources for priority disease control programs that affect economic progress. This could reinforce the active collaboration among UN specialized agencies, bilateral and other donors and developing countries in increasing cost-effectiveness of primary health care as a means to upgrade poverty conditions in the developing world. The HRDG is also a tangible mechanism through which the Bank can extend its own efforts to meet basic needs in developing countries beyond its customary sector lending operations.

I. Needs for Improved Technology in the Health Sector

5. The health status of the poor in developing countries may be improved both through the general process of social and economic development and through the provision of basic health services. The impact of the development process per se on health status is limited; moreover development proceeds at a slow rate and its benefits are inequitably distributed.

6. Improvements in health status may be accelerated through basic health care delivery that controls the commonly occurring diseases. However, two obstacles must be overcome in order to achieve direct improvements in health. First, a system must be established to bring currently available technology to those who currently have no access to health services. Second, safe, simple and inexpensive measures must be developed to prevent or treat serious common diseases such as malaria, schistosomiasis and onchocerciasis, for which there are currently no effective control technologies. The first obstacle is being addressed by the Bank through its normal country lending operations. Overcoming the second obstacle requires the mobilization of scientific and financial resources at the global level toward discovery and application of appropriate technology to control major infectious and parasitic diseases.

7. The Bank's leadership can be instrumental in stimulating such an effort because as the major lending development institution, multilateral and bilateral donors as well as developing countries place a high degree of credibility on successful outcomes of large-scale, long-term projects managed by the Bank. This level of credibility is crucial in gaining the long-term support and commitment for health research and development programs that require mechanisms:

i) to stimulate, coordinate and finance promising research from early stages of development through to wide-scale implementation; and

ii) to stimulate and increase country-level skills in research, development and management of disease control programs in countries where the diseases are endemic.

Such efforts should draw on the scientific resources of institutions in both the public and private sectors throughout the world.

8. The common causes of mortality and serious morbidity in developing countries include diseases which are rare in the developed world. Public and private funding of research on diseases prevalent in developing countries have been very limited, resulting in neglect by scientists in academic institutions and the pharmaceutical industry. The pharmaceutical industry, for example, has limited its research investments on drugs to control tropical diseases because of the high cost of such drug development in relation to investment returns in developing countries. The focus of biomedical and

other research on the control of cardiovascular diseases, cancer and other major causes of death in the industrialized world, has produced recent advances in immunology, molecular pharmacology, epidemiology and social and behavioral sciences. These have broad applicability to the control of major diseases in the developing world and have not been fully exploited.

9. Some steps, however, have been taken to exploit this potential. Under the leadership of WHO, UNDP and the Bank, the scientific and donor communities, and developing countries themselves, several major goal-oriented joint programs have been launched. The Onchocerciasis Control Program (OCP) is an action-oriented regional program focused on the control of the black fly vector in the Volta River watershed. OCP requires financial resources well beyond the means of the countries affected, and control techniques which must be applied across national borders. The Special Programme for Research and Training in Tropical Diseases (TDR) and the Diarrheal Diseases Control Programme are other global collaborative efforts that focus basic research on major causes of morbidity and mortality which impede social and economic progress in developing countries. These programs are designed to develop simple, low-cost, vaccines, drugs, pesticides and other new methods of disease control; and to strengthen institutions in the countries where the diseases are endemic.

10. Discovery of a new drug or vaccine and the steps leading to use are normally carried out by different scientific groups and involve a sequence of time-consuming activities: laboratory discovery; animal trial testing for toxicity and teratogenecity before human use; clinical trials in humans to confirm such factors as safety and efficacy; research to achieve product stability, predictable potency and low-cost production methods; and evaluation of cost-effective disease detection and product application methods.[1/] Two elements could shorten this process by several years: (a) skillful arrangements of a network of groups to coordinate the successive stages of work; and (b) the regular and timely provision of necessary financial support. Success is dependent on maintaining the commitment of scientists and support of donors over 10 - 15 years, and for this an effective mechanism is needed to organize and manage the network of scientific and financial resources. Bank participation in a consortium of scientists and donors could perform the vital services of strengthening management, as well as attracting and sustaining the confidence and commitment of donors to high priority programs.

11. The Bank should be highly selective in supporting research and development for health. It should promote those programs that aim to control diseases that significantly impede economic and social progress in developing countries, yet which are not receiving adequate attention from the scientific community. The Bank should stress efforts to accelerate the discovery and application of simple, cost-effective interventions for use in its lending programs for basic health services in developing countries.

1/ See Attachment 1

12. Investments in programs of research and development in health are modest compared to the costs associated with technologies currently used to control certain infectious and parasitic diseases. Over a billion people in the developing countries suffer from poor health attributed to tropical diseases. Some tropical diseases once under control, such as malaria, are in resurgence. Others, such as schistosomiasis, are spreading as a result of irrigation, hydroelectric power and other economic development activities. Present control technology is difficult, complex and costly. For example, between 1973-79, Bank projects in Upper Egypt have included a total component cost for schistosomiasis control of US$28.7m., of which Bank financing amounted to US$21.9m. 85 percent of the investment was in molluscicides for vector control, with the remainder in chemotherapy. In the absence of more cost-effective alternative technologies, the recurrent costs could amount to approximately US$18m. per year, yet reach only approximately one third of the total population.

13. Between 1971-79, 43 percent of health component expenditures by the Bank were devoted to vector control, chiefly for malaria and schistosomiasis. This amounted to US$145m., almost 58 percent of the total expended for health components; recurrent costs during this period were US$14m. These are necessary, but interim steps awaiting future technology that will more effectively prevent and treat vector borne diseases. Presently, where such diseases are endemic, human productivity is reduced; and during epidemics, entire workforces may be disabled. Human habitation is at high risk over large areas of Africa, Asia and the Amazon region of South America due to the prevalence of malaria, schistosomiasis, trypanosomaisis and onchocerciasis. Animal husbandry and other economic ventures are similarly affected. In Africa alone, the tstse fly, the trypanosomiasis vector, infests over 10m. square km of land which, if cleared, could provide a potential cattle population of 125m.

14. To alleviate such problems, the Bank as part of its program to develop primary health care, should give high priority to the support of research aimed at producing simple, effective and inexpensive technology that will protect populations in developing countries against the principal causes of mortaility and morbidity. While appropriate biomedical technology exists for some major infectious diseases such as measles, smallpox and influenza, there remain technological gaps to control other major infectious disorders and parasitic diseases. Furthermore, improved methods to control fertility and to curb malnutrition could also enhance longevity and the quality of life. The situtation in the health sector for the 1980's is parallel to that underlying the creation of the CGIAR in the 1970's, when it became clear that meeting the food problems of the poor required a major research effort drawing upon global resources.

II. TDR: A Proven Model for Coordinating Donor Inputs

15. The Special Programme for Research and Training in Tropical Diseases (TDR) is a goal-oriented global effort that provides an excellent example of a research development program designed to meet the needs described. Supported jointly by contributions from major multilateral and bilateral donors, including countries whose populations will directly benefit from results, TDR is now in its third year under WHO/UNDP/Bank cosponsorship. It is acknowledged by scientists, donors and developing countries as the leading research force (a) in developing new, improved and cost-effective products and techniques for the control of six major diseases: leprosy, malaria, schistosomiasis, filariasis (including onchocerciasis), trypanosomiasis and leishmaniasis; and (b) in strengthening research and management capability in developing countries for essential tasks of testing, evaluating and delivering new disease control technologies.

Organizational Structure

16. Unlike CGIAR which establishes major new research institutions, TDR scientific activities are based on a global network of existing laboratories with sophisticated biomedical expertise in industrialized countries and clinical and research facilities in countries affected by the diseases. TDR Scientific Working Groups (SWGs), composed of scientists from several disciplines, define research objectives, devise a strategic plan to achieve them,[1/] conduct research according to the plan, review and revise both the plan and research findings as work progresses. A list of SWGs is attached.[2/]

17. Evaluation mechanisms are part of the Programme. Individual research projects are technically evaluated by a Steering Committee of each SWG. The activities of each SWG are evaluated on a regular basis by a Scientific and Technical Advisory Committee (STAC), a multidisciplinary body of 15-18 internationally distinguished scientists. In addition, STAC performs in-depth reviews of the SWG's: three SWG reviews have already been completed by STAC, which will evaluate the total scientific program at five-year intervals.

Programme Management

18. The extent to which TDR short and long-range goals are achieved depends not only on the quality of scientists but on the effectiveness of management. Modeled to some degree after the CGIAR, a 1978 Memorandum of Understanding on Technical and Administrative Structures between cosponsors and cooperating parties defines the organizational/management system to assure global scientific and technical progress.[2/] WHO, as Executive Agency, appoints the Secretariat and also handles fund raising. The Bank administers a trust fund and plays a major role in program management. All three cosponsors act as a Standing Committee to evaluate ongoing program activities and recommend annual priorities and budgets to the Joint Coordinating Board (JCB), the top

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1/ See Attachment 1
2/ See Attachment 2

decision-making body. The JCB consists of 30 members, including the co-sponsors; representatives of governments financially contributing to the program, governments reflecting interests of countries where the six diseases occur, and agencies selected by the JCB because of their activities in tropical diseases research and training.

Role of the Standing Committee

19. The Standing Committee performs key management functions. It meets triannually to review program progress and to undertake specific functions on behalf of the JCB. While it is not a resident body, its functions are similar to that of the CGIAR Executive Secretariat. Standing Committee responsibilities include preparation of annual recommendations to the JCB on (a) program and budget based on substantive review by the STAC; (b) major appointments, such as the Program Coordinator and STAC members; (c) fiscal and program management issues such as internal audit, cash flow/liquidity; allocation of staff resources; and (d) preparation of terms of reference for the Programme's five-year performance review.

Role of the Bank

20. The Bank was invited to become a cosponsor in order to increase donor confidence in effective program management and administration and to establish and provide fiscal management of a Tropical Diseases Research Fund to which the majority of TDR contributions are deposited. Governments who are unable, for legal or political reasons, to contribute their funds through the Bank, deposit their contributions to a WHO administered trust fund. In 1979, over 65 percent of contributions were deposited to the Bank-administered fund.

21. In addition to its role as fiscal agent, the Bank exercises its responsibility through participation in the Standing Committee and the JCB. It initiated a proposal for internal audit of projects and analyzed liquidity issues affecting cash flow. The Bank also provides a Public Health Staff Officer with responsibilities for (a) ongoing liaison with pertinent Bank departments, cosponsors and cooperating parties; (b) review and analysis of technical and administrative program documentation; (c) representation of UNDP/Bank cosponsorship as an observer to the STAC annual program review, and (d) preparation of documents relating to the Bank's managerial role.

22. The Bank accepted cosponsorship because the potential products of TDR are integral to the Bank's mission of improving opportunities for better health and progress in countries affected by the diseases. There was reluctance on the part of some major donors to participate in the program unless the Bank became fiscal agent, and the Bank itself conditioned participation on its recommendations for strengthening of technical and administrative relationships between the TDR and WHO. These arrangements were subsequently accepted by WHO and are reflected in the system presented here.

Progress

23. TDR is regarded as successfully progressing according to standards established by STAC and expectations of the cosponsors and the JCB. Approximately half of TDR resources are spent in developing countries on research, training of personnel and strengthening of research institutions. The scope of activity includes biomedical, environmental, epidemiologic, socio-economic and health services research. Highly qualified scientists from leading institutions in the industrialized world have turned their attention from the health problems of affluent societies to participate in research directed toward these neglected diseases. In addition, TDR has stimulated NIH, the Rockefeller Foundation and the Wellcome Trust to increase their annual appropriations to tropical diseases research, thereby accelerating and broadening the base of scientific knowledge to be applied to the control of tropical diseases.

24. Since its inception, 600 projects have been funded in 66 countries. In 1979, almost half of these projects represented new efforts, demonstrating the rapid rate of program development. More significant, however, is the steady progress of technical activities which already have produced major results to control five of the six diseases under investigation:

i) Trypanosomiasis: disease detection which permits more accurate diagnosis and treatment;

ii) Onchocerciasis: drug screening for more effective treatment;

iii) Schistosomiasis: improved drug therapy;

iv) Leprosy:)
v) Malaria:) extremely promising leads for vaccines.

25. It is unlikely that necessary resources to produce these results would have been available without the presence of the Special Programme. The WHO Advisory Committee on Medical Research has cited the scientific achievements of TDR as an example of outstanding research management, and has commended the balance between research and development and strengthening of research institutions. It regards TDR as a model for other WHO extrabudgetary efforts.

26. Reflecting these assessments, TDR financial resources have grown from about US$3.2m. in 1976 to over US$20.0m. in CY80. In CY80, TDR is being supported by two of its three multinational cosponsors, one development bank, three foundations and 18 bilateral donors including four LDCs.1/ While financial contributions from developing countries are modest, allocation of their scarce resources to TDR is indicative of the value attributed to potential gains. On the recommendation of the Standing Committee, the JCB approved a

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1/ See Attachment 3

Standing Committee recommendation for a five-year forecast of budget needs. The CY80 budget was approved at US$26.6m., with the expectation that annual budgets should plateau at about US$35.0m. in 1980 dollars. Recognizing that donor interest tends to shift over time, concern is already being expressed about sustaining the level of support required as the program enters the stages of clinical trial and implementation of new discoveries.

27. The Bank has a request pending from the JCB for a financial contribution to the TDR in CY80. A financial contribution has been supported to the President by the Vice President, Operations, and is awaiting review for allocation from the Bank's FY80 net annual income. There are two major reasons why the Bank should provide this support:

i) TDR progress to date promises delivery of products essential to Bank lending operations, particularly for vector control in water and irrigation projects; and for vaccines and drugs in primary health care;

ii) several major donors to TDR will interpret lack of financial support by the Bank as indicating doubtful value of the program's potential to meet its goals; this could seriously erode resources made available to the program.

28. It is therefore proposed that the Bank make a financial contribution to TDR in CY80 at a level of 10 percent of the projected budget support of TDR donors. The Bank's contribution would be approximately US$2.0m. in CY80 and can be expected to require up to approximately US$3.5m. per annum in CY80 dollars at periods of maximum expenditure. Recommendations on the Bank's level of annual support would be based on the program's technical progress and prospects for short, medium and long-term outcomes.

29. It is also recommended that the Bank consider the support of TDR within the technical and administrative framework of health research and development described below.

III. Recommendations for Establishing a Health Research and Development Group (HRDG)

30. The World Bank should join with WHO and UNDP to cosponsor a health research and development group. The formation of the HRDG would provide a mechanism to broaden the support for international goal-oriented programs of research and development aimed at providing appropriate technology for control of diseases influencing social and economic progress in developing countries. HRDG membership would include the proposed cosponsors, representatives of donors and countries affected by outcomes of sponsored programs. The proposed cosponsors correspond to FAO/UNDP/Bank cosponsorship of the CGIAR with WHO the technical lead agency in health, as the counterpart of FAO.

31. Administrative and technical structures established for TDR provide a prototype for the proposed HRDG. Each program accepted into the system would, like TDR, function according to legal terms of agreement contained in a Memorandum of Understanding on Technical and Administrative Structures. This is a departure from CGIAR, where each center is the responsibility of an independent international Board of Trustees legally functioning under local law and agreement. The Bank would establish and administer an HRDG Trust Fund.

32. The HRDG would include the Group, per se, and a Management Board composed of the cosponsors to work on behalf of the HRDG. The role of the Board would be comparable to the TDR Standing Committee and the CGIAR Executive Secretariat. Management Board recommendations on budget, management, administrative and technical aspects of HRDG and its programs would be presented for annual decision to the full HRDG. The HRDG and its Management Board would be advised on each program by a STAC composed of international experts working outside of the program network. The Board would be assisted in establishing priorities among programs by a small panel of international scientists from outside the HRDG network. An HRDG Director would be responsible for coordination and technical implimentation of HRDG programs and report to the Management Board. WHO would be represented on the Management Board by an Assistant Director-General in order to facilitate administrative implementation of programs carried out by WHO. WHO would also provide secretariat and administrative services.

HRDG Functions

33. Proposed structure and functions of the HRDG are presented on the following page. As proposed, the HRDG would organize, manage and finance a selected number of global health programs aimed at providing appropriate technology for the purposes defined above. It would be responsible for identifying such programs and establishing priorities among them. It would meet annually at the headquarters of any of its cosponsors, to discharge the following functions:

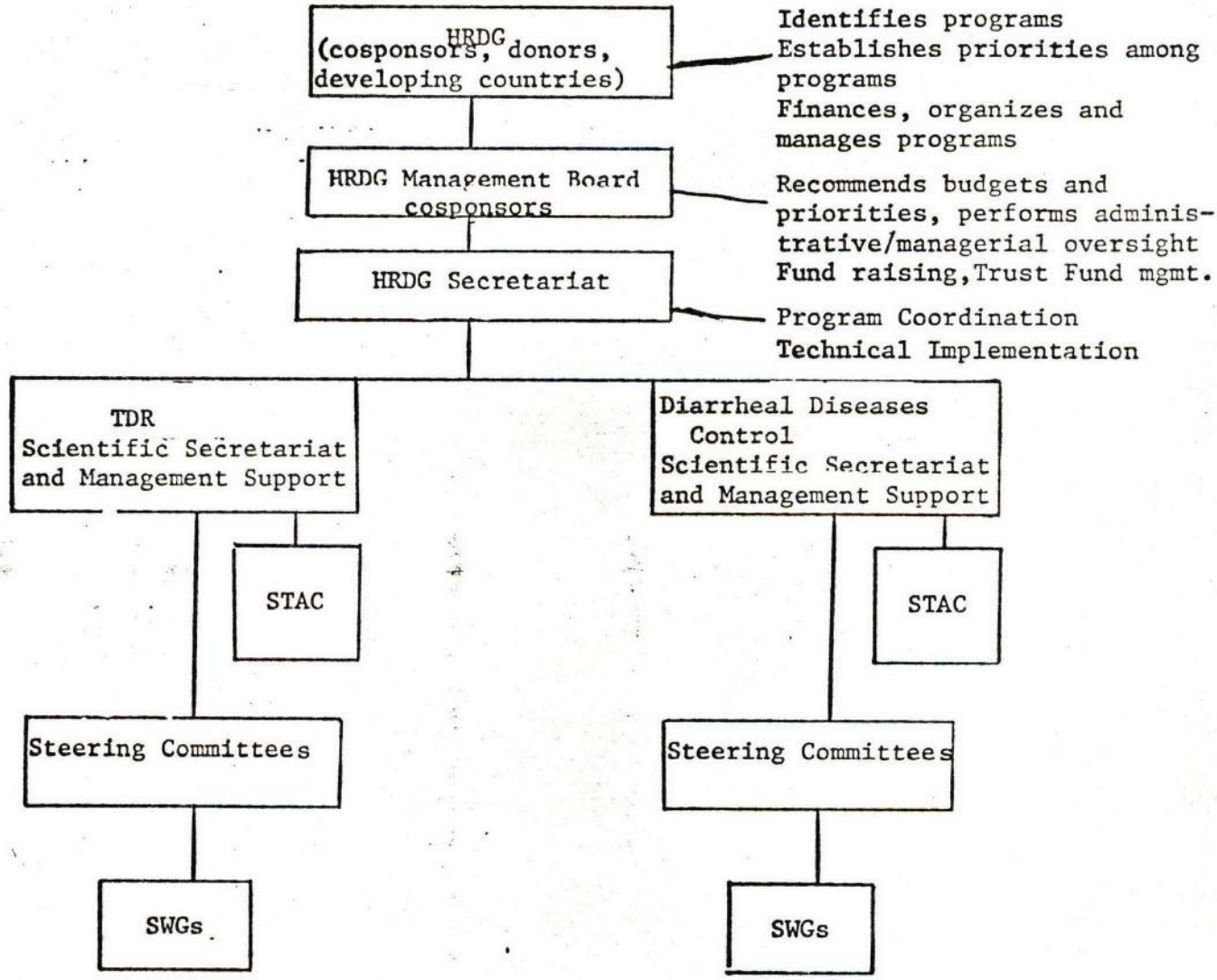
i) review and decide upon the planning and execution of programs. For this purpose it will keep itself informed of all aspects of program developments and consider reports and recommendations submitted to it by the Management Board;

ii) review and act on the proposed plan of action and budget for the coming financial period, prepared by the Executing Agency and reviewed by the Management Board;

iii) review financial resources and recommendations provided by the Management Board to determine allocations within and between specific programs;

iv) review periodic reports which evaluate the progress of each program towards the achievement of its objectives;

PROPOSED HRDG MANAGEMENT STRUCTURE AND FUNCTIONS



This model modifies CGIAR and TDR mechanisms. Major departures from CGIAR are:

(a) The single TAC is replaced by a separate STAC for each program; (b) the support of lead institutes is replaced by support of a global network of scientists and institutions linked to goal-oriented strategic plans; (c) there is only one technical/administrative Secretariat housed at WHO, Geneva, and responsible for coordination between programs (d) the Bank's role as Chair of the CGIAR Executive Committee is replaced by a Management Board composed of the three cosponsors, with the Bank serving as administrator of a HRDG Trust Fund.

v) review and act on the proposals from the Management Board for appointments of HRDG Director, Program Directors, and STAC members;

vi) review proposed longer-term plans of action, their financial implications and approve a rolling five-year plan of operation;

vii) review the annual financial statements as well as the audit report thereon;

viii) consider such other matters relating to the HRDG as may be referred to it by any group member.

HRDG Management Board Functions

34. The Management Board would be composed of the three cosponsors. It would function in the same manner as the TDR Standing Committee, with the additional responsibility for fund raising. The funds annually allocated to each HRDG program would be pooled in a single HRDG Trust Fund to be established and administered by the Bank on behalf of the Board and the HRDG. The role of the Bank's Responsible Officer for TDR would be expanded to all HRDG programs.

35. The Board would be expected to perform four major functions:

i) management overview of each program as well as the total network system;

ii) management of the HRDG Trust Fund which would be administered by the Bank;

iii) recommendations to the HRDG on resource allocations and program direction;

iv) recommendations to the HRDG on appointments to HRDG Director, Program Directors and each STAC.

36. In establishing priorities among programs, the Board would be assisted by a small panel of international scientists from outside of the HRDG network. Proposed criteria for recommending programs to the HRDG would include:

i) opportunity for providing new or improved cost-effective biomedical or other technology with obvious links between research, application and integration in PHC to deal with major causes of morbidity and mortality in LDCs;

ii) methods for institutional strengthening to build self-reliance in LDCs for developing, managing and evaluating control programs;

iii) innovative, comprehensive approaches to meeting objectives, logistics, and evaluation of scientific task(s);

vi) sound financial and administrative management procedures for monitoring cost-effectiveness;

v) practical and feasible goals to be achieved within defined time periods and available finances;

vi) opportunities which no single bilateral or multilateral donor is able to accomplish by itself but where leadership in development and management of large-scale programs and projects is regarded as essential to attract and sustain a critical mass of donors and scientists.

37. Each program would be operated according to management procedures described above, and in most, if not all, WHO would be the Executing Agency. Each program would have its own Scientific and Administrative Director responsible to the HRDG Director whose responsibilities will include technical implimentation and coordination of all programs. The HRDG Director would be in charge of the Secretariat and be responsible to the Management Board.

Functions of HRDG/STAC

38. The equivalent of STAC in the CGIAR model is the TAC, appointed by the cosponsors to assure scientific excellence. CGIAR has one TAC, whereas the proposed HRDG would require a separate STAC corresponding to the specific needs of each program. Functions of STAC include:

i) STAC, like TAC, would follow goal-oriented terms of reference prepared by the technical lead agency and approved by the HRDG on recommendation by the Management Board. WHO would normally provide the professional and administrative Secretariat for each STAC;

ii) STACs would prepare the recommended work program and budget level for annual presentation to Management Board and HRDG;

iii) each STAC would perform in-depth annual reviews of activities for presentation to the Management Board.

A five-year review for each program would be conducted by groups of independent outside experts selected by the HRDG under terms of reference which it approves on recommendation from the Management Board.

Rationale for Establishing the HRDG

39. The need for the proposed HRDG and the functions it would perform resemble that of CGIAR when it was formed in 1971. CGIAR demonstrated the growing awareness that important aspects of the agricultural sector were being neglected and that these created impediments to economic development. It sought to focus on neglected aspects of food research and to enhance potential progress through multilateral funding. The formation of HRDG would represent a similar necessary change in the philosophy toward investment in health research, one which directs attention of the international health and development communities to the rational allocation of scarce resources for priority disease control programs that affect economic progress in developing countries.

40. Such a change is necessary. Until TDR was established, WHO had limited success in stimulating broad support of global research and development for disease control. As the technical lead agency in health, WHO has been the primary force in identifying health problems that require such attention. The success of mobilizing resources for TDR has resulted in the presentation of more than 200 areas for extrabudgetary funding, with no priority order or indication of requirements for organizational management. As the technical lead agency in health, WHO can and should provide this stimulus. However, donors have been critical of the lack of criteria for selecting among priority programs. and the lack of necessary assurance that cost-effective methods would be applied in the delivery of program outcomes.

41. In the case of TDR, for example, WHO required assistance from the Bank and UNDP in order to establish the priority for long-term investment in tropical diseases research, as well as to establish the credibility of the TDR technical and administrative structures for achieving its potential products.

42. WHO is now attempting to mobilize similar support for an expanded program of Diarrheal Diseases Control (CDD). Diarrheal diseases are the leading cause of death in infancy and early childhood throughout the developing world. In 1979, WHO/UNDP/Bank collaboration resulted in a 5-year US$5m. UNDP grant to WHO to initiate a research program for vaccine and drug development. WHO is seeking continued UNDP/Bank collaboration, similar to that of TDR, to effect a technical and organizational structure that commands long-term donor support and commitment. It has been suggested that the JCB for TDR also serve as the mechanism for financing, organizing and managing the TDR and CDD. Future priorities for global programs might also include: (a) safe and effective fertility reduction techniques of high acceptability to individuals in different clinical and cultural situations;[1/] (b) improved prevention, detection and treatment for nutritional disorders; and (c) improved diagnostic, therapeutic preventive measures to deal with common but serious disorders such as respiratory infections.

1/ The WHO Human Reproduction Program (HRP) focuses on this goal but operates within an organizational framework that would require modification for acceptance within the proposed HRDG.

43. While it is likely that the JCB could handle two programs of the scope and magnitude of TDR and CDD, additional priority programs to develop alternative disease control technologies would require coordinative mechanisms beyond those in the current JCB mechanism. A mechanism like the proposed HRDG would have the following advantages:

i) provide a forum for decisions on resource allocations among programs. The same donors will likely be called on for financial support of different disease-control programs. Donors are more willing to provide both top-level representation and greater level of commitment when their responsibilities are focused toward establishing direction for a variety of supported programs;

ii) increase cost-effectiveness through sharing of common administrative services and scientific resources;

iii) increase management effectiveness of program review and the identification of management interventions to deal with the inevitable problems which may occur in long-term research efforts;

iv) facilitate implimentation of new global programs based on experience with TDR and CDD.

Comparative Advantages of Bank Participation

44. As a proposed cosponsor, the Bank would be a member of the Management Board, the key HRDC advisory body. It is expected that the Bank would establish and administer a Trust Fund to which donors would contribute sums annually. As in the case of its role in the TDR Standing Committee, the Bank's presence is considered important to attract sufficient funds and to assure that they are well managed. As development institutions, the Bank along with UNDP, increase donor confidence that criteria for selecting HRDG programs are directed toward disease control programs that will appreciably affect social and economic progress in developing countries.

45. The Bank's involvement in the HRDG would strengthen the system's potential in several important ways:

i) the Bank is more independent of political interference than most UN Agencies and, therefore, is in a much stronger position to ensure that expert, independent scientific advice is obtained and used for scientific management decisions;

ii) the Bank's reputation for careful analysis, efficient organization and sound financial management lends credibility to programs in the eyes of donors and recipient countries;

iii) the Bank's economic perspective and broad multisectoral approach to development should reduce the danger of programs falling into narrow compartments corresponding to the sector responsibility of one technical agency;

iv) the Bank has the capacity to introduce new approaches and to adapt them to changing needs and circumstances, thus providing more effective and flexible leadership than most UN agencies.

46. The credibility of HRDG programs would be further reinforced in developing countries and the donor community if the Bank provided a commitment for financial support of global health programs on a long-term basis (e.g. 15 years). This is important in order to demonstrate the appropriate level and direction of support for other donors. The level of support to any program in the HRDG should be determined annually, with funds allocated from the Bank's annual net income and on approval of the Bank's Executive Directors. The annual apportionment of the Bank's contribution among HRDG programs should be determined on the basis of past achievements and progress forecasted. Programs would be subject to annual review of technical and administrative progress by the HRDG Management Board and intensive quinquennial review by an independent group. The financial contribution to HRDG programs should be viewed as an investment with delayed returns similar to those expected in Bank lending in those sectors supportive of meeting basic needs. Cost-benefits from simple, low-cost alternative technologies derived through HRDG should offset the Bank's current investments in diseases control, many of which are complex, costly, logistically difficult to manage and do not fully reach the populations at risk.

47. The HRDG would provide the Bank with a tangible investment mechanism in technology development for use in sector operations that extends the Bank's efforts to improve health in developing countries beyond customary lending operations. There are three major outcomes which justify its full participation in the HRDG:

i) reinforcement of the Bank's own activities in meeting basic needs of the poorest populations of the developing world through support of research and development in currently neglected areas; this would provide new and appropriate technology critical to the success of Bank operational interventions to provide cost-effective health services in developing countries;

ii) reinforcement of Bank loans to strengthen health infrastructures through increased research capability and management in LDCs for initiation and maintenance of disease control activities;

iii) reinforcement of the Bank's active collaboration with WHO, UNDP and other UN agencies, bilateral donors and the developing countries toward integrating health research and development activities as a means of accelerating social and economic progress in the developing world.

HRDG Implementation

48. The proposed HRDG would be implimented in stages, replacing the JCB mechanism currently used for TDR and under consideration for CDD. The HRDG would add two elements that could not be achieved by merely expanding the existing JCB to serve these two programs. First, the donors and cosponsors would receive recommendations on the priorities for research and development support of existing and proposed new programs. Second, an HRDG Secretariat, under the direction of the Management Board, would be added to oversee and coordinate the technical implimentation of programs. These functions would assume even greater significance as the number of HRDG programs increases. Because of the necessary lead time to refine and institute the HRDG, it is recommended that the Bank propose its establishment at the December 1980 JCB meeting of the TDR in Geneva.

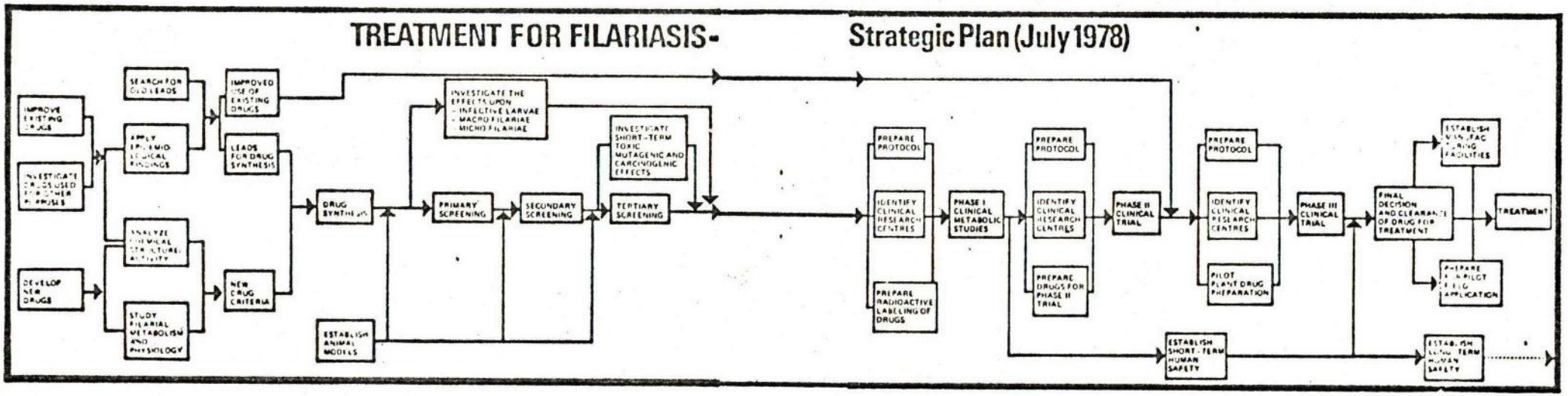
49. TDR would be the first program in the HRDG, CDD the second. As noted earlier (para. 27), the Bank has a pending request from the TDR/JCB for a financial contribution in CY80. This has received support from the Vice President, Operations and is awaiting review for allocation from FY80 net annual income. There are two major reasons why the Bank should allocate funds to support TDR. First, TDR progress to date reinforces the system's capacity to deliver products essential to Bank lending operations in the health sector. Second, future progress could be impeded by lack of Bank financial support because several major donors will interpret this as indicating doubtful value of TDR potential to meet its goals. This would seriously erode the amount of donor resources for TDR. For these reasons, it is proposed that the Bank make a financial contribution to TDR in CY80 at a level of 10 percent of the projected budget support of donors. The Bank contribution would be approximately US$2.0m. in CY80 and can be expected to require up to approximately US$3.5m. per annum in CY80 dollars at periods of maximum expenditure. The diarrheal disease control program would be reviewed for support as the second HRDG program in CY81.

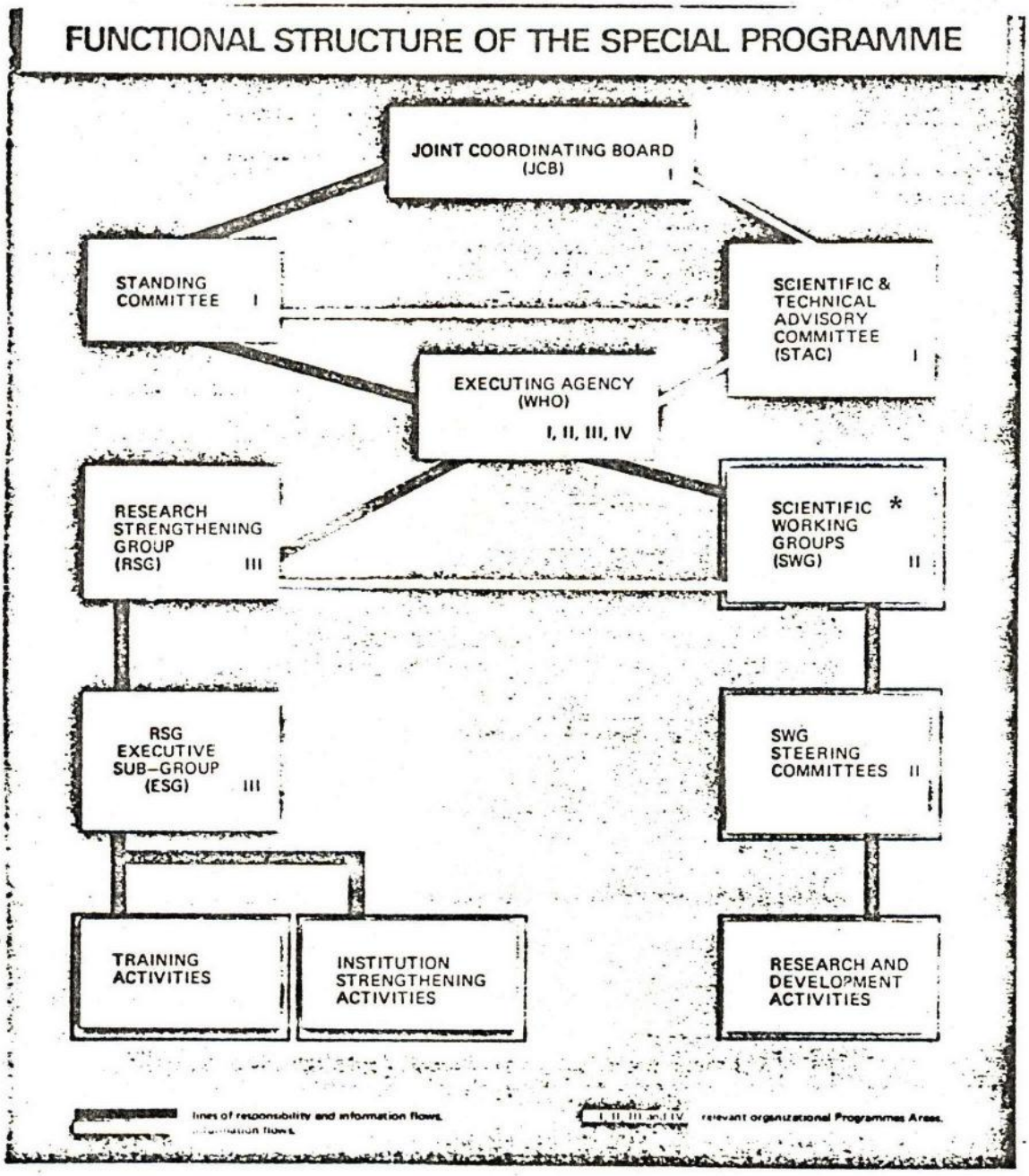
JREvans/AFonaroff:fo

March 10, 1980

Attachment 1

Each SWG develops its strategic plan against which individual projects are evaluated for priority and relevance. Below is the strategic plan of the SWG working on developing of new compounds for treatment of filariasis, including onchocerciasis.





* SWGs include:

Malaria
Schistosomiasis
Filariasis
African Trypanosomiasis
Chagas' Disease
Leishmaniasis
Leprosy
Biomedical Sciences
Vector Biology & Control
Epidemiology
Socio-economic Research

SPECIAL PROGRAMME MANAGEMENT SUMMARY

Functions		Mechanisms
General Areas	Specific Activities	
POLICIES AND PRIORITIES	Establish Special Programme policies	Joint Coordinating Board (JCB) aided by the Standing Committee
	Set Programme priorities	JCB on the recommendations of the Scientific and Technical Advisory Committee (STAC)
	Set Research Capability Strengthening priorities	STAC
	Set Research and Development priorities	STAC
	Set priorities within SWGs	Individual Scientific Working Groups (SWG) and their Steering Committees
PLANNING AND RE–PLANNING	Total Programme planning	Programme Director aided by Research Strengthening Group (RSG), SWGs, SWG Steering Committees and Secretariat Teams (HQ and Regional Office staff)
	Research Capability Strengthening planning	RSG aided by Executive Sub–Group and Secretariat Research Training Team
	SWG planning	SWG and SWG Steering Committee aided by Secretariat Team
	Project planning	National scientists, national institutions aided by RSG Executive Sub–Group, SWG Steering Committees and Secretariat Teams
ASSESSMENT	Assess projects for relevance	SWG Steering Committees, RSG or RSG Executive Sub-Group
	Assess projects for scientific quality	SWG Steering Committees, RSG or RSG Executive Sub-Committee aided by external "peers"

Functions		Mechanisms
General Areas	Specific Activities	
ETHICS	Establish guidelines	Director-General on the advice of the ACMR and Secretariat Committee on Research Involving Human Subjects (SCRIHS)
	Review projects	SCRIHS
APPROVAL	Approve Programme and Budget	JCB on the advice of STAC
	Approve projects	RSG and its Executive Sub-Group or SWG Steering Committees
CONTRACTS	Issue contracts	Programme Director (Executing Agency)
OBTAIN RESOURCES	Obtain financial resources for the Programme	Co-sponsors and Cooperating Parties
ALLOCATE RESOURCES	Allocate resources to the Programme Areas and individual SWGs	JCB on the advice of STAC (and Standing Committee for Programme Areas I and IV)
	Allocate resources to individual projects	Programme Director on the recommendation of the RSG and its Executive Sub-Group or the SWG Steering Committees
IMPLEMENTATION OPERATION AND MONITORING	Implement, operate and monitor the Programme	Programme Coordinator and Director
	Implement, operate and monitor individual projects	RSG and its Executive Sub-Group or SWG Steering Committees and their respective secretaries (secretariat)
EVALUATION	Evaluate the overall Programme	JCB aided by STAC
	Evaluate the overall Science and Technology	STAC
	Evaluate individual institution strengthening and training activities	RSG
	Evaluate individual SWGs	STAC
	Evaluate individual projects	SWG Steering Committees aided by external "peers"

ATTACHMENT 3

CONTRIBUTIONS TO THE SPECIAL PROGRAMME FOR RESEARCH AND TRAINING IN TROPICAL DISEASES AS AT 30 DECEMBER, 1979

(EXPRESSED IN US$ 1000)

Contributor	1973-1975	1976	1977	1978	1979	Pledges 1980
Multinational						
United Nations Development Programme (UNDP)	-	50	50	969	1 787	1 948
World Health Organization (WHO)	175	331	903	1 50	1 592	1 050
Total	175	381	953	2.470	3.379	2.998
Ba..s						
African Development Bank	-	-	-	-	250	250
Total	-	-	-	-	250	250
Foundations						
International Federation of Anti-Leprosy Associations	78	36	63	62	67	65
Japan Shipbuilding Industry Foundation	51	500	400	400	400	400
Lepers' Trust Board, New Zealand	-	-		10	7	10
WellcomeTrust, United Kingdom	25	-	-	-	—	—
Total	154	536	473	472	474	475

Contributor	1973-1975	1976	1977	1978	1979	Pledges 1980
Bilateral: Developing Countries						
Bahamas	.5	0.5	-	-	—	—
Cuba	—	—	—	—	2	2
Cyprus	-	-	0.2	-		
India	-	-	-	-	103	100
Iraq	5	-	-	-	—	—
Niger	-	-	-	2	2	2
Nigeria	-	80	81	81	80	80
Romania	-	2	-	-	—	—
Total	6	83	81	83	187	184
Bilateral: Developed Countries						
Australia	-	-	-	260	257	253
Austria	5	23	31		38	40
Belgium	64	272	-	1.533**	450	500
Canada	-	309	-	535	609	700
IDRC/Canada	75	491	178	63	-	-
Denmark	-	-	4.933	2.934	2.863	1.900
Finland	-	-	72	96	125	125
France	-	-	-	-	227	225
rmany, Federal Republic of	-	-	-	333	1.168	1.100
Netherlands	100	400	1 000	1.000	955	1,000
Norway	71	109	456	966	1.090	1.110
Sweden	805	404	1 351	1,928	2,530	2.530
Switzerland	-	102	422	554	747	750
United Kingdom	-	133	470	992	1.232	1.934*
United States of America/USAID	-	-	25	24	1.5	4.0
Total	1.120	2.243	8.838	11.323	13.791	16.157
GRAND TOTAL	1.455	3.243	10.345	14.348	18.081	20.064

* Includes final part of CY79 to be paid in CY80

** Includes 1977 contribution

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UNITED NATIONS DEVELOPMENT PROGRAMME

GLOBAL PROJECT

Title:	Diarrhoeal Diseases Control Programme - Research in Vaccine and Drug Development
Number:	GLO/78/005/A/01/14 Duration: Five years
Sector:	Health (25)
Sub-Sector:	Communicable Diseases Prevention and Control (2540)
Government Co-operating Agencies:	Ministries of Health and Education
Executing Agency:	World Health Organization (WHO)
Estimated Starting Date:	June 1979
Government Inputs:	n.a.

UNDP Contribution (Indicative Planning Figure, IPF): US$ 5,150,400

OPEC Special Fund Cost-Sharing Contribution:

Equipment	US$ 562,000	
Overhead	US$ 78,680	
TOTAL		US$ 640,680

Approved on behalf of the Executing Agency — 4 July 1979 Date

Approved on behalf of the United Nations Development Programme — 4 July 1979 Date

Part I. Legal context

Not applicable.

Part II. A. Development objectives

Diarrhoeal diseases top the list of killing diseases, not only taking the lives of millions of children in the developing world each year, but also retarding physical and mental growth and reducing the quality of life of those who survive by impairing their nutritional status.

Recent World Health Assemblies and Regional Committees and other forums have increasingly reflected the wide concern of national health administrations about the extent, severity and complexity of this problem, particularly in the developing countries. They have urged governments and WHO to develop further the global collaborative Programme on Diarrhoeal Diseases Control, in association with UNDP, UNICEF and the World Bank.

The present project for vaccine and drug development and related epidemiological studies is proposed as an essential component of the broader research programme designed to support the overall attack on diarrhoeal diseases which WHO has now launched. This project takes into account existing knowledge and aims at developing a research programme in vaccine and drug development, which will complement and support other ongoing preventive and control activities of WHO and UNICEF-supported programmes at the country level. The project is designed to promote development at the earliest possible date of vaccines and drugs for the prevention and control of several of the diarrhoeal diseases by placing resources at the disposal of researchers who give promise of contributing successfully to this goal-oriented research effort.

Part II. B. Immediate objectives

To improve and to develop appropriate intervention measures for reducing morbidity and mortality due to diarrhoeal diseases through (1) immunological research, vaccine development and related epidemiological studies; (2) pharmacological and pathophysiological research aimed at the development of new drugs for the treatment and prevention of diarrhoeal diseases.

Part II. C. Special considerations

The project will be of the highest social relevance as indicated in Part II.A. As research results emerge and field trials are initiated the sociological and other factors involved in application will require close attention.

Part II. D. Background and justification

1. In the past, the efforts of the world medical and scientific community in the field of diarrhoeal diseases have been mainly directed towards the control of cholera, typhoid fever and dysentery. It is only in recent years that the need to combat a number of other and even more prevalent diarrhoeal diseases, such as those caused by other enterotoxin-producing bacteria and rotaviruses, has been fully recognized and that these diseases have begun to receive some of the attention they deserve. It has been estimated that each year about 500 million episodes of acute diarrhoea occur in children below five years of age in Asia, Africa and Latin America, resulting in at least 5 million deaths. This is similar to the mortality rate from diarrhoeal diseases in industrialized countries at the end of the last century. More than one-third of the children's hospital beds in developing countries are occupied by diarrhoea patients who receive expensive antibiotics and intravenous fluids, thus putting a heavy load on the limited health budgets of those countries.

In many developing countries at least one-third of infant mortality can be attributed to diarrhoeal diseases and frequently these deaths are associated with malnutrition. Malnutrition increases susceptibility to, and the severity of, diarrhoeal disease. Moreover, diarrhoea is associated with diminished food intake and nutrient wastage leading to malnutrition, thereby creating a vicious circle.

Those living under the poorest socioeconomic and sanitary conditions suffer the highest attack rates from diarrhoeal disease and, amongst these, infants and children are the chief victims. Those who survive childhood are usually somewhat more resistant. High childhood mortality rates force parents to bear more children to replace their losses, thus counteracting family planning efforts to regulate birth rates.

2. Many developing countries now depend on tourism as a major source of national income. In countries where diarrhoea is prevalent, tourists and other newcomers to the area often suffer a higher attack rate from diarrhoeal disease than the residents of the area who have acquired some resistance. "Travellers' diarrhoea" is a well-recognized health hazard in many countries, and efforts to reduce its prevalence should be taken into account in the planning for overall economic development. Travellers' diarrhoea is caused by a number of different micro-organisms, probably varying from time to time and from country to country. More research is needed to determine the relative importance of different causes in different areas. Research efforts aimed at improving the treatment and prevention of travellers' diarrhoea could bring benefits to the developing countries in two ways: (a) the acquired knowledge about the causative organisms, as well as the modes of treatment and prevention of such diarrhoea, could be applied directly to the local residents, especially the children who, like the traveller, are immunologically naive; (b) since the fear of diarrhoea may limit the number of tourists to a particular region, any improvement in the health of travellers could result in a greater number of visitors. This greater influx of foreign currency would have a major economic impact, which would have a cascading beneficial effect in many sectors of the community.

3. Acute and often fatal diarrhoeal disease in livestock is frequently caused by micro-organisms closely related to those which afflict man. Outbreaks of these diseases amongst newborn calves, piglets, lambs and goats reduces herd size and hence available food protein. Research on diarrhoeal diseases of livestock has already contributed extensively to our understanding of the analogous diseases in humans. By the same token, better understanding of the mode of spread and development of immunity against these diseases in man may be applicable to their treatment and prevention in livestock.

4. WHO, in response to the concern of Member States, has recently intensified its efforts to evoke a greater awareness of the deleterious effects of the diarrhoeal diseases and to stimulate concerted action for their control. The WHO Advisory Committee on Medical Research[1] at its nineteenth meeting in 1977 reviewed recent advances and remaining gaps in knowledge and emphasized the need to strengthen research on diarrhoeal disease. The Sixth General Programme of Work of the Organization for the period 1978-1983 affirms that "the impetus given to cholera control should be extended through prophylactic, therapeutic and environmental health measures to the entire range of acute infections of the intestinal tract". In line with this objective, and in the context of the technical cooperation programme, the WHO Executive Board agreed that "in communicable disease control the development programme will be used to launch a major attack on diarrhoeal diseases".

In response to this mandate, a Technical Advisory Group (TAG) on Programme Development for Diarrhoeal Diseases Control was convened by WHO in May 1978. After screening the new knowledge, current activities and possible approaches, appropriate strategies were formulated for control of the acute diarrhoeal diseases. These include the promotion of oral rehydration and the setting up of national facilities for the production of oral rehydration packets; due attention to critical aspects of child care; improved water supply and sanitation; training of national health workers; and dissemination of information. The TAG also emphasized the great need for further research directed towards prevention and control. These research needs include: improvement of oral rehydration methods; development of anti-diarrhoeal drugs; vaccine development supported by further epidemiological and immunological studies; improvement of child care practices; and better methods for provision of safe water and sanitation facilities.

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[1] The Advisory Committee on Medical Research is composed of distinguished scientists who advise the Director-General, WHO, on matters of research in the health sciences.

The Programme for Diarrhoeal Diseases Control was endorsed by the Thirty-first World Health Assembly in May 1978 (resolution WHA31.44). This resolution, inter alia, included a request to the Director-General to accord high priority to research activities for the further development of simple, effective and inexpensive methods and strategies for treatment, prevention and control of diarrhoeal diseases in areas with different kinds of health service facilities. The resolution invited UNICEF's continuing support in the fight against diarrhoeal diseases and looked forward to key contributions by governments, UNDP, UNFPA and the World Bank.

Further, the World Bank/UNDP/PAHO sponsored international conference on the Diarrhoea of Travellers late in 1976, defined opportunities for exploiting recent research breakthroughs in Escherichia coli and rotavirus diarrhoeas.

5. It should also be noted that the WHO Global and Regional Advisory Committees on Medical Research in five of the six WHO regions have given priority to diarrhoeal diseases research, and are helping to identify local institutions and scientists who are capable of undertaking this kind of work within the overall priorities of the Programme.

6. A major thrust of the overall WHO Programme for Diarrhoeal Diseases Control is to strengthen the capabilities of national health services of applying existing knowledge about the treatment and prevention of diarrhoeal diseases to their own national programmes of primary health care. To date, some 55 countries have started diarrhoeal disease control programmes with WHO and UNICEF collaboration. Continued research is needed to improve strategies for national control programmes.

7. During the last 10-15 years, basic research in physiology, microbiology and immunology has yielded a fundamental understanding of the disease mechanisms which has in turn brought about major improvements in treatment and prevention. For example, basic research on intestinal absorption and secretion of sugar, water and salts was the essential precursor of the development of the highly successful oral rehydration therapy for diarrhoea which has already saved millions of lives. Basic electron microscopic and microbiological studies of the surface hairs, or pili, on certain diarrhoea-producing bacteria have led to an understanding of their role in causing these bacteria to adhere to the intestinal wall, and have further led to the development of a successful vaccine for the prevention of diarrhoea caused by E. coli in calves. Basic virological research led to the discovery of rotaviruses which have proved to be a major cause of infantile diarrhoea in both temperate and tropical zones. Environmental research has shown that the provision of safe drinking-water supplies alone is not sufficient to prevent acute diarrhoeal diseases. These are only a few examples of the incalculable contributions made by basic and applied research in diarrhoeal diseases during recent years. Of even greater importance, a number of the most recent basic discoveries have still not emerged from the laboratory stage of their development, and many of these hold excellent promise of being translated into practical control measures in the near future if opportunities are provided for investigators to bridge the gap between the basic findings and the application to a health-directed goal.

8. The research areas of vaccine and drug development have been selected for the present project for the following reasons:

(a) Vaccine development

While it is recognized that clean water supplies and safe disposal of human sewage would bring about a dramatic reduction in human diarrhoeal disease, it must also be recognized that these two fundamental developments cannot be realized in many areas for many decades. Therefore, the health and economic consequences of exposure to the diarrhoea-producing organisms will continue unabated. If existing vaccines could be improved and new effective vaccines developed, these would be important components of any national diarrhoeal disease control programmes. For example, the vaccine that is at present available against cholera has only limited effectiveness for a short duration.

New knowledge of immune mechanisms in the human bowel and of the genetics of the causative microbes has now made it much more likely that substantial improvements can be made in the efficacy of cholera vaccines. Perhaps of even greater importance, it may now be possible to develop new vaccines against rotaviruses and enterotoxinogenic E. coli, which together account for 60-70% of diarrhoeas in infants and young children in the developing countries. There is hope, especially from recent results in veterinary research, that such vaccines can be developed in the near future.

In order better to determine the population and age groups at highest risk of disease due to these various etiological agents, careful field epidemiological studies must be carried out in the different geographical regions where they are prevalent. This knowledge will be required in order to determine which segments of the population will benefit from vaccines and how the most effective vaccine programmes can be developed. Such information will be critical, for example, to determine whether it would be efficacious to provide vaccines to mothers to provide protection for nursing infants by way of antibodies in breast milk.

(b) Drug development

Oral rehydration therapy using a glucose and electrolyte solution is a safe and effective means of treatment and prevention of dehydration in diarrhoeal diseases. However, in the most severely affected patients, especially those with cholera, purging occurs at such a high rate that intravenous replacement of fluid is essential for survival. Thus the development of new pharmacological agents that could decrease the rate of fluid loss in severe diarrhoeal illnesses by reversing the secretory process in the small intestine would provide a valuable adjunct to treatment, especially in developing countries where intravenous rehydration is often unavailable. The diseases that would be most amenable to such agents are cholera and other enterotoxin-mediated, secretory (non-invasive) diarrhoeas. Promising results have already been seen with one such antisecretory drug, chlorpromazine, in patients with severe cholera.

In the initial stages of very severe cholera or E. coli diarrhoea and in rotavirus diarrhoea, nausea and vomiting may limit the intake of oral rehydration fluid and increase the need for intravenous therapy and the risk of fatal outcome. This complication could be avoided by the development of suitable anti-emetic drugs. It is also known that the incidence of diarrhoeal disease is especially high in family contacts of index cases with certain types of enteric infections and in visitors from low- to high-prevalence areas (travellers' diarrhoea); thus the identification of suitable prophylactic agents of a type not promoting drug resistance could markedly reduce the risk of contracting diarrhoea in these persons.

There is a need to test currently available anti-diarrhoea drugs (e.g. paragoric, diphenoxylate and loperamide) for their efficacy in acute infectious diarrhoea. These drugs may have an effect on intestinal secretion, in addition to their action on motility. A drug-testing programme could provide a vehicle for interaction between those doing research and the pharmaceutical industry, in order to evaluate new candidate drugs as they become available.

Part II. E. Outputs

1. New and improved vaccines for the prevention of diarrhoeal diseases and guidelines for their use:

- Epidemiological data defining the distribution and relative importance of each of the major microbial pathogens as causes of morbidity and mortality in representative geographical regions.

- Better laboratory methods for quick identification and characterization of these microbial agents, and for determining the immune response to the major pathogenic factors in each of the agents.

- New immunizing agents arising from epidemiological, immunological and genetic research followed by their evaluation in volunteers and controlled field trials.

2. Appropriate drugs for improved treatment of diarrhoeal diseases:

- New anti-diarrhoeal drugs that could block or reverse the intestinal secretory process, based on pathophysiological studies of the various diarrhoeal diseases in animal models and clinical trials.

- New anti-emetic drugs that could reduce nausea and vomiting in diarrhoeal diseases, based upon pharmacological research and clinical studies.

- Better prophylactic drugs for diarrhoeal diseases.

Part II. F. Activities

This project started with preparatory assistance from UNDP in 1979 and collaboration with the World Bank. The activities described in the following sections indicate the total scope of research objectives in vaccine and drug development. Through the mechanisms described in Part II.K of this proposal, the project will focus on selected research targets and opportunities within a pattern of priorities evolved and refined over the period of the project.

1. Immunology and vaccine development

1.1 Toxin-mediated diarrhoea (such as enterotoxinogenic E. coli (ETEC) diarrhoea and cholera)

It is recognized that the research included in this section applies especially to studies of ETEC and Vibrio cholerae but also will include studies of any enterotoxin-producing organism that causes diarrhoea.

1.1.1 Protective immune mechanisms and protective antigens

1.1.1.1 There is a need for better definition of the precise bacterial somatic structures, such as those involved in colonization, and extracellular products, such as toxins, that are important in pathogenesis and acquired immunity. This knowledge is basic to rational development of new vaccines.

1.1.1.2 Tools should be developed for the detection of antibody in serum as well as intestinal fluid against the structures or products of these organisms that play a role in pathogenesis. These would include assays of antibodies to various factors involved in bacterial colonization, multiplication and pathogenesis (e.g. toxins) in situ.

1.1.1.3 The natural course of clinical disease in toxin-mediated diarrhoeas should be determined by epidemiological studies and in volunteers. Of particular interest is the magnitude and duration of protective immunity to both the homologous as well as heterologous organisms (for example, does immunity to cholera confer resistance to ETEC diarrhoea?). The effect of the magnitude and duration of priming of the mucosal immune system on secondary immune responses should also be studied.

1.1.2 Methods for stimulation of mucosal immunity

1.1.2.1 Studies can be undertaken to determine the best method of initiating a protective mucosal immune response, including evaluation of various antigen forms; routes of administration and adjuvants; and of prolonging both the immune response and the memory for response to booster.

1.1.2.2 Studies are required to define practical ways of measuring mucosal immunity. Such studies should include examination of extra-intestinal secretions such as saliva and breast milk to determine whether they reflect intestinal immunity. This is important in relation to the prospect of immunizing nursing mothers against infantile diarrhoea.

1.1.2.3 Immune responses in different populations should be investigated. This includes comparisons between persons in endemic and non-endemic areas as well as an assessment of the influence of age, nutritional status, genetic factors and concurrent infections.

1.1.3 Development of animal models

There is a great need for more satisfactory animal models than those currently available for studies of pathogenesis and protective immunity in the toxin-mediated diarrhoeas. These models should simulate as much as possible intestinal infections in humans by utilizing an intact, non-ligated bowel in an appropriate animal.

1.1.4 Immunizing agents

1.1.4.1 Systems of genetic and biological analysis should be applied to diarrhoea-producing organisms to provide a detailed understanding of factors associated with virulence and protection. Application of this knowledge can facilitate the rational identification of antigens that should be included in vaccines.

1.1.4.2 New and improved immunogens should be developed; these should include the following:

(a) Non-living immunogens, such as whole-cell vaccines; crude extracellular products and purified somatic or extracellular products such as lipopolysaccharide; toxin-derived antigens; and colonization factors or pili.

(b) Living vaccines, consisting either of naturally-occurring non-pathogenic strains, laboratory-produced mutants or hybrid strains. Candidate live vaccine strains should have selective genetic markers to allow for their differentiation from wild-type strains.

The recent demonstration that purified pili preparations from E. coli can protect against ETEC diarrhoea in livestock (pigs and calves) illustrates that surface antigens, not derived from enterotoxins, may serve as highly effective vaccines against toxin-mediated diarrhoea. It is important to recognize that similar, but as yet unidentified, surface factors that are necessary for colonization of cholera vibrios may be equally important in establishing acquired resistance to cholera.

There is a need for continued evaluation of the synergy between two or more immunogens in experimental animals and in volunteers. Such studies would facilitate the development of combined non-living vaccines (e.g. vaccines against cholera or ETEC diarrhoea containing both somatic antigens such as pili and toxin-derived antigens such as B subunits) as well as identification of the antigens that will be required in live vaccines.

1.2 Viral diarrhoeas

1.2.1 The mechanism of fluid and electrolyte loss in any of the viral diarrhoeas has not been established. This area should receive study as such information may be helpful in developing and assessing the efficacy of immunizing agents.

1.2.2 Rotavirus diarrhoea

1.2.2.1 To determine the antigenic components required for a rotavirus vaccine, studies are needed to establish the number of serotypes, the occurrence of minor antigenic differences, and the importance of these antigenic differences in pathogenesis and acquired immunity.

1.2.2.2 Since human rotaviruses cannot now be grown to sufficiently high titre for use in vaccine development, high priority should be given to the development of more efficient propagation methods.

1.2.2.3 Although intestinal IgA antibody against rotavirus is of known prime importance in preventing disease, additional studies are needed to determine the duration of protection and to develop methods for enhancing the immune response. Studies of antibody levels in secretions such as saliva and breast milk are required to determine whether these levels reflect the antibody content of small intestinal fluid.

1.2.2.4 In a disease in which local intestinal antibody plays such an important role in resistance, the low rate of illness in infected neonates is difficult to explain. The mechanism of such resistance requires study.

1.2.2.5 Since passive administration of rotavirus antibody by the alimentary route has resulted in resistance to challenge in various animal models, studies in humans on the effect of oral administration of human rotavirus antibody should be considered. Another approach may be the oral administration of cow's "immune milk" (containing antibody to rotavirus).

1.2.2.6 An animal in which disease could be induced beyond the early period of life should be sought. This would be important for the study of the safety and efficacy of candidate rotavirus vaccines.

1.2.3 Norwalk group

1.2.3.1 These viral agents cause diarrhoea in older children and adults. Efforts should be made to develop animal models for the study of illness caused by these agents.

1.2.3.2 These agents fail to evoke long-term immunity in volunteers. This observation may have important implications for understanding the basic general mechanisms of local intestinal immunity and requires investigation.

1.2.4 Other viral agents

Studies should be done to characterize and determine the importance of other viral agents that may be associated with viral gastroenteritis (e.g. astrovirus, calicivirus).

1.3 Shigella vaccines

1.3.1 Live oral vaccines

Colonization of the intestinal mucosa followed by penetration of and multiplication within intestinal epithelial cells are necessary steps in the pathogenesis of Shigella dysentery. These events are also probably required to confer resistance to challenge. Currently available attenuated vaccine strains do not penetrate epithelial cells. Perhaps, by application of genetic techniques, strains could be developed which do not penetrate, and therefore do not produce disease, but which can colonize the mucosal surface of the bowel to produce enough antigenic stimulus for protection.

1.3.2 All Shigella species have been shown to produce an enterotoxin. The importance of enterotoxin in the pathogenesis of shigellosis needs to be elucidated.

1.3.3 Studies should be carried out to define the duration of immunity in the natural disease and in volunteers.

1.4 Genetic studies

There is every reason to believe that recent advances in microbial genetics and DNA biochemistry can be applied to the practical problems of enteric vaccine development; this will require an appreciation of both the potential usefulness and limitations of the genetic approach. Genetic studies should include:

1.4.1 Identification and characterization of a better selection of bacterial strains which can serve as donors and recipients of plasmids and bacteriophages; this will facilitate study of the genetic determinants of pathogenesis in the diarrhoea-producing bacteria.

1.4.2 Better characterization of enterotoxin plasmids from the enterotoxinogenic E. coli (ETEC) of man and their relationship to those plasmids found in E. coli which cause diarrhoea in animals.

1.4.3 Investigation of the nature and genetic basis (whether chromosomal or extrachromosomal) of colonization of the bowel mucosa by toxinogenic organisms and other enteric pathogens.

1.5 Identification of facilities for vaccine testing in endemic and non-endemic areas

Certain questions concerning pathogenesis and immunity in the infectious diarrhoeas can be answered only in carefully controlled studies in volunteers. Thus there is a need for the identification of suitable facilities in endemic and non-endemic areas. Such facilities should provide the possibility for studying:

- the response to oral challenge with living bacterial and viral pathogens in order to define the natural course of disease;

- the immune response;

- the protective value of candidate vaccines.

In all of these studies the highest ethical standards must be followed with regard to selecting volunteers and informing them of the nature of the study and of their rights. Volunteer study centres should be operated under the direction of local investigators. The protocols should be reviewed by national and WHO ethical review committees composed of individuals not directly involved in the project. Written informed consent documents must be utilized, which are drafted in simple terms that can be understood by the volunteer.

1.6 Epidemiological studies

Studies of the epidemiology of diarrhoeal disease in representative regions need to be carried out in order to define specific needs and use for these vaccines. The studies should include the determination of groups at highest risk of disease and an assessment of the relative importance of various pathogenic agents. The micro-organisms that should be investigated are the pathogenic vibrios (V. cholerae, non-cholera vibrios, V. parahaemolyticus), enterotoxinogenic E. coli (ETEC), classical enteropathogenic E. coli, invasive E. coli, other toxin-producing bacteria, Shigella, Salmonella, Yersinia, Campylobacter, rotavirus and other viral diarrhoea agents, and the diarrhoea-producing protozoa.

2. Pharmacological development

2.1 Antisecretory drugs

Such drugs should ideally: (1) have a large margin of safety; (2) be inexpensive; (3) not only prevent but, more importantly, reverse established hypersecretory processes in the bowel; and (4) be effective by both parenteral and oral routes.

The following research activities would promote the development of such drugs:

2.1.1 Pilot trials of the most promising inhibitors of enterotoxin-induced intestinal secretion (e.g. chlorpromazine, nicotinic acid, salicylates and indomethacin). Initial trials should first be done in toxin-mediated diarrhoeas since these drugs have proved to be effective in animal studies (chlorpromazine has recently been shown to reduce intestinal fluid losses in a preliminary trial in cholera patients). These trials should study effectiveness; toxicity; dose-route-response relationships; and the feasibility of combining these drugs with oral rehydration treatment.

2.1.2 Expansion of the search for additional pharmacological agents with antisecretory activities, with the aims of improving the therapy of diarrhoeal disease and obtaining a better understanding of the intestinal secretory mechanism.

2.1.3 Determination of whether antisecretory drugs are effective against only one class of enterotoxins (such as those produced by V. cholerae and ETEC) or whether they have a broader spectrum including heat-stable toxins, and Shigella and Salmonella enterotoxins, as well as invasive diarrhoea caused by rotaviruses or salmonellae.

2.1.4 Determination of whether a combination of two antisecretory agents - e.g. chlorpromazine and nicotinic acid - increases the magnitude or spectrum of their activity.

2.1.5 Continuation of basic studies of the physiology of secretion and absorption in the small intestine and colon, in relation to the various kinds of pathogenic mechanisms seen in the infectious diarrhoeal diseases. Until these processes are well understood, the search for antisecretory agents and improvement of the therapy of diarrhoea will, of necessity, be empiric.

2.2 Anti-emetic drugs

2.2.1 Controlled trials of available anti-emetic drugs in diarrhoeal diseases of various etiologies are needed. It is notable that certain drugs like chlorpromazine have both anti-emetic and antisecretory activities.

2.2.2 Studies are required to clarify the basic mechanisms of nausea and vomiting in severe secretory and invasive diarrhoeas, and to identify microbial products that contribute to these symptoms.

2.3 Absorption-promoting drugs

2.3.1 There is a need to study the physiology of the colon in diarrhoeal disease. Information is especially needed about the absorptive function of the colon in infancy and early childhood.

2.3.2 The search should be continued for drugs that enhance absorption in either the small intestine or colon. This should include investigations with naturally-occurring substances such as carbohydrates (other than glucose), amino acids, etc.

2.3.3 Investigations should be done to determine the action of narcotics and their analogues (e.g. diphenoxylate) on intestinal secretion and absorption. Such an effect should be evaluated against the consequences of prolonged carriage of pathogens in the gut, as well as toxic side-effects.

2.4 Antimicrobial agents

2.4.1 Antimicrobial agents are of proven benefit in the treatment of bacillary dysentery, typhoid fever, amoebiasis and severe cholera. There should especially be evaluation of the efficacy of antibiotics in the treatment of ETEC and EPEC diarrhoea. Clinical investigations should also be directed at improved management of the haemolytic uraemic syndrome of bacillary dysentery which is often fatal and has not been proved to benefit from antibiotic therapy.

2.4.2 Prophylactic use of antimicrobial agents in the prevention of diarrhoeal disease is a controversial issue. Although controlled studies have demonstrated that certain drugs can reduce the incidence of diarrhoea in travellers and in family contacts, there are major risks which must be considered, such as the promotion of antimicrobial resistance in various intestinal bacteria including the pathogens; alteration of intestinal flora; and drug toxicity. Careful studies should be carried out to determine in which situations, and for which pathogens, antimicrobial prophylaxis might be used to reduce severe disease or deaths from diarrhoeal disease. The risks associated with antimicrobial prophylaxis should also be defined so that appropriate recommendations can be made concerning their usage.

2.5 Other anti-diarrhoeal drugs

There may be a role for the use of other pharmacological agents in the treatment or prevention of diarrhoea which is independent of their effect on hypersecretion.

2.5.1 Nonspecific adsorbents like charcoal, kaolin and pectin, which are commonly used for the treatment of diarrhoea, are worthy of carefully designed clinical trials. Such drugs could have selective abilities to bind certain organisms or their virulence factors, such as toxins.

2.5.2 GM1 ganglioside specifically binds cholera toxin as well as E. coli heat-labile toxin. GM1 coupled with charcoal (to prevent cell uptake of ganglioside) should be evaluated as a prophylactic and/or therapeutic measure against cholera and ETEC diarrhoea. There should also be a search for other specific receptors for the toxins of other diarrhoeal pathogens.

2.5.3 Cholera B subunit can prevent experimental cholera in animals by blocking the intestinal GM1 receptors for the toxin. Oral administration of purified B subunit may thus provide immediate protection against cholera by receptor blockage, and stimulate a protective mucosal immune response. This could be evaluated in close contacts of cholera patients.

2.5.4 Basic studies of virulence factors and pathogenic mechanisms could lead to the identification of "target events" susceptible to drug interference. Such investigations could provide a basis for the development of specific adsorbents for enteropathogens or their virulence factors.

2.6 Facilities for clinical trials

Facilities for conducting clinical trials of drugs for treatment of diarrhoea should be identified and strengthened. These facilities should develop the capacity for careful clinical investigation of the natural history of the diseases under study and for the design and execution of controlled trials. Details concerning the ethical considerations relating to clinical investigation are the same as set forth in 1.5 for vaccine development.

Part II. G. Inputs

The provision is to be used by WHO as Executing Agency for the implementation of this research component of the Diarrhoeal Disease Control Programme in accordance with the policies, priorities and plans formulated and endorsed by the WHO Advisory Committee on Medical Research,[1] the WHO Scientific Working Groups (SWGs) in these disciplines,[2,3,4] and the WHO Technical Advisory Group (TAG) for this Programme.[5]

The project will be using the services and facilities of the Executing Agency at the global, regional and country level for executing and coordinating the research programme. The project will develop collaboration in specific laboratory and field aspects of the research work with selected institutions in the scientific community and with the pharmaceutical industry, and will be carried out in developed and developing countries. The project will make arrangements for the exchange of research workers in diarrhoeal diseases between institutions in different countries to enable them to exchange research experience and develop research potential. Collaboration and linkage between institutions in the developed and developing countries for vaccine and drug development and their evaluation will be developed. Appropriate contractual arrangements will be made by the Executing Agency in consultation as necessary, with the TAG, the SWGs and the WHO Expert Advisory Panel on Acute Diarrhoeal Diseases and other Enteric Infections.

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[1] New knowledge and research needs in the control of acute diarrhoeal diseases, WHO unpublished document BAC/DDC/78.1.

[2] Immunity and vaccine development - Report of a Scientific Working Group (Geneva, 14-16 August 1978), WHO unpublished document WHO/DDC/78.2.

[3] Clinical management including drug development - Report of a Scientific Working Group (New Delhi, 30 October - 2 November 1978), in preparation.

[4] Escherichia coli diarrhoea - Report of a Scientific Working Subgroup (Copenhagen, 15-16 January 1979), in preparation.

[5] Development of a programme for diarrhoeal diseases control - Report of an Advisory Group (Geneva, 2-5 May 1978), WHO unpublished document WHO/DDC/78.1.

International Centre for Diarrhoeal Diseases Research, Bangladesh

In addition, UNDP support in the amount of US$ 1.5 million will be provided over the years 1979-1983 to the International Centre for Diarrhoeal Diseases Research, Bangladesh. This Institute, formerly the Cholera Research Laboratory, is expanding its activities in diarrhoeal diseases. The amount allotted under the subcontract is not limited in its use to the areas defined in the project but may be used in support of the other Institute's activities in diarrhoeal diseases. Subcontract arrangements will be made and a mechanism will be worked out for allotment of the money to the Institute which will take into account the responsibilities of WHO as the Executing Agency.2/

Part II. H. Preparation of work plan

See Annex.

Part II. I. Not applicable.

Part II. J. Development support communication

Not applicable.

Part II. K. Institutional framework

The project will promote, support and evaluate research in vaccine and drug development and related immunological and epidemiological activities. WHO will act as Executing Agency on behalf of UNDP, with the collaboration of the World Bank. The project will constitute part of the overall WHO Diarrhoeal Disease Control Programme and, as such, the overall guidance and monitoring of progress for the project will be exercised by the Programme's Technical Advisory Group (TAG). The TAG is composed of specialists from the developed and developing countries representing various fields of public health, communicable diseases and research administration with specific interest and experience in various aspects of diarrhoeal diseases control and research. It meets at least once a year to review the entire scope of the WHO Programme and to present progress reports to the Executing Agency and the Programme sponsors, and, in turn, to Member States.

The mechanism that will be used for support and guidance of the research activities under this project will be that of the WHO Diarrhoeal Disease Control Programme, operating within the policy and framework of the Sixth General Programme of Work for the period 1978-1983, the Global and Regional Advisory Committees on Medical Research and their subcommittees on Diarrhoeal Diseases, and the governing bodies of the Organization. The mechanism directly related to the project is the following:

Scientific Working Groups (SWGs) - In the WHO Programme there are five SWGs in the fields of: (1) immunology and vaccine development; (2) clinical management including drug development; (3) epidemiology and etiology; (4) child care practices related to diarrhoea; and (5) improvement of water supply and sanitation. Each SWG is composed of up to 10 experts in each of these five research areas. The membership of the SWGs is not fixed. The first three of these SWGs will be concerned with this project. Subgroups at present exist for the SWG on epidemiology and etiology, and it is anticipated that subgroups in other areas will be formed as needed. The SWGs and subgroups of the Programme will meet as necessary to review recently acquired knowledge, recommend priority areas of research, and review research proposals.

WHO Expert Advisory Panels - The Organization has a number of panels made up of experts in different disciplines. The Diarrhoeal Disease Control Programme utilizes the services of members of related panels, which in the case of this project are: Acute Diarrhoeal Diseases and other Enteric Infections, International Pharmacopoeia and Pharmaceutical Preparations, Immunology, International Surveillance of Communicable Diseases and Health Laboratory Services.

2/ The cost-sharing contribution to the Centre from the OPEC Special Fund will be used as follows: US$500,000 for construction of buildings for a Clinical Research Unit; and US$62,000 for research equipment for the Unit.

The process used for review of research proposals for funding under the project will be that of the WHO Diarrhoeal Disease Control Programme and will involve the existing WHO mechanism of research promotion and ethical review. Proposals will be screened by the Secretariat of the WHO Diarrhoeal Disease Control Programme for their relevance. Those acceptable will be referred for an objective evaluation to members of a Scientific Review Committee composed of from five to 10 members drawn from the SWGs most closely related to the proposals under review. This Committee may be augmented, at the discretion of the Secretariat, by members of the expert panels or other outside experts, as appropriate. This Review Committee will evaluate and rank all proposals in accordance with the research activities set forth in this project and advise the Secretariat concerning priorities for funding. Proposals may also be sent for evaluation to members of SWGs or otherwise who will not be members of the Review Committee but whose evaluations will be considered at the meeting of the Scientific Review Committee.

The three sponsoring agencies for this project (UNDP, the World Bank, WHO) will form a Standing Committee to advise on and facilitate the orderly development and management of the project and will meet at regular intervals.

The continuing technical and administrative management of the project will be the responsibility of the Executing Agency Secretariat, which will also serve the TAG, SWGs, and the Standing Committee.

The project during its initial stage of implementation will arrange for the involvement of the pharmaceutical industry. It is recognized that the pharmaceutical industry has a key role in the Programme, not only in the development, manufacture and distribution of any products that emerge, but also in the research phases. The appropriate means of most effectively involving industry in WHO programmes will be established.

While WHO has had beneficial collaboration with industry, especially in the Human Reproduction Programme and the Special Programme for Research and Training in Tropical Diseases, some problems remain, as, for example, the development of policy as it relates to patents and pricing and the speed of response to research proposals.

Discussions will be initiated with industry, both with individual corporations and with representatives of the pharmaceutical industry as a whole, to exchange information and identify possibilities for research and other collaboration. One point of contact would be with the recently constituted International Association of Biological Manufacturers. It is recognized that a major activity by which the WHO Programme could encourage pharmaceutical industry participation is the development and improvement of facilities for clinical research so that new methods of treatment or prophylaxis could be rapidly and critically evaluated.

Part II. L. Prior obligations and prerequisites

Not applicable.

Part II. M. Future UNDP assistance

The UNDP inputs for the research components of this project for the next five years will contribute significantly to developing and supporting several of the activities envisaged; however, additional UNDP assistance and voluntary contributions from bilateral and multilateral sources will be needed as considerable funds will be required to further support research.

Part III. Schedules and monitoring, evaluation and reports

The research components of the project will be periodically reviewed and evaluated as described in Part II.K.

An annual report will be prepared, together with a terminal report, in line with UNDP requirements. Special reports may also be produced as required.

Future UNDP assistance will be reviewed between UNDP and the Executing Agency and other interested parties in 1981 (mid-term review) and again in 1983.

Project Budget Covering the UNDP and the OPEC Special Fund Cost-Sharing Contribution

Country: GLOBAL

Project No.: GLO/78/005/A/01/14

Title: Diarrhoeal Diseases Control Programme - Research in Vaccine and Drug Development

		Total	1979	1980	1981	1982	1983
		US$	US$	US$	US$	US$	US$
19.	Personnel	650,400	76,700	140,500	141,500	144,400	147,300
29.	Sub-Contract	5,062,000*	1,112,000	1,050,000	900,000	1,000,000	1,000,000
99.	Grand total	5,712,400	1,188,700	1,190,500	1,041,500	1,144,400	1,147,300
101.	Cost-Sharing	562,000	562,000	-	-	-	-
102.	Total UNDP Contribution	5,150,400	626,700	1,190,500	1,041,500	1,144,400	1,147,300

* This amount includes US$ 1.5 million earmarked for the International Centre for Diarrhoeal Diseases Research, Bangladesh for research purposes; $500,000 for construction of buildings for the Clinical Research Unit; and $62,000 for purchase of equipment for the Unit.

OPEC Special Fund Cost-Sharing Contribution

Country: GLOBAL

Project No.: GLO/78/005/A/25/14

Title: Diarrhoeal Diseases Control Programme - Research in Vaccine and Drug Development

	Total	1979
	US$	US$
Cost-sharing (line 101)	562,000	562,000
Overhead on Cost-sharing	78,680	78,680
Total Cost-sharing Contribution	640,680	640,680

Upon signature of the Project Document, the OPEC Special Fund will make an initial payment which will thereafter be replenished upon submission by UNDP of satisfactory evidence of disbursements made, and in accordance with the above project budget.

TIMETABLE FOR PROJECT DEVELOPMENT

The activities listed immediately below have been completed or are in the process of completion:

Activity	Date completed
SWG on Immunity and Vaccine Development	14-16 August 1978
SWG on Clinical Management including Drug Development	30 October - 3 November 1978
SWSG on E. coli Diarrhoea	15-16 January 1979
UNDP/World Bank/WHO collaboration to develop a project on Vaccine and Drug Development Research for submission to UNDP Governing Council	8-14 February 1979
SWSG on Rotavirus Diarrhoea	27-28 March 1979

The following activities are expected to be completed within the time intervals shown:

Activity	Estimated completion time
Review and expand, as needed, membership of SWGs	Mid-June 1979
Constitute the SRC by selecting appropriate representatives from the SWGs	1 July 1979
Establish priority areas of research as guidance to potential investigators with the help of consultants	31 July 1979
Extend first invitation for grant applications	August 1979
Convening SWSG on cholera	September 1979
Complete initial grant review process and notify applicants of status	December 1979
Convene SWG on Epidemiology and Etiology	Autumn 1979

The following timetable will serve to guide the early involvement of the pharmaceutical industry and research institutions in the project:

Activity	Estimated date
Initiate consultations and visits with pharmaceutical firms and research institutions	April 1979
Convene meeting of interested pharmaceutical films to define potential collaborative research and related vaccine/drug development activities	December 1979

Annex

The activities described in this section indicate the scope of research objectives in vaccine and drug development. Through the mechanisms described earlier (Part II, K) the project will focus on selected research targets and opportunities within a pattern of priorities.

The principal objectives to be served within the context of this limited proposal are the support, encouragement and realization of promising breakthroughs in a few selected areas made possible largely through the results of previous and/or ongoing researches. In this connexion, the role of the pharmaceutical industry is seen as being especially important in achieving early development of efficacious products with other scientific institutions.

1. Vaccine development

1.1 Development of immunizing agents against cholera

1.1.1 Evaluation of well-defined bacterial components or products as protective immunogens in animals and volunteers:

(a) subunits of the enterotoxin;

(b) bacterial surface antigens such as LPS and adherence factors;

(c) flagellar components.

1.1.2 Evaluation of combined antigens as practical immunogens (e.g. whole-cell vaccine and toxoid).

1.1.3 Evaluation of naturally occurring non-toxinogenic strains as live vaccines in animals.

1.1.4 Development and evaluation of laboratory-induced mutants as live vaccine candidates:

(a) non-toxinogenic strains;

(b) strains producing selected subunits.

1.2 Development and evaluation of enterotoxinogenic E. coli vaccines

1.2.1 Evaluation of the importance of antitoxic immunity in resistance in animals and volunteers.

1.2.2 Identification of bacterial colonization factors and evaluation of their protective immunogenicity alone and in combinations.

1.2.3 Search for and evaluation of candidate live E. coli vaccines.

1.2.4 Development of a simple and rapid diagnostic test for enterotoxinogenic E. coli.

1.3 Development and evaluation of vaccines against other toxin-producing organisms

1.3.1 Assessment of the role of enterotoxin in pathogenesis.

1.3.2 Identification of other putative protective antigens.

1.3.3 Evaluation of immunogens in protection.

1.4 Development of rotavirus vaccine

1.4.1 Studies of pathogenesis and pathophysiology of rotavirus diarrhoea.

1.4.2 Development of methods for large-scale production of human rotaviruses in cell culture.

1.4.3 Development of animal models for the study of rotavirus disease.

1.4.4 Elaboration of serotypes and antigenic variations.

1.4.5 Development and testing of candidate rotavirus vaccine.

1.5 Development and evaluation of vaccines against Shigella

1.5.1 Study of the role of enterotoxins in the pathogenesis of shigellosis.

1.5.2 Evaluation of the importance of antitoxic immunity in shigellosis.

1.5.3 Study of mechanisms of acquired resistance in shigellosis.

1.5.4 Development of oral vaccine based on findings derived from above studies.

1.6 Gut-associated immunity

1.6.1 Basic studies of gut-associated immune mechanisms in animals.

1.6.2 Studies to assess the measurement of antibodies in milk and saliva as a means of estimating immunity in the intestinal mucosa.

1.6.3 Studies of the local immune response in patients and volunteers with cholera, E. coli diarrhoea and other enteric infections.

1.6.4 Studies in humans of secretory IgA antibody responses to defined immunogens administered by different routes.

1.7 Epidemiological studies to determine the distribution of the major causes of diarrhoeal diseases and their microbial agents

2. Drug development

2.1 Antisecretory agents

2.1.1 Clinical trials of promising agents, such as chlorpromazine, and the anti-inflammatory agents.

2.1.2 Search for new drugs and their assessment in animals and volunteers.

2.1.3 Basic studies of intestinal secretion.

2.2 Anti-emetic drugs

2.2.1 Controlled trials of available drugs.

2.2.2 Basic studies of the pathogenesis of vomiting.

Annex

2.3 Absorption-promoting drugs

2.3.1 Studies on function of the colon in diarrhoeal disease.

2.3.2 Search for drugs that could promote absorption in the small intestine and colon.

2.4 Antibiotics

2.4.1 Evaluation of their therapeutic efficacy in E. coli diarrhoea, and diarrhoea caused by other specific agents.

2.4.2 Studies to define the benefits and risks of prophylactic use of antibiotics.

2.5 Other anti-diarrhoeal agents

2.5.1 Carefully designed clinical trials to evaluate the effectiveness, if any, of non-specific absorbents such as charcoal, kaolin and pectin.

2.5.2 Evaluation of GM1 ganglioside as a prophylactic and/or therapeutic agent against toxin-mediated diarrhoeas.

2.5.3 Evaluation of B subunit of cholera toxin as a prophylactic and/or therapeutic agent against toxin-mediated diarrhoeas.

2.5.4 Studies of the pathogenesis and pathophysiology of diarrhoeal diseases of different etiology to identify potential "target" events for interference.

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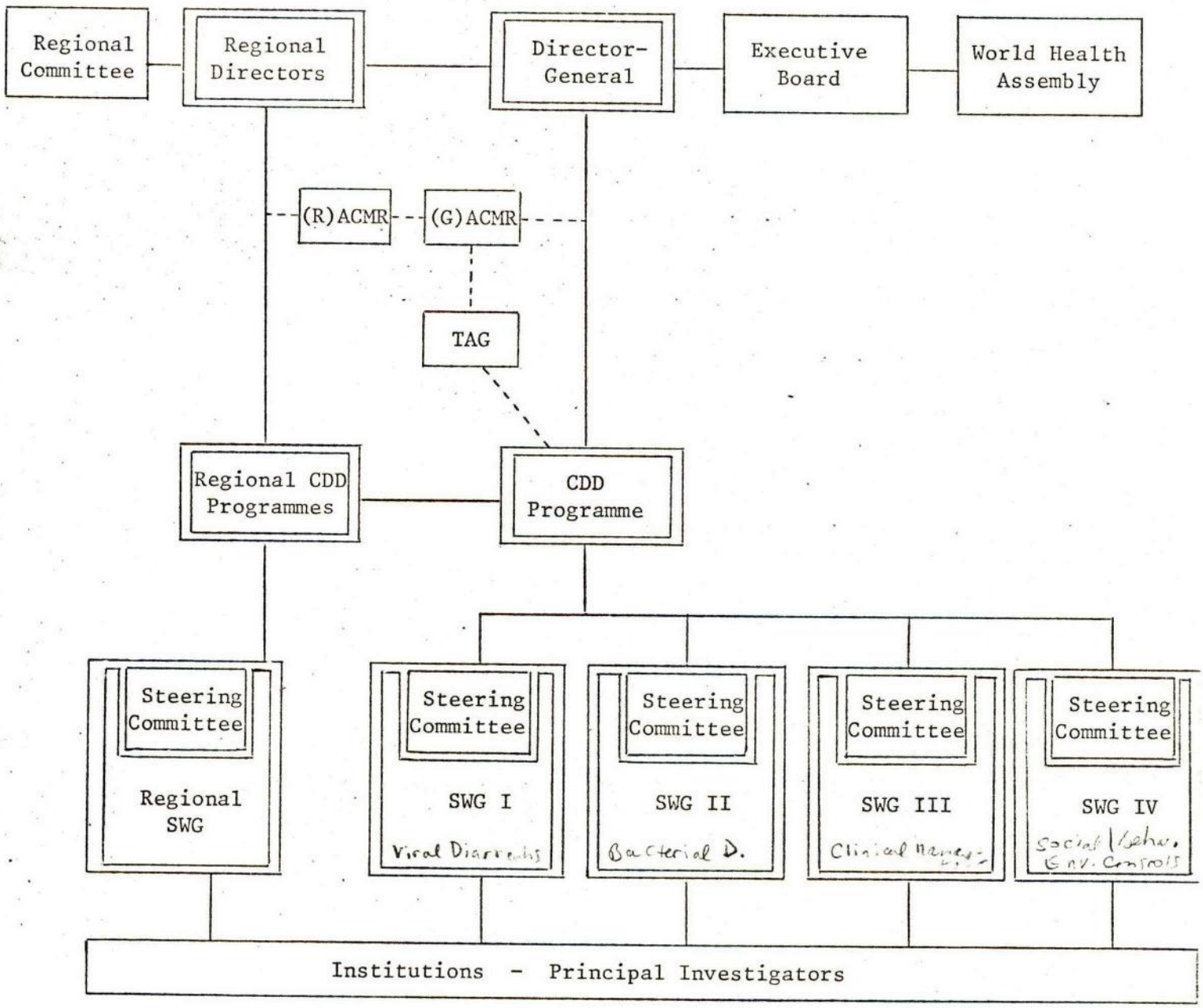
Figure 1

DIARRHOEAL DISEASES CONTROL PROGRAMME

RESEARCH COMPONENT



LEGEND

------- Advisory function

_____ Direct operational relationship

Research Management

SWG Scientific Working Group

UNDP FUNDS - 1979

	Amount allotted	Disbursed	Balance
	$	$	$
Allotment IR/ARI/BVD/085/DP/79 (Preliminary funds from UNDP)	50 000		
1. Meeting to prepare and review draft proposal for research in areas of vaccine and drug development for research in diarrhoeal diseases		4 950	
2. SWSG* on Epidemiology and Etiology of Escherichia coli Diarrhoea; SWSG on Rotavirus and other Viral Diarrhoeas		13 409	
3. Visits with Pharmaceutical Industry		4 561	
4. Participation in meeting of SAREC/SIDA		924	
5. Consultants		13 565	
6. Personnel		12 210	
Total disbursement under this allotment		49 619	381
Allotment IR/ARI/BVD/091/DP/79 (Funds from UNDP for research in vaccine and drug development for diarrhoeal diseases)	226 700		
1. SWSG on Etiology and Epidemiology of Cholera and other Vibriogenic Diarrhoeas; SWSG on Salmonella, Shigella, Yersinia and Campylobacter Infections		22 300	
2. Meeting on Wellcome Cholera Vaccine Trial, Bangladesh		1 070	
3. Duty travel		5 140	
4. Personnel		24 200 (projected)	
Total disbursement under this allotment		52 710	173 990
Allotment IR/ARI/BVD/091/DP/79.1 (Funds from UNDP for ICDDR,B)	400 000		
1. Meeting on Wellcome Cholera Vaccine Trial, Bangladesh		20 055	379 945

* Scientific Working Sub-Group

DIARRHOEAL DISEASES CONTROL PROGRAMME

Reports

Title	Date of meeting
Development of a Programme for Diarrhoeal Diseases Control (Report of an Advisory Group), WHO/DDC/78.1	2-5 May 1978
Immunity and Vaccine Development (Report of a Scientific Working Group), WHO/DDC/78.2	14-16 August 1978
Clinical Management of Acute Diarrhoea (Report of a Scientific Working Group), WHO/DDC/79.3	30 October-2 November 1978
Escherichia coli Diarrhoea (Report of a Sub-group of the Scientific Working Group on Epidemiology and Etiology), WHO/DDC/EPE/79.1	15-16 January 1979
Rotaviruses and other Viral Diarrhoeas (Report of a Sub-group of the Scientific Working Group on Epidemiology and Etiology) - in press, WHO/DDC/EPE/79.2	27-28 March 1979
Child Care Practices related to Diarrhoeal Diseases (Report of a Scientific Working Group), WHO/DDC/79.4	17-20 April 1979
Environmental Health and Diarrhoeal Disease Prevention (Report of a Scientific Working Group) - in draft	3-6 July 1979
Cholera and other Vibriogenic Diarrhoeas (Report of a Sub-group of the Scientific Working Group on Epidemiology and Etiology) - in draft	24-27 September 1979

Dr. John R. Evans, PHN

March 31, 1980

Arlene Fonaroff, PHN

WHO/UNDP/Bank Diarrheal Diseases Control Programme (CDD)

Dr. Mersam was at PAHO last week for the USAID-sponsored meeting for PVOs on oral rehydration methods and conveyed the following progress on CDD:

Joint Coordinating Board

1. While general support for a joint JCB for TDR/CDD exists at senior level in Geneva, WHO Regional Directors are apprehensive. Dr. Zahra remains concerned about whether the JCB would accommodate the TAG recommendations for operational, epidemiologic and basic research. A small committee was formed at Geneva to review the issues and is expected to present a proposal to Dr. Mahler by the end of the month. Expectations are that concensus can be achieved, provided WHO does not feel it is being pressured into accepting the idea.

2. Mr. Mashler has been at WHO several times since the January TAG meeting. He evidently believes that all CDD components should remain together under JCB management.

3. A CDD budget is near completion, as is the finalized report of the TAG.

Vaccine and Drug Development (VDD)

4. UNDP has funded two additional staff positions for the Technical Secretariat. Mr. Hogan has been seconded from CDC to handle program management. However, the organizational structure and technical/administrative responsibilities have not been clearly worked out. It is unclear, for example, whether Dr. Mersam will be responsible for all or part of the VDD effort, or whether he will direct the total program.

5. There are three SWGs concentrating on VDD which will begin meeting this Spring: bacterial and enteric diseases (April, June, September); viral diseases (June, September); and drug development (September). At the first meeting, each SWG will prepare a strategic plan. Steering Committee meetings will then be scheduled to review proposals already submitted for relevance to the strategic plan; and to identify methods for soliciting additional proposals.

Implications to Bank

6. The focus of VDD is likely to broaden beyond rotovirus and enterotoxigenic E. Coli to other agents because of very recent and promising discoveries. UNDP support was based on Bank recommendations for a limited initial focus to accelerate discovery and drug development and the Bank collaboration was based on the understanding that WHO would adhere to the terms of reference in the proposal. The diffusion of interest to investigate other agents, particularly in the absence of a definitive plan of

research management, may jeopardize progress of the original collaborative agreement. Delays have already occurred because of limited staff resources, requiring Dr. Mersam to work on other than the VDD component.

7. The Bank's role has yet to be defined. UNDP's interests have now expanded to all phases of the CDD. Since we and UNDP will be in Geneva at the end of April, we might consider initiating an ad-hoc meeting to discuss progress on VDD. Perhaps by then Management will have made clearer its intent to support the JCBHR in which case we could also discuss the scope of Bank interest in support of CDD. The Bank's position is not at all clear in Dr. Zahra's mind.

AFonaroff:va