

Strategy (2000–2005)

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



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TDR STRATEGY

2000-2005

October 2000

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FOREWORD



“To be successful, a strategic planning process should provide the criteria for making day-to-day organisational decisions and should provide a template against which all such decisions can be evaluated”.¹

TDR is now 25 years old. A long history, compared with the lifespan of other health and research initiatives in the UN – but a short one, considering the immensity of the challenges faced by TDR and the resources at its disposal. Two years ago, the 3rd External Review Committee came up with clear conclusions and recommendations.² The Report of this committee stressed that “TDR should develop a long-term vision and a strategic plan that would set the overall context for TDR’s priorities”.

The present document is our response to this challenge. It represents the summary of more than six months of discussion, debate and resolution. It was a very stimulating and rewarding process. We decided to formulate the strategy through a participatory process involving all TDR technical staff. We had to work in the context of ongoing reforms in two of our co-sponsors – UNDP and WHO. We had to be consistent with the new WHO corporate strategy, which was being shaped in parallel. So we knew that we would need professional guidance. We thank Kepner-Tregoe®, and its local director Lynn Verdina-Henchoz, for the competent guidance and orientation in this complex environment.

We knew our strategy had to take into account past TDR successes – but also the failures. The final report of the 3rd External Review Committee was one of our roadmaps:

- We learned a lot from the committee’s careful analytical work on the role of TDR in the development of tools that represented turning points in the control of leprosy and onchocerciasis, and an important step forward in Chagas disease control, i.e. multidrug therapy (MDT),³ ivermectin⁴ and the fumigant canister;⁵
- We learned from the issues identified by the committee as meriting urgent correction: the need to fundamentally restructure the interaction between research and control; the need for a new philosophy in capacity building; and the need for a stronger disease focus in the management matrix of TDR.

The first question we had to answer was “What drives TDR?”, or, in Kepner-Tregoe® jargon, “What is the major driving force?”⁶ The consensual conclusion – after hot debate – was that it resides in our operational capability. That is, in our ability to bring together a large number of partners – donors, researchers and developers, from the north and south – and catalyse processes to solve public health problems and build research capacity.

TDR is a knowledge-management organization in health research and capacity building – a leading actor in a field with many players.



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The next step was to address the issue of interaction between research and control. Why was this so difficult? Why had satisfactory cooperation between these two areas never been established? What were the stumbling blocks? How could we remove them and build a new and productive relationship to make an impact on disease burden?

The conclusions and would-be consequences surprised us. We discovered that TDR was stopping its work on new tool development prematurely. According to the classical credo, research work and duties stopped with “proof of principle”, or, according to the 1987-1988 external review of TDR, after “*demonstration of the utility of the tools in their intended setting of use ...and the initial exploration of the most appropriate means of their application*”.⁷ As a consequence of realizing this, we would have to venture into the uncharted territory of “implementation research” and address the complex issues arising when a new tool moves into real life application.

This stimulated a long debate. Some were scared of the new responsibilities (“*We are not prepared for this kind of work!*”), some kept the old view (“*But this is ‘their’ responsibility!*”), and a few already missed the “*good old times*” when TDR only had to interact with academia. The consensus, at the end, was “*We have to go for it, and the time is now*”. This was a real breakthrough - the participatory process had performed the magic of convincing and bringing all staff together in the decision to cope with this challenge.

Then the new strategy began to fly. An immediate corollary was that we needed to rescue the disease component from the matrix-management of TDR. As often occurs, the 1994 reform had shifted the pendulum of the structure from “too much disease” to “too much function” – and we had lost the full potential of true matrix management. Working closer with endemic countries and their poor and marginalized populations had additional consequences. Firstly, we had to reshape TDR’s capacity building strategy; secondly, in respect of our end-users, we had to substitute the long-standing, classical, static list of TDR diseases with a more dynamic disease portfolio. We could no longer say “*Sorry, we cannot help you - your disease is not on our list*”, or “*Sorry, we have ‘sunset’ your disease - it has been decided that it is no longer important*”.

These conclusions pose formidable challenges, e.g.:

- Expanding our responsibilities while maintaining our focus and efficient use of limited resources.
- Attracting new resources, skills and partners.
- Having analytical work and continuous honing of workplans at the centre of our management while taking into account both function and disease.

We also analysed TDR's changing environment. This showed us the need for:

- Stronger interaction and partnerships with the private sector from both developed and disease endemic countries.
- Exploitation of the biotechnological revolution, with its new opportunities and increased speed of discovery.
- Intensive use of information and communications technology.

The Strategy represents an evolution of a highly successful programme. It builds on our previous history and successes and is rooted in the successful recipe that our founders developed 25 years ago.

Carlos M. Morel
Director, TDR
Geneva, May 2000

A draft of the new strategy was presented to the Joint Coordination Board in June 2000. The Board approved the Strategy as it was presented, and suggested a few clarifying changes to the text. These revisions have been included in the present version.

Erik Blas
Programme Manager, TDR
Geneva, October 2000



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an evolution of a highly
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1

BACKGROUND

1.1 Tropical Disease Burden

Despite significant input of resources and effort over the past 50 years by governments, and national and international programmes to control infectious diseases, these still persist and constitute the majority of the burden of disease in the poorest countries. Infectious diseases continue to impede social and economic development in these countries, disproportionately affecting poor and marginalized populations. Tools and strategies once considered sufficient for successful prevention and control are failing, some because of development of drug resistance and others because the difficulties of implementation were not adequately taken into account. Only a few tools and strategies have been appropriately evaluated in field conditions.

Of the TDR diseases, malaria and tuberculosis rank among the 12 leading causes for loss of DALYs (Disability-Adjusted Life Years) in the global population. The other diseases in the TDR group - *schistosomiasis*, *lymphatic filariasis*, *onchocerciasis*, *leishmaniasis*, *Chagas disease*, *African trypanosomiasis*, *leprosy*, and *dengue* – rank below number 54.⁸ However, there are significant differences between regions, countries, and within countries depending on social, economic, political and ecological factors.

A major determinant for the burden of disease is poverty. For the TDR group of diseases, the gap between the world's 20% poorest and 20% richest is wide. If the disease, age, and gender specific death rates among the poorest were equal to those of the richest, the number of deaths among the poorest would be reduced by 97.5% for tuberculosis, 99.6% for malaria, and 99.9% for the other TDR diseases. Only diarrhoeal diseases (96.5%), childhood cluster diseases (97.5%) and maternal conditions (98.6%) come close to having the same gap as in the TDR diseases between the poorest and the richest.⁹ Diseases that primarily affect the poorest do not constitute an attractive market for drug developers. An assessment of 1233 drugs that reached the market between 1975 and 1997 found that only 13 products were approved specifically for tropical diseases; of these, 6 had been developed with the help of TDR.^{10 & 11}

1.2 TDR's Strategic History

The main events that led to the creation of TDR, and the major events in its first 20 years, have been described.¹² TDR came into being at the 27th World Health Assembly in May 1974, when Member States passed a resolution calling on the director general to intensify WHO's research into tropical diseases, with the stipulation that such research was to be



Infectious diseases continue to impede social and economic development in the poorest countries, disproportionately affecting poor and marginalized populations.

Diseases that primarily affect the poor do not constitute an attractive market for drug developers.



TDR gives precedence to science over politics, and provides a neutral platform where scientists from all over the world can work together.

Reorganization in 1994 allowed industrial approaches to be introduced, based on product development teams responsible for specific candidate products.

Social, economic and behavioural research (SEB) to be established as a new area.

In 1999, TB and dengue were incorporated into TDR's disease portfolio.

carried out as far as possible in endemic countries.¹³ Its “informal” origins, however, can be traced back to 1958 and the 10th Anniversary of WHO, when the WHA accepted the extrabudgetary contribution of the USA, which developed into WHO’s intensified medical research programme.¹⁴ In 1978, the Programme was formally structured on the basis of co-sponsorship by UNDP, the World Bank and WHO, and the functions, composition and operations of its administrative and technical structures were defined in a Memorandum of Understanding.¹⁵

At first, the Programme pursued an approach based on the creation and support of modern research institutions at strategic sites, but this was soon replaced by an approach based on building networks of researchers and institutions. The Programme was, from the beginning, goal oriented. It published priorities for research and made recommendations about funding of projects within this framework. From its inception, TDR gave precedence to science over politics, and provided a neutral platform where scientists from all over the world could work together. The Programme also vigorously maintained a recruitment policy based on merit rather than geographical quota or politics, even though this, at times, led to loss of funding from those attempting to exert pressure. The strong leadership under the then director general of WHO, Halfdan Mahler, protected the young programme from the bureaucratic processes of a large organization.¹⁶

During the 1980s, TDR became increasingly involved in product development and, in 1990, a product development unit was established with staff recruited from industry. Reorganization in 1994 allowed this area to be totally rearranged, and industrial approaches to be introduced, based on product development teams responsible for specific candidate products. This represented a departure from the steering committee-based approach used in the past and posed administrative challenges for the programme management. However, it resulted in a significant increase in output.

TDR’s initial structure was “disease-based” and largely operated through steering committees responsible for all aspects of a disease. In 1994, the Programme underwent a major organizational shift, adopting a “functional-based” structure, replacing the disease-specific committees by committees, task forces and product development teams based on function or specific development task. This helped focus research and development efforts, but also gave rise to priority-setting problems and left some gaps in the activity portfolio of certain diseases. Social and economic research (SER), which was absorbed into the new area of Applied Field Research (AFR), largely disappeared as AFR concentrated on clinical field trials. The need to better understand the social, economic and behavioural factors and determinants for disease and disease control led the Scientific and Technical Advisory Committee, in 1999, to advise that social, economic and behavioural research (SEB) be established as a new area under strategic research; this was endorsed by the Joint Coordinating Board.

From its inception until 1999, TDR focused on eight diseases – malaria, schistosomiasis, onchocerciasis, lymphatic filariasis, African trypanosomiasis, Chagas disease, leishmaniasis, and leprosy. Despite early attempts to include tuberculosis (TB) in the disease portfolio, it was only in 1999 that TB, and also dengue, were included.

One of the persistent strategic and organizational challenges during the years has been the interface between research and control. This has been a major theme of all three external reviews of the Programme. There have always been good intentions to improve the interaction between the two areas, for example, the Seventh Programme Report (1985) stated “*SER will give priority to research projects which seek to incorporate the findings of social and economic studies into disease control programmes. To this end, more extensive links will be established with WHO's operational disease control programmes and with ministries of health*”.¹⁷ Nevertheless, the problem has persisted, and the 3rd External Review (1998) recommended looking at it as a structural issue.

1.3 Major Achievements

TDR has a long history of accomplishments, the details of which are documented in its 14 programme reports and 3 external reviews. The role of TDR in the development of ivermectin for onchocerciasis,⁴ multidrug therapy for leprosy,³ and a fumigant canister for controlling Chagas disease⁵ was analysed during the 3rd External Review.² In an attempt to measure the impact of TDR on research in tropical diseases, a bibliometric study was carried out by Harvard University for the 3rd External Review. This revealed TDR to be *the* leading funding source for research on African trypanosomiasis, leishmaniasis, leprosy, malaria and onchocerciasis, ranking second for Chagas disease, filariasis and schistosomiasis. Of papers published in 1992-1996 that acknowledged TDR as funding source, 60-91% were cited at least once during the period, (depending on the disease) with averages ranging from 3.6 for Chagas disease to 6.4 for leishmaniasis, leprosy and malaria. The maximum citations for single articles were 43 in malaria, 39 in schistosomiasis, and 36 in leishmaniasis.¹⁸

During its 25 years, TDR has supported strengthening of over 160 institutions in 80 countries and awarded more than 1100 research training grants for formal graduate degree training and specialized research skills acquisition. Currently, 52 masters and 154 PhD students are receiving TDR grants.

The Wellcome Trust published, in 1999, a study on malaria research capacity in Africa, covering the period 1995-97. TDR came out on top of the list for all indicators used, including source of funding for African malaria research laboratories, and master's degree and PhD training for African researchers. Twenty-four per cent of all papers on malaria published by African scientists during the period acknowledged TDR as a source of funding. The report concluded that “*TDR's particular impact in this survey is a reflection of the success of its training schemes, but also in part reflects its major focus on malaria and on least developed countries*”.¹⁹



TDR is the leading funding source for research on African trypanosomiasis, leishmaniasis, leprosy, malaria and onchocerciasis.

More than 160 institutions in 80 countries and over 1100 research training grants awarded.

TDR leads in supporting malaria research capacity in Africa.



Increasing inequity in access to health care services and products means TDR must increase its emphasis on 'products for the poor'.

The biotechnological revolution means there are new opportunities and increased speed of discovery.

Advances in information technology and new means of communication potentially lead to increased access to information, but could also lead to an increased gap between those with and those without access.

The general conclusion of the 3rd External Review was that:

“TDR is not only a ‘special’ Programme in the bureaucratic sense of the word, but also special in terms of its flexibility, its capacity to take initiatives and its leadership. Our conclusions and recommendations need to be interpreted in light of the high quality and relevance of TDR’s activities in the field of endemic tropical diseases”

1.4 Strategic Environment for Research and Development

TDR’s environment continues to undergo rapid and far-reaching changes that significantly influence the way the Programme can operate.

The decreasing role of the state, decentralization, cost-recovery, and the increasing role of the private sector, including NGOs, are likely to lead to increasing inequity in access to health care services and products. For TDR this means increasing its emphasis on ‘products for the poor’. On the other hand, TDR must increasingly understand and interact with the private sector. In the future, TDR must focus on policy and service packages and products which do not assume national, centrally managed control programmes since, in many countries, these are no longer the most significant health care providers.

The biotechnological revolution means there are new opportunities and increased speed of discovery. This, together with the globalization of trade and economy, increases the investment capital requirements for research, development, and marketing. Mergers between the big pharmaceutical companies are likely to amplify the market failures of new discoveries and developments, so that fewer of these will enter into health care service for the poor. This could provide new opportunities for developing country manufacturers, who may shift their innovative capacity to developing new drugs for a niche market. However, it could also lead to higher drug prices and thus reduced access for the poor. For TDR therefore, the biotechnological revolution may mean that a different approach to working with industry is needed, e.g. an approach which focuses more on moving discoveries that are not viable for big companies to small- and medium-sized pharmaceutical companies in developing countries.

Advances in information technology and new means of communication potentially lead to increased access to information, but could also lead to an increased gap between those with and those without access. For TDR, this means new opportunities for reaching out and an increased demand for information and response. Researchers in the least developed countries may fall further behind if not supported to keep up with the pace of development.

The above changes in the environment mean that extra resources are required for keeping up-to-date. As a consequence, TDR must either expand its resource base or narrow its scope of operation.

Official development assistance is stagnant or decreasing, and the concepts and structure of traditional donor-funded control programmes are changing as focus shifts towards funding of sector-wide approaches to health development. Private development assistance is increasing both in relative and absolute terms, often with specific foci, and seeks immediate tangible returns in the form of recognition and impact. The number of organizations set up to channel and implement funds from private sources is growing. The United Nations organizations are currently characterized by re-structuring and increased demand for accountability and tangible returns.

For TDR this means a huge potential for new resources for research and development, new competition and new partnerships, and a challenge to maintain independence in priority setting and operations. TDR needs to be increasingly results oriented, to take advantage of the explosion of networks and informal groups of stakeholders, and to expand its brokerage role in this more complex environment. Having special co-sponsored programme status is a comparative advantage when coping with this challenge.

1.5 TDR Values and Expectations

TDR is a value-based organization drawing its values from the international community. TDR's specific organizational beliefs and values are that:

- Good health is an essential foundation for social and economic development and access to basic health care is a human right. "The enjoyment of the highest attainable standard of health is a fundamental human right".
- Social, economic and gender inequities are major impediments to improvements in health status.
- Research and development of means to combat disease and improve health must adhere to internationally accepted legal and ethical principles.
- Knowledge is a crucial element in health improvement, and the attainment of self-reliance in research and development in disease endemic countries is key to sustainability.
- Closing of the global gap in research and product development, between the rich and the poor and marginalized populations suffering from neglected infectious diseases, requires collaboration and partnership between public and private sectors and involvement of research, planning and implementing agencies at international, national and local levels, as well as the targeted populations.
- It is essential for the successful functioning of TDR that the Programme retains its scientific independence, operational transparency and special programme status within the UN system.



Having special programme status is a comparative advantage when coping with the new challenges.

Good health is an essential foundation for social and economic development.

Collaboration and partnership between public and private sectors and involvement of research, planning and implementing agencies.

Retain independence, transparency and special programme status.



Diseases which are of limited interest to the commercial sector but which have dramatic effects on the social and economic development.

'TDR' has become a brand name.

TDR has an unparalleled range of in-house scientific expertise.

TDR is a safe investment.

- As an organization of the international community, TDR values professional competence, together with gender and geographical balance in staffing, committee membership, and participation in research and product development.

Donors, as well as client countries, are represented on the Programme's highest managerial body, the Joint Coordinating Board (JCB). The members have, over the years, consistently expressed their expectations as:

- Continued emphasis on neglected infectious diseases which are of limited interest to the commercial sector but which have dramatic effects on the enjoyment of the highest attainable standard of health and on the social and economic development of the countries where they are endemic.
- Continued emphasis on capacity building and involvement of researchers from both least and advanced developing countries.
- Better response to the medium- and long-term needs of disease control.

1.6 TDR Competitive Advantage

'TDR' has become a brand name. The Programme is based on networks of leading researchers throughout the world. It is easy for TDR to co-opt new members. Scientific independence, global perspective, quality, and leadership in a number of areas help setting research agenda almost universally. While others try to define research priorities, TDR often sets them.

TDR has a full range of in-house scientific expertise, from basic biomedical and social science, through product development to clinical field research, capacity building, and communication, etc. The breadth and depth of this expertise in the field of tropical diseases is unparalleled.

TDR has, through its co-sponsors UNDP, the World Bank, and WHO, access to technical expertise and networks in a broad range of sectors and disciplines from governmental and non-governmental organizations to individuals at international and national levels.

TDR has a reputation for efficiency, stability, and transparency – it is a safe investment. As a special co-sponsored programme, it has the advantage of being housed within the UN system, while at the same time, donors and clients have direct managerial authority through the Joint Coordinating Board.

2 THE STRATEGY

2.1 Goals, Objectives and Expected Results

2.1.1 Goals

- To alleviate inequity and poverty and foster social and economic development in endemic countries through reduction of mortality, morbidity and disability caused by neglected infectious diseases which affect poor and marginalized populations.
- To increase research self-reliance in endemic countries for identifying needs and developing solutions to public health problems caused by neglected infectious diseases.

TDR can contribute to the attainment of these goals. However, their actual attainment is influenced by a large number of factors, including economic, environmental, social, and other factors, most of which are outside TDR's immediate control.

2.1.2 Objectives

The objectives are considered to be within TDR's managerial control. Their attainment is the collective responsibility of the whole Programme, regardless of disease, function, or category of staff. Attainment of the objectives is the basis on which the Strategy will be reviewed and evaluated. The objectives are:

- To improve existing and develop new approaches for preventing, diagnosing, treating, and controlling neglected infectious diseases which are applicable, acceptable, and affordable by developing endemic countries, which can be readily integrated into the health services of these countries, and which focus on the health problems of the poor.
- To strengthen the capacity of developing endemic countries to undertake the research required for developing and implementing these new and improved disease control approaches.

2.1.3 Expected Results and Key Output Indicators

The expected results are deliverables which are within the managerial control of those teams within TDR which have been assigned responsibility for producing each specific result. Expected results will form the basis for continual monitoring of TDR's performance. The biennial programme report will communicate achievements. The key output and performance indicators and targets will be used to measure Programme performance.



To alleviate inequity and poverty and foster social and economic development.

To increase self-reliance in research.

To improve existing and develop new approaches which focus on the health problems of the poor.

To strengthen the capacity of developing endemic countries to undertake research.

Expected results will form the basis for continual monitoring of TDR's performance.

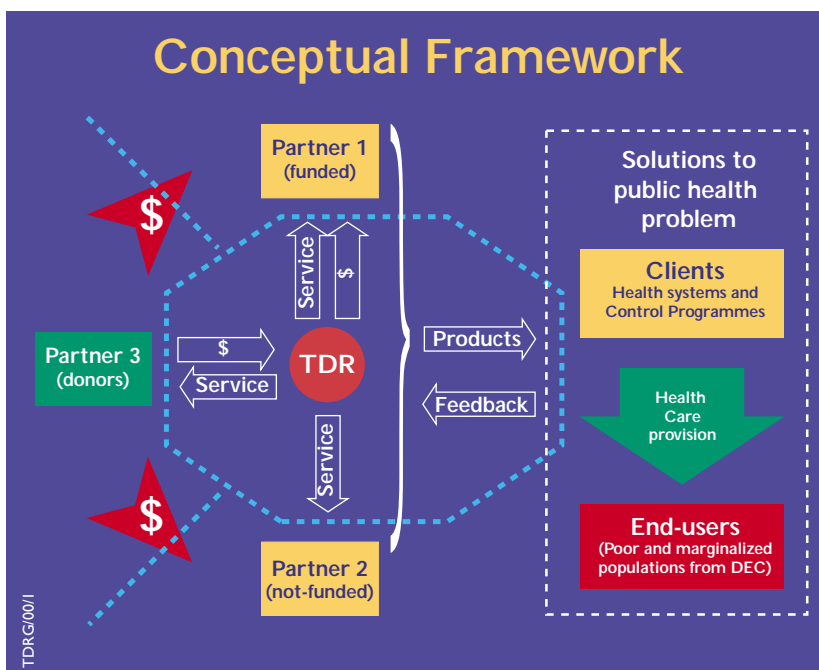
EXPECTED RESULTS	OUTPUT AND PERFORMANCE INDICATORS - TARGETS FOR PERIOD 2000-2005
A. <i>New basic knowledge</i> about the biological, social, economic, health systems, and behavioural determinants, and other factors of importance for effective control of infectious diseases generated and accessible at national and international levels	<ul style="list-style-type: none"> • 8 new, significant and relevant scientific advances (biomedical, social, economic, and public health sciences) in neglected tropical diseases
B. New and improved <i>tools</i> for use in infectious disease prevention and control, e.g. drugs, vaccines, diagnostics, epidemiological tools, environmental tools, etc. , developed	<ul style="list-style-type: none"> • 6 new candidates (drugs, vaccines and diagnostics) ready to enter into development • 8 new or/and improved tools (drugs, vaccines and diagnostics) resulting in regulatory approval for the use in neglected tropical diseases • 5 new or/and improved epidemiological tools developed for the use in neglected tropical diseases
C. New and improved <i>intervention methods</i> for applying existing and new tools at the clinical and community levels developed and validated	<ul style="list-style-type: none"> • 11 new or improved intervention methods for the prevention, diagnosis, treatment, and rehabilitation of populations exposed to neglected tropical diseases, validated
D. <i>New and improved policies</i> for large-scale implementation of existing and <i>new prevention and control strategies</i> developed, validated and guidance required for application in national control settings accessible	<ul style="list-style-type: none"> • 3 currently used control policies and strategies for neglected tropical diseases improved • 5 new control policies and strategies for targeted neglected tropical diseases formulated, tested and validated • 6 new and improved tools brought into the control of neglected tropical diseases
E. <i>Partnerships</i> established, and adequate support for research and product development <i>capacity building</i> in countries provided	<ul style="list-style-type: none"> • 11 multi-institutional R&D partners engaged • 400 individual/institutional R&D partners engaged • 50 MSc, 100 PhD completed, and 250 trained in immunology • 13 institutions in least developed countries strengthened • 50% of centres and experts from disease-endemic countries out of the total number engaged in TDR research and product development • 15% of research findings, new and improved tools and intervention methods produced by institutions in DEC
F. Adequate <i>technical information, research guidelines and instruments, and advice</i> accessible to partners and clients in countries	<ul style="list-style-type: none"> • Number of R&D initiatives in neglected tropical diseases using the instruments developed. • Number of requests for pages from TDR website from developing countries • Number of effective staff contacts with R&D partners working in neglected tropical diseases <p><i>Baselines and targets to be established for these indicators</i></p>
G. <i>Resources</i> for research, product development, and capacity building efficiently mobilized and managed	<ul style="list-style-type: none"> • 60% increase in funding of TDR overall • 12 fold increase in contributions resulting from the participation of new groups of donors • 75% undesignated funding out of total funding received. • 70%, 20%, and 10% of funds, out of total, allocated to Operations, Personnel, and Operational Support respectively

2.2 The Conceptual Framework

TDR acts as a catalyst. It facilitates the R&D agenda through setting priorities, funding projects, and providing services in the form of technical guidance, capacity building, and brokerage for bringing together partners who have the comparative advantages required to make end-products become realities. TDR is rarely the owner of the final product, nor is it normally the sole contributor to the process that results in the product - the products materialize through the joint efforts of many partners, including academia, industry, public and private institutions, and donors from developing and developed countries.

Funding partners provide funds either through TDR or directly to one of the R&D partners. R&D partners may be funded by TDR or may be entirely funded from other sources. However, partnerships are guided by common workplans, as symbolized by the dotted octagon in the conceptual framework diagram below.

TDR has unique operational capabilities which allow it to bring together the world's leading researchers and product developers, from both public and private sectors and both developing and developed countries, to address the public health problems related to neglected infectious diseases. These capabilities also allow TDR to fund and manage, in an efficient, accountable, and transparent way, a large number of research and product development projects as well as the knowledge and capacity they generate.



Traditionally, TDR has worked with its partners to develop new products to the "proof of principle" stage, when their potential usefulness for disease control is demonstrated. TDR's new strategy calls for going a step further – for working with clients and end-users to ensure that products also work in real field settings and are taken up for use in health care services.



Products are produced through the joint efforts of many partners, including academia, industry, public and private institutions, and donors from developing and developed countries with TDR as the catalyst.

TDR has unique operational capabilities to fund and manage, in an efficient, accountable and transparent way, a large number of projects.

The concept of "product" is broadened from methods and tools to solutions to public health problems.



Products will range from environmental, through population and systems based interventions, to those aimed at diagnosing and treating diseases in the individual.

TDR remains a Special Programme, co-sponsored by UNDP, the World Bank and WHO, and funded by voluntary contributions from its donors and co-sponsors.

TDR's governance and operational procedures are tailored to meet its special needs.

In doing so, the concept of “product” is broadened from methods and tools to *solutions to public health problems*, i.e. to including research into delivery of effective services, appropriate structure of health systems, policy, etc.

TDR end-users are the poor and marginalized populations in developing endemic countries who do not have access to appropriate and cost-effective means to prevent and treat their neglected infectious diseases. TDR reaches its end-users through its clients *in public and private health systems* and national and international disease control programmes.

The resulting solutions *to public health problems* will emerge from *knowledge* generated by research and increased research capacity, and from developing, testing, and validating *tools, intervention methods, and implementation strategies*. The products will range from environmental, through population and systems based interventions, to those aimed at diagnosing and treating diseases in the *individual*.

2.3 Strategic Emphasis and Change

2.3.1 TDR: a Co-sponsored Special Programme

TDR remains a Special Programme, co-sponsored by UNDP, the World Bank and WHO, and funded by voluntary contributions from its donors and co-sponsors:

- The Programme is governed by the Memorandum of Understanding, with amendments as approved by the Joint Coordinating Board.
- The Joint Coordinating Board is the highest managerial authority of the Programme. It approves the biennial budget, staffing, workplan, progress and financial reports.
- TDR is funded through a special trust fund kept by WHO on behalf of the Programme. Contributors pay their donations directly to this trust fund. When a contribution to TDR is part of an “undesignated” contribution to WHO or any of the other co-sponsors, the part intended for TDR has to be specifically earmarked.
- WHO is the executing agency. This means that TDR staff are recruited according to WHO terms, conditions, and privileges; the Programme is physically housed in WHO; and administrative services are provided against an agreed payment. Further, TDR’s budget is captured and reported on within WHO’s overall budget and financial reports as a clearly identifiable item.
- TDR’s special programme status means that its governance and operational procedures can be tailored to meet the special needs of an R&D organization of its nature.

2.3.2 Defining TDR as a Knowledge Management and Network Organization

TDR functions with a dual set of objectives: to improve existing and develop new approaches to disease prevention and control, and to strengthen research capacity. To achieve this, the underlying values of the programme call for greater involvement of researchers from developing countries. The new strategy foresees TDR operating as a true network organization, managing the generation and application of knowledge, linking and brokering in a much more complex environment with many more stakeholders and processes, as described in the conceptual framework.

This will require:

- Strengthening TDR capability to provide proactive leadership in research agenda setting for neglected infectious diseases affecting poor and marginalized populations.
- Strengthening TDR capability for conducting analytical work - to identify research and control needs, opportunities and partners - and building capacity.
- Strengthening the roles and functions of the TDR disease and functional coordinators to emphasize establishment and maintenance of networks in the disease control and scientific communities.
- Revising and developing staff profiles to include management of networks, science, and knowledge in addition to specific technical expertise.
- Strengthening TDR communication capacity, using the latest and most appropriate technology, to reach target audiences in both developed and developing countries.
- Strengthening TDR management capability to ensure the highest possible efficiency in general administration as well as in project management.

2.3.3 Dynamic Disease and Activity Portfolio

The underlying commonalities of the traditional TDR diseases are that they are neglected infectious diseases which disproportionately affect poor and marginalized populations. However, the disease portfolio was static until June 1999. Since the change in structure in 1994, some diseases have been de-emphasized in some functional areas and the disease/activity mix has tended to be determined by staffing pattern and interest. JCB(22) approved the inclusion of TB and dengue into the disease portfolio, and of diagnostics and basic social, economic and behavioural research as new functions.

The new strategy allows for continual dynamism in the disease/activity mix. New major diseases will only be included into the portfolio after



TDR to become a knowledge management and network organization.

TDR's activity and disease portfolio to become more strategic and dynamic.



*Accepting responsibility
for following products
through to the
implementation phase.*

analysis and recommendation by STAC and approval by JCB; however, the strategy will allow for inclusion of work on other diseases linked with the TDR diseases or with the same characteristics as the core diseases, on an opportunistic basis and up to a ceiling of 3% of the budget. The activity portfolio will be exposed to continuous scrutiny to balance relevance, appropriateness, timeliness, and resource allocation. This will require:

- Strengthening of the Programme's analytical capability to match needs and opportunities, to set priorities and allocate resources.
- Redefining and strengthening the role of TDR disease coordinators to include assessment of needs and proposal of products; defining the role of TDR functional coordinators as assessment of opportunities, management of activities, and assurance of quality.
- Changing the organizational structure to a true matrix-management structure which addresses both disease and function and works on a project basis.
- Revision and dynamic definition of the workplan and budget structure so that they are based on expected results rather than organizational structure.
- Strengthening of TDR management capacity through continual reviewing, improving, and developing of management processes, procedures, and tools.

2.3.4 Greater Interaction with Disease Control: "Implementation Research"

With the exception of onchocerciasis, leprosy, and Chagas disease, the interaction of TDR with disease control has for a long time been of concern to the TDR governing bodies. Despite several attempts, it has been difficult to find the right balance between short-term needs, long-term needs, and scientific opportunity.

It will be essential to ensure relevance, appropriateness, and responsiveness of R&D, as well as timeliness, in moving candidate products through the R&D process and into implementation. This means redefining the concept of a product and accepting additional responsibility for following products through to the implementation phase, including working directly, and increasingly so, with disease control programmes and health systems in endemic countries.

This will require:

- Developing a conceptual framework for the relationship between R&D and disease control.
- Defining the role of the TDR disease coordinator as maintaining close contact with disease control programmes and health systems.

- Revising membership of STAC and some steering committees to ensure that disease control needs and health systems perspectives are represented.
- Modifying the staff profile to include expertise in public health and disease control programme management.
- Strengthening TDR analytical capability to address the needs of disease control.
- Modifying the TDR activity portfolio to include research in implementation as well as research in basic social and economic sciences and health systems.

2.3.5 Re-focusing Research Capacity Strengthening (RCS)

A continued concern of the TDR governing bodies has been to achieve greater involvement of developing country researchers in all stages of research and development, and to find new ways of evaluating and monitoring efforts in capacity strengthening.

The research capability strengthening activities of TDR will be refocused along two lines - general and targeted - with the budget and activities for each clearly distinguished:

- 40% of the research capability budget will be reserved for general research capability strengthening in *least developed countries*, while the remaining
- 60% will be allocated to *targeted research* capability strengthening in support of specific high priority research areas of TDR.

This will require:

- Strengthening TDR analytical capacity in identification of research needs and opportunities for capability building.
- Changing the structure and functioning of steering committees in order to ensure an appropriate synergy between research and capacity building. This may be done through cross-membership and modification of committee procedures.
- Restructuring the budget and workplan to reflect cross-over between RCS and the other functional areas.
- Strengthening TDR managerial capacity, tools and procedures to handle the increased complexity of operation.



To facilitate greater involvement of researchers from developing countries.



A matrix-management approach with clearly identified persons responsible for horizontal (disease) and vertical (functional) roles.

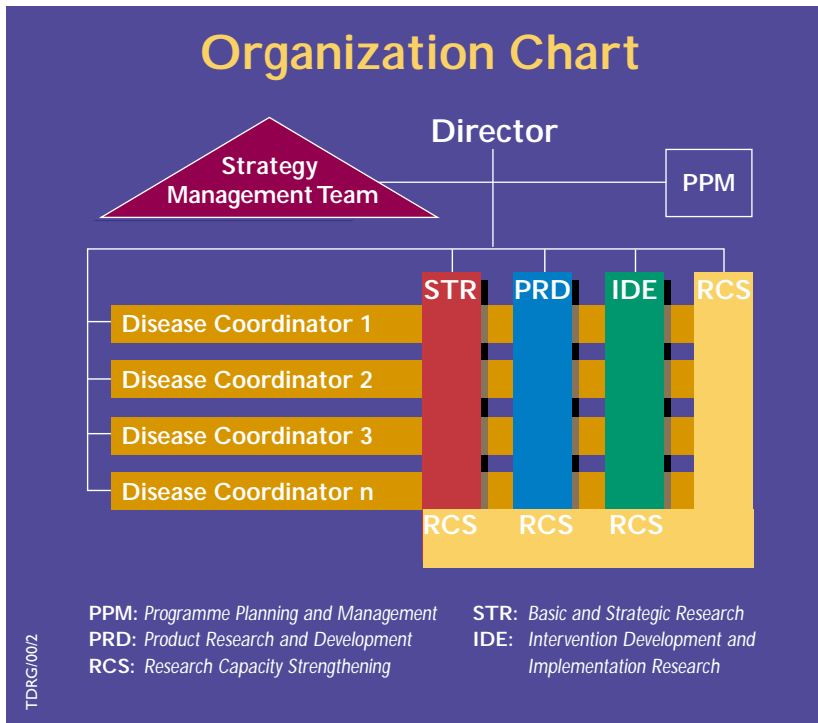
2.3.6 Organizational Structure

The restructuring in 1994 changed TDR from a disease-based organization to one based on function. Although the existing structure foresees the role of disease coordinator, this role has not been formalized nor has there been any internal forum for discussion or priority setting within and across diseases. As a consequence of the above changes in emphasis, a *further evolution of the 1994 structure is necessary.*

The new organizational features will be:

- A structure based on a matrix-management approach with clearly identified persons responsible for horizontal (disease) and vertical (functional) roles.
- A formalized role for disease coordinators. The disease coordinator will have a distinct function within TDR and a post description which reflects 25-50% of time (depending on the diseases covered) for disease-specific activities - including analytical work, proposing products and activities, i.e. cutting across the functional areas of the Programme - and the remaining 50-75% of time for managing specific R&D projects.
- A main role of the disease coordinators will be to establish and maintain linkage with disease control programmes and initiatives within the disease(s) covered.
- A revised role for team coordinators. This role will include line-management functions, and implementation and quality assurance of R&D activities. The post description will reflect approximately 50% of time for line-management functions and the remaining 50% for managing specific R&D projects.
- A major role for the team coordinator is to establish and maintain links to private sector structures and the research community, and manage the overall R&D processes, including steering committees.
- The terms of reference and working procedures for scientific committees, task forces, and product development teams, including those co-managed with other organizations and programmes, will be reviewed and revised, as needed, to better support the matrix structure and networking and catalytic role of TDR.
- Expanded terms of reference for the Intervention Development and Evaluation Team (IDE) and a change of name to Intervention Development and Implementation Research.
- Established formal links through cross-membership between RCS and the R&D steering committees.

The managerial process to be established, to make the matrix structure operational, will include introduction of a *Strategy Management Team* consisting of the disease coordinators, the functional [team] coordinators, the programme manager and the director. The Strategy Management Team will commission analytical work, review evidence, set priorities, and monitor implementation of the Strategy.



The Strategic Management Team will be critical to implementing the new strategy. It will be the mortar that keeps the different elements of the Programme together. It will ensure that the activity portfolio matches the short-, medium- and long-term needs of disease control and is congruent with the TDR basic values, strategic objectives and goals. It will be responsible for maximizing the synergies between the different elements and activities of the Programme, for allocating resources and moving new and improved tools and approaches into disease control use as fast as possible.

The Strategic Management Team will also address collaboration with partners above the level of the individual project and functional team.

The Strategy Management Team will commission analytical work, review evidence, set priorities, and monitor implementation of the Strategy.



3

STRATEGIC BUDGETS AND FUND-RAISING



*The strategic budget
is results oriented.*

The introduction of two new diseases; social, economic and behavioural-strategic research; diagnostics; and implementation research has a major implication for the overall budget level of the programme. The strategic budget is results oriented and presented below from three different perspectives: 1) the expected results, 2) the disease, and 3) the operational perspective. These represent the dimensions of the strategic budget framework within which the biennial programme budgets will be prepared and reported to the Joint Coordinating Board.

3.1 Results Budget

The Results Budget outlines how TDR's overall budget will be distributed between the results that the Programme aims to deliver in each of the three biennia of the strategy.

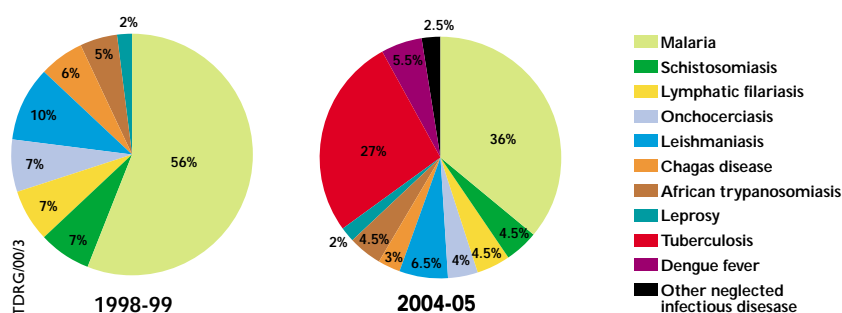
BUDGET BY EXPECTED RESULT AREA (US\$ 000)

	1998-99	2000-01	2002-03	2004-05
New Basic Knowledge	6,581	11,000	12,000	12,200
New and Improved tools	15,802	20,500	21,000	22,000
New and Improved Intervention Methods	8,160	7,000	9,000	10,500
New and Improved Policies & Strategies	2,144	3,200	9,000	10,500
Partnerships and R&D Capacity Building	16,609	22,000	22,000	23,000
Tech. Information, Guidelines, Instruments and Advice	3,780	5,500	7,000	7,300
Resource Management	5,908	6,500	7,360	7,700
Total	58,982	75,700	87,360	93,200

3.2 Disease Budget

The projected budgets by disease are based on the distribution of operations budgets by each disease. The introduction of two major new diseases has a significant impact on the relative distribution between diseases. In absolute terms, the impact will be far less as the overall budget is expected to grow.

Share of operations in %

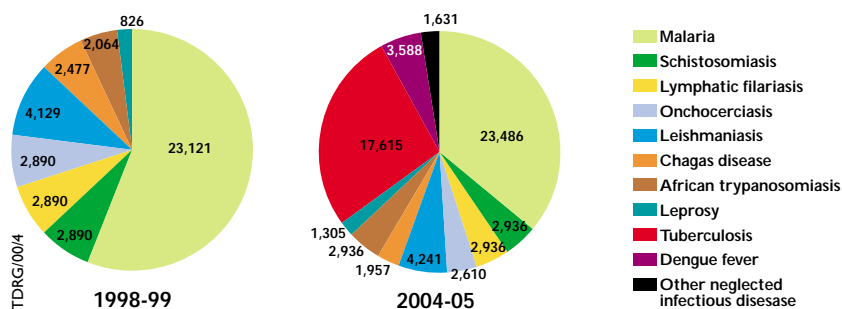




Distribution between budget elements will be maintained.

Seeking to increase funding from both current and new donors.

Share of operations in US\$



3.3 Operational Budget

The Operational Budget depicts how the total budget will be distributed between the traditional budget elements of the Programme, i.e. operations, personnel, operational support, and technical and administrative bodies. As the overall budget increases, it is expected that the percentage spent on personnel will decrease from 22% to 20%. In view of the shift in emphasis of capacity building, it is envisaged that the need for the operational support budget will increase for this programme area.

BUDGET DISTRIBUTION BY BUDGET ELEMENT (%)

	1998-99	2000-01	2002-03	2004-05
Operations	69.0	68.0	70.0	70.0
Personnel	22.0	22.0	20.0	20.0
Operational Support	8.0	9.0	9.5	9.5
Technical and Administrative Bodies	1.0	1.0	0.5	0.5
Total	100	100	100	100

3.4 Fund-Raising

3.4.1 Diversification of Funding

It will be necessary to increase the TDR income by over 50% during the strategic timeframe in order to meet the budget requirements. A two-pronged strategy will be pursued: increased funding from current donors, notably the OECD government donors and co-sponsors, and diversification of the donor base. Specific efforts and plans will be made to establish funding relationships with developing country governments, intergovernmental organizations, and private organizations.

During the 2002-03 biennium, the possibilities of raising resources from the general public will be explored in connection with more intensive use of the TDR website.

PROJECTED FINANCING (US\$ 1000)

	1998-99	2000-01	2002-03	2004-05
Governments & GOs (OECD)	37,585			50,000
Governments (Developing)	252			2,500
Intergovernmental Organizations	0			5,000
Co-sponsors	9,815			13,000
Private Organizations (Not-for-Profit)	1,611			10,000
Private Organizations (For-Profit)	43			6,000
Control Programmes	2,255			4,000
General Public	0	0	100	500
Other income & reduction in carry/over	7,421	2,000	2,000	2,200
Total	58,982	75,700	87,360	93,200

3.4.2 Quality of Funds

TDR has, over the years, benefited from a large proportion of its funding being undesignated. This has helped to ensure stability and rational priority setting. The emphasis on securing as much undesignated funding as possible will be maintained. It is, however, envisaged that it will be necessary to accept an increasing proportion of the income as designated against specific parts of the overall workplan. This may in particular be the case for new private sources of funding. It is foreseen that, by 2004-05, the designated funds may reach 25% of total income. With higher levels of designated funding, it becomes more difficult to ensure smooth operation.

TYPE OF FUNDS (%)

	1998-99	2000-01	2002-03	2004-05
Undesignated	85	80	78	75
Designated	15	20	22	25
Total	100	100	100	100

Some of the current donors already have multi-year funding arrangements with TDR. This greatly facilitates long-term planning and the commitment required for research and development. Efforts will be made to negotiate such arrangements with all existing and future donors.



Undesignated funds help to ensure stability and rational priority setting.

Multi-year funding facilitates long-term planning and the commitment required for research and development.



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