

TDR investment case

A cost-efficient model for eliminating infectious diseases of poverty

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







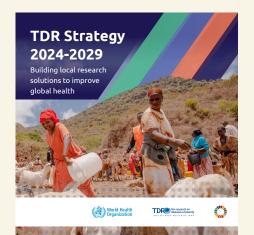


Call to action

Eliminating infectious diseases of poverty, together

The necessary funding that supports the strategic, long-term objectives of the Programme over a biennium stands at US\$ 40-50 million. This will advance disease control and elimination efforts in countries to prevent millions of unnecessary deaths and illnesses, while strengthening dozens of institutions and training thousands of researchers in low- and middle-income countries (LMICs).

TDR supports research and builds research capacity to address four major global health challenges affecting infectious Climate diseases of poverty using a One **Epidemics** change's and Health approach impact on outbreaks health 02 03 Control and Resistance elimination to treatment of diseases and control 04 of poverty 01 **Infectious** agents **Diseases of Poverty** One Health Human Health + Animal Health + Environment



Scan to view the *TDR* Strategy 2024-2029



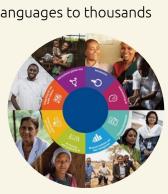
TDR, the Special Programme for Research and Training in Tropical Diseases, is a global programme of scientific collaboration that helps facilitate, support and influence research efforts to combat diseases of poverty. It is cosponsored by the United Nations Children's Fund (UNICEF), the United Nations Development Programme (UNDP), the World Bank and the World Health Organization (WHO).

Examples of current research initiatives requiring support:

With US\$ 3 million, we can democratize research education through an advanced online platform offering AI-driven, self-paced and hybrid training packages focused on implementation research

for neglected tropical diseases, treatment resistance, vector control, climate change and epidemics. Over the past decade, we've successfully delivered online courses and toolkits in multiple languages to thousands

of health professionals in LMICs who have used research evidence to make changes in health programme implementation.



With US\$ 10 million over five years, we can train more than 15 000 health workers and policy-makers globally to address the effects of climate change on infectious diseases in LMICs. By working with 500+ health professionals in each of the six WHO regions annually, we will drive health impact through implementation research focused on climate variability, involving communities and multisectoral stakeholders through a One Health approach.

TDR helps countries detect early signals of impending disease outbreaks through an Early Warning and Response System for climate-sensitive diseases (EWARS-csd). Several countries are piloting EWARS-csd as part of their national surveillance systems. US\$ 5-7 million would support testing community-based approaches, adding an AI layer and expanding EWARS-csd to 10-15 high-burden LMICs, preventing millions of illnesses.

With US\$ 12 million over five years, we can build sustainable operational research capacity to address antimicrobial resistance using a One Health approach.

Through the Structured Operational Research and Training Initiative (SORT IT) coordinated by TDR, we support research aligned with country priorities, build research capacity and enable evidence-informed health system improvements. Of the first 49 SORT IT studies, 78% influenced policy or practice within 12 months, improving health systems at national, regional and health facility levels.



Your support will contribute to improving health outcomes for millions in low- and middle-income countries.

A cost-efficient model for making a difference in lowand middle-income countries

- TDR plays an influential role in building high-level health research leadership across the world. Many scientific leaders and health policy-makers in LMICs are former TDR grantees. These include WHO Director-General Tedros Ghebreyesus, Institut Pasteur President Yasmine Belkaid and Francine Ntoumi, Founder and President of the Congolese Foundation for Medical Research
- For each staff member at TDR, 40 people are working in partner institutions on research activities in countries. TDR works directly with implementers, decision-makers and social innovators, alongside researchers, democratizing research and empowering people who are tackling health issues on the ground. We focus on supporting implementation research to make sure health innovations reach those who need them.
- As a cross-UN agency, TDR has direct access to its co-sponsors' health programmes and country and regional offices, as well as convening power to ensure key stakeholders from health and related sectors, national governments and academia share their expertise, experience and resources. This allows us to create a bridge from local communities and researchers in countries to the World Health Assembly.

- For every dollar invested in TDR research and training activities, partners in countries contribute twice that value. We work with institutions across all continents, from universities and ministries of health, agriculture, science and technology to nongovernmental organizations, international networks and community groups, to strengthen research capacity in LMICs.
- More than 80% of our grants and contracts go to recipients in disease endemic countries, and at least 50% of our grants are awarded to women. For decades, equity has been one of TDR's core values. Our research is focused on vulnerable populations, mostly in low- and middle-income countries, and this includes hard-to-reach, marginalized groups, nomadic and migrant populations, post-war and conflict situations, places with reduced infrastructure for research and where access to health care is limited.

TDR helps us to lower the costs of doing research. TDR ensures that the research being done is of much better quality. TDR enables us and other partners to be faster in doing this because we have the local capacity that's there.

- Mr Benjamin Schreiber, Associate Director of Partnerships, UNICEF



Our deep country-based experience delivers results for vulnerable populations

With support from our donors and partners, we have been able to deliver results that have transformed how neglected diseases are addressed. Key achievements over the course of our 50-year history include the following:



Produced research

evidence for five major elimination campaigns

for neglected diseases, resulting in improved health and millions of lives saved.



Played a key role in the development of 13 new

first-line treatments against tropical diseases, saving millions of lives and preventing diseases such as leprosy, malaria, visceral leishmaniasis and river blindness, from spreading further, bringing some neglected diseases close to elimination.



Trained more than 20,000 researchers

and strengthened countless research institutions in LMICs.



Assessed the effectiveness

of insecticide-treated nets and artemisinin combination therapy, now the mainstay of malaria control and treatment.



Identified social and gender barriers that impede access to

treatment and provided evidence of the strength of communities as an extension of health systems to deliver river blindness annual treatments, diagnose and treat malaria and prevent dengue and Chagas disease transmission.

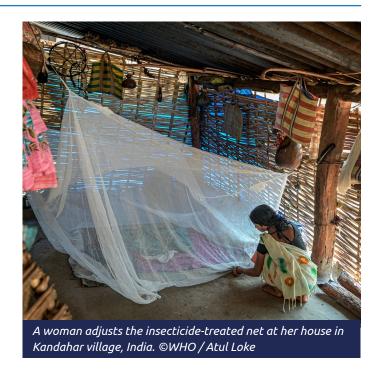


Created the product development

partnership model and helped to establish the first PDPs and PPPs to effectively address the area of infectious diseases of poverty: DNDi, TB Alliance, MMV and FIND.

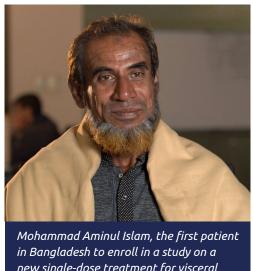
Establishing the effectiveness of insecticide-treated nets to fight malaria

It was TDR's independence and perseverance in conducting numerous large-scale trials on all continents to prove the effectiveness of insecticide-treated nets – despite external pressure to drop this idea – that led to the generation of evidence that prompted WHO to recommend them as a standard preventive treatment in malaria endemic areas. The extensive distribution of treated bed nets led to a 60% reduction in mortality. Without TDR's leadership, we can assume it would have taken another 10 years for this to be implemented. Therefore, TDR's sustained effort was responsible for saving 5-7 million lives over 10 years.



Shaping the Indian subcontinent's kala-azar elimination strategy

Visceral leishmaniasis (also known as kala-azar) is close to elimination on the Indian subcontinent, thanks to sustained TDR-supported clinical and implementation research that shaped the elimination strategies of Bangladesh, India and Nepal. This research has led to new therapies, improved diseases surveillance, rapid diagnosis and innovative vector control tools adopted by national programmes. Over the course of two decades, this cost-efficient, replicable partnership saved millions of lives, with an estimated investment of US\$ 20 million. In Bangladesh alone, between 2006 and 2021, TDR's efforts averted 5.9 million **disability-adjusted life years (DALYs).** New efforts to eliminate visceral leishmaniasis in East Africa are now drawing on the success and lessons learnt from this decades-long initiative, showcasing TDR's catalytic role for South-South collaborations.



new single-dose treatment for visceral leishmaniasis. ©TDR / Amit Ashraf



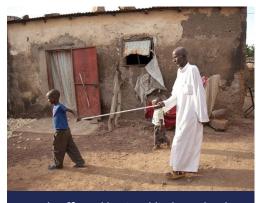
A 20-year-old patient in Santo Domingo, Dominican Republic, diagnosed with Rifampicinresistant TB receiving certification of "cured" after 9 months of all-oral treatment. ©Aline De Cima

Empowering national TB control programmes

TDR has been a pioneer in training and empowering national tuberculosis programmes to conduct research to address their local problems. TDR's unique approach engages researchers, programme managers and government policy-makers and has led to approximately 500,000 lives saved between 2007 and 2022. TDR continues to support research led by country programmes to prevent and address TB disability, shorten treatment times, and show the impact of socially innovative models on patient outcomes. An evaluation from 2022 showed that a regional network of TB control programmes TDR established in West and Central Africa led to immediate and substantial changes in policy and practices in countries.

Towards the elimination of river blindness (onchocerciasis)

TDR has had a massive impact on progress towards elimination of onchocerciasis. TDR played a critical role in the community trials which established ivermectin's safety for mass drug administration and its potential to control onchocerciasis as a public health problem. TDR led the studies supporting the registration of moxidectin by the not-for-profit Medicines Development for Global Health (MDGH) and worked with MDGH to qualify moxidectin for mass drug administration. As a more efficacious drug, moxidectin could accelerate onchocerciasis elimination. TDR is providing the tools and evidence to support decisions on implementing and adapting new interventions to eliminate parasite transmission in Africa.



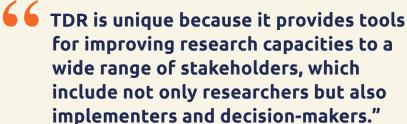
People affected by river blindness develop eye lesions which can lead to visual impairment and permanent blindness. © The End Fund/ E. Aegler

In the words of TDR beneficiaries and partners...



In many ways, TDR's support started me on a career that has led me to where I am. And I know I'm not the only one. TDR has played an influential role in building research leadership across the world."

- WHO Director-General Dr Tedros Ghebreyesus



- Maria Isabel Echavarria, Centro Internacional de Entrenamiento e Investigaciones Médicas (CIDEIM), Colombia



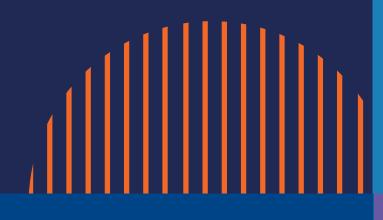


TDR has made it possible for me to conduct rigorous studies and generate powerful insights that my country is using to improve surveillance of antimicrobial use in the agricultural and human health sectors."

- Amara Leno, Ministry of Agriculture and Food Security, Sierra Leone



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