
Annual Report 2021

Global Engagement

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List of abbreviations

AFRO	WHO Regional Office for Africa
AMR	Antimicrobial resistance
ASEAN	Association of Southeast Asian Nations
ASEAN NDI	Association of Southeast Asian Nations – Network for Drugs, Diagnostics, Vaccines and Traditional Medicine Innovation
ClimDevAfrica	Climate for Development in Africa Initiative
DAC	Data Access Committee
DEC	Disease endemic, low- and middle-income countries
EDP	Ebola Data Platform
FAIR	Data sharing resources that are Findable, Accessible, Interoperable and Reusable
GFCS	Global Framework for Climate Services
H-NAP	Health National Adaptation Plans
IDRC	International Development Research Centre (Canada)
IDDO	Infectious Diseases Data Observatory
IRI	International Research Institute for Climate and Society at Columbia University, New York, USA
ISARIC	International Severe Acute Respiratory and Emerging Infection Consortium
JCB	TDR Joint Coordinating Board
NDC	National Determined Contribution
NMAIST	Nelson Mandela African Institute of Science and Technology, Arusha, United Republic of Tanzania
PHE (WHO)	Public Health, Environmental and Social Determinants of Health
PHE (AFRO)	Protection of Human Environment
P2I	Portfolio-to-Impact R&D modelling tool
RCS	TDR unit on Research Capacity Strengthening
RTC	Regional Training Centre
RVF	Rift Valley fever
SDF	Strategic Development Fund
SDG	Sustainable Development Goal
SEAR	WHO South-East Asia Region
SORT IT	Structured Operational Training Initiative
SPH	School of Public Health, University of Ghana
SPT	Special Project Team
STAC	TDR Scientific and Technical Advisory Committee

SU	Sokoine University, Morogoro, United Republic of Tanzania
SWG	Scientific Working Group
STH	Soil Transmitted Helminth
TDR	UNICEF/UNDP/World Bank/WHO Special Programme for Research on Tropical Diseases
VBD	Vector-borne disease/s
WHO HQ	World Health Organization headquarters in Geneva, Switzerland
WMO	World Meteorological Organization
WPR	WHO Western Pacific Region

Introduction

An essential part of the work of the UNICEF/UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR) is to engage with the global health community to promote and facilitate the role of research for development and to advocate for the use of high-quality evidence to inform policy. TDR is at the interface between research and health care delivery and is embedded within the United Nations (UN) family through its co-sponsors: the United Nations Children's Fund (UNICEF), United Nations Development Programme (UNDP), the World Bank and the World Health Organization (WHO). This unique position allows TDR to create a bridge from local communities to the World Health Assembly, which offers the broadest possible scope of dialogue and debate across the spectrum of health research – from priority setting to evidence-based policy-making at local, national, regional and global levels.

As part of TDR's strategy 2018–2023, the activities under Knowledge Management and Collaborative Networks and Engagement, as well as TDR Global and the Social Innovation in Health Initiative (SIHI), and effective engagement in gender and equity, are grouped together under Global Engagement (GE) in the Director's office. The Global Engagement area of work also includes TDR's collaboration with key global health stakeholders within the World Health Organization (WHO), as well as research activities of WHO headquarters and regional offices. The TDR-hosted Secretariat of the ESSENCE on Health Research initiative is also part of the Global Engagement workstream.

The overall TDR programme budget workplan for 2020–2021 (including GE activities) was reviewed and approved by the TDR Scientific and Technical Advisory Committee (STAC) in March 2019 and the Joint Coordinating Board (JCB) in June 2019.

Objectives

TDR's approach to Global Engagement is to develop and employ strategies, frameworks, tools and platforms in the following areas:

1. Engagement of key global stakeholders, TDR co-sponsors, WHO regional and country offices, and WHO control and research programmes;
2. Creation of the TDR Global community and promotion of innovative tools for mentorship and collaboration;
3. Advancement of community-engaged social innovation in health care delivery in support of universal health coverage (UHC) in low- and middle-income countries (LMICs), through research, capacity and advocacy;
4. Development of research policy to identify new approaches to support and finance research, and undertake knowledge management activities to improve the efficiency and maximize the impact of research for health;
5. Development and promotion of models of data sharing and open publications that support and promote research activities in LMICs;
6. Support the ESSENCE on Health Research initiative by working with stakeholders and funders of research to develop and promote best practices in research management, standard methodologies, implementation research (IR) and approaches to monitoring and evaluation (M&E) of impact; and
7. Effectively engage in gender and equity research and capacity strengthening.

Key achievements in 2021

SIHI network expanding worldwide through LMIC leadership

- SIHI Secretariat played a leadership role in embedding social innovation in key institutions, including WHO ([WHO Innovation hub](#)), the University of the Philippines Manila (Social Innovation Centre), The Network: Towards Unity for Health ([TUFH](#)), and in creating leverage of resources for research and network activities.
- Launch of two new self-financed hubs in India (July 2021) and Sweden (December 2021).
- Six new calls for social innovations were launched by the SIHI hubs in China, India, Indonesia, Nigeria, the Philippines, Uganda and Latin and Central America / PAHO (with a total of 22 calls) and 8 new case studies completed (with a total of 52 case studies).
- Launch of two journal supplements on social innovation in the Journal of Infectious Diseases of Poverty (full supplement [here](#)) and the British Medical Journal (call for articles [here](#)).
- Development of two new research tools: (i) the Social Innovation Monitoring and Evaluation [Framework](#); and (ii) the research checklist for social innovation, to guide innovators, researchers and other stakeholders.

Engagement with key stakeholders and WHO regional offices at the time of WHO's transformation

- Joint activities were conducted with key stakeholders and co-sponsors, including research entities at WHO, for example, the UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction (HRP) and the Alliance for Health Policy and Systems Research (AHPSP) as well as UNDP and UNICEF. Collaboration with all six WHO regional offices is strong, and implementation of the joint Small Grants Scheme continues to be a success.
- The review of the Small Grants Scheme 2020 identified the impact and reach of the scheme and provided further recommendations to enhance it. Building on this, further work was done in 2021 to identify specific examples of impact in countries.

Research policy and knowledge management

- The mapping of TDR research 2008–2020 was updated and published in August 2021.
- Provided technical assistance to three WHO-led research priority setting exercises using the WHO Guide to Research Priority Setting that TDR helped to develop in 2020.
- Coordinated two priority reports in the areas of gender, equity and human rights and the neglected tropical diseases (NTDs) and the product pipeline for Chagas and soil transmitted helminth (STH) diseases.
- Launched and implemented a knowledge translation and uptake module for the AMR–SORT IT programme. Completed three rounds of training.
- Continued operation of the Ebola Data Platform with IDDO. Provided Chair of DAC and technical assistance to other IDDO platforms, the COVID-19 clinical data platform and the COVID-19 Clinical Research Coalition.
- Supported the development of two pieces of WHO work on a policy for data sharing and reuse and creating a vision to support open science.

ESSENCE on Health Research initiative

- A new mechanism for funders to jointly review their investments in research capacity strengthening in LMICs and to enhance coordination has been developed and held its regular annual meeting.
- Two recent good practice documents on research costing and IR were widely disseminated.
- Implementation of the 2020–2021 ESSENCE workplan was completed as planned, with a focus on research management and IR.
- Increased visibility of ESSENCE in the global health research landscape has generated numerous references to its work, achievements and is a model of engagement with partners. Four new members joined the initiative.

TDR Global

- Showcasing TDR women scientists. The Women in Science compendium was launched in March 2021. We created a collection of inspiring stories to showcase the incredible work of a range of women scientists. The vision of the TDR Global compendium is to motivate those working in the field by sharing success stories of women in research.
- Crowdfunding as an innovative funding model. The Crowdfunding practical guide was developed and launched as a collaboration between TDR Global, SESH (Social Entrepreneurship to Spur Health) and SIHI. This practical guide provides tools, open access resources and advice for researchers, especially those living in low- and middle-income countries. Three of the five trainees have successfully crowdfunded for their projects. The SIHI network is including this guide among innovative fundraising approaches that will be piloted with social innovators and hubs.

Gender and Equity

- Following the recently launched TDR Intersectional Gender Research Strategy, TDR initiated a new project on gender and social innovation in health, applying an intersectional gender lens. This approach will allow to explore how gender intersects with other social variables and how they influence social innovation processes and strategies at country level that contribute to prevent and control infectious diseases in LMICs.
- Finalized in 2021, intersectional gender research studies in Nepal and Uganda, whose key findings will be incorporated into the interactive web version of the TDR toolkit on intersectional gender analysis in infectious disease research. They will also be featured in the upcoming Implementation Research Massive Open Online Course (MOOC), whose gender module will be launched in 2022.
- TDR expands its collaboration with HRP: Addressing and integrating sex and gender in health research in the context of Sexual and Reproductive Health and Rights (SRHR) and infectious diseases is an urgent priority for the two special research programmes. Attention to sex and gender throughout the research cascade – from conception to design, data collection, analysis, interpretation and reporting – is critical to ensuring research findings are scientifically rigorous, and that they equitably meet the needs of everyone. When sex and gender have been applied in health research, it has shown positive effects on both the quality of the science as well as on health outcomes and equity. This has required not only disaggregation of data by sex, age and other stratifiers and their analysis, but also innovative research methods and measures that facilitate unpacking of gender roles, norms and power relations as determinants of health. Recognising that specific knowledge, skills and competence are required to effectively integrate sex and gender in health research, we are joining efforts to strengthen this capacity.

- Strengthened and increased TDR's leadership in gender and infectious disease research among funders, academia and research and training partners.
- Completion of an IR MOOC module on gender and intersectionality that will be launched in 2022.
- TDR formalizes its commitment to principles of Equality, Diversity and Inclusivity in science and explicitly encourages researchers to apply irrespective of their gender identity, sexual orientation, social background or (dis)ability status, among others. To continue TDR's implementation of its Intersectional Gender Research Strategy, and systematically mainstreaming gender and equity dimensions, TDR calls for proposals also formalize requirements to ensure disaggregated data at least by sex and age (and other social stratifiers wherever possible as appropriate).

Summary progress description

An essential part of TDR's engagement with the global health community is to promote and facilitate the role of research for development and to advocate for the use of high-quality evidence to inform policy. Table 1 summarizes the progress achieved against the Global Engagement workplan.

Table 1. Global Engagement workplan overall progress

<i>Ongoing expected results by outcome</i>	<i>Indicators and progress against targets</i>
1.3.5 Research on social innovation to enhance healthcare delivery: i) At least four social innovation research hubs in low- and middle-income countries established and functioning; and ii) Growing number of partners who share resources and synergize efforts.	<p>By 2021:</p> <ul style="list-style-type: none"> – At least four research hubs have institutionalized social innovation as a multidisciplinary approach in their organization to enhance healthcare delivery research (promotion, convening, research, research capacity, knowledge management); and – At least three new collaborations to advance social innovation in health in the regions and/or develop new research and capacity strengthening tools. <p>Progress in 2020-2021:</p> <p>i) Thirteen SIHI country hubs, in China, Colombia, Ghana, Honduras, India, Indonesia, Malawi, Nigeria, Philippines, Rwanda, Sweden, South Africa and Uganda, have been effectively advancing social innovation research in their respective countries. The four hubs in China, Colombia, Uganda and Philippines have institutionalized social innovation in their organization and/or in their government and the hubs in Malawi and Latin America are on their way to do the same. SIHI hubs in India and in Sweden are self-financed.</p> <p>ii) In 2020-2021 the SIHI country hubs have established partnerships with new research institutions to establish additional SIHI hubs in Ghana, Honduras, India, Nigeria, Rwanda. New hubs were launched successfully and work in collaboration with SIHI network. A new collaboration between the SIHI Secretariat and WHO Innovation hub was initiated.</p>

Ongoing expected results by outcome	Indicators and progress against targets
2.1.1.2 WHO regional office collaboration and small grants: <ul style="list-style-type: none"> i) Small grants schemes operationalized in at least five WHO regional offices; ii) Functional collaboration frameworks with at least five regional offices established. 	<p>By 2021:</p> <ul style="list-style-type: none"> - Small grants calls launched, projects selected and funded; and - Evidence of collaboration framework effectiveness based on successful joint projects and activities. <p>Progress in 2020-2021:</p> <ul style="list-style-type: none"> i) Small grants calls launched in all six WHO regions. ii) Total of 200 research projects on key impact and implementation research questions conducted. iii) Review of small grants in the last 5 years conducted and lessons learned, impact assessed.
2.2.1 Shaping the research agenda: <ul style="list-style-type: none"> i) Support through technical advice and/or workshops to TDR or its stakeholders; ii) Analysis of the health product pipeline for HIV, TB, malaria and NTDs combined with mapping of operational and implementation research; iii) Technical support through regional offices to WHO Member States engaged with health research. 	<p>By 2021:</p> <p>Report on the health product pipeline for HIV, TB, malaria and NTDs combined with mapping of published operational and implementation research.</p> <p>Progress in 2020-2021:</p> <ul style="list-style-type: none"> i) The mapping of TDR research 2008-20 was updated and published in August 2021. ii) TDR provided technical assistance to 3 WHO-led research priority setting exercises using the WHO Guide to Research Priority Setting that TDR helped to develop in 2020. iii) TDR coordinated 2 priority reports in the areas of: Gender, equity and human rights and the NTDs and the product pipeline for Chagas and STH diseases.
2.2.2 Capacity strengthening to bring research evidence into policy: <ul style="list-style-type: none"> i) Embed knowledge management and evidence for decision-making into the SORT IT AMR programme; ii) Data sharing in support of capacity building and development of policy; iii) Application and use of knowledge management tools to improve the dissemination and mapping of TDR supported research. 	<p>By 2021:</p> <p>Use of ORCID ID, application of the TDR open access policy, 20 papers in the TDR Gateway</p> <p>Six policy briefs adopted in countries, to change policy and decision-making.</p> <p>Progress in 2020-2021:</p> <ul style="list-style-type: none"> i) Launched and implemented a knowledge translation and uptake module for the SORT IT AMR programme. Completed 3 rounds of training. ii) One systematic review of reviews on effectiveness of evidence to policy strategies. iii) Continued operation of the Ebola Data Platform with IDDO. Provide Chair of DAC and technical assistance to other IDDO platforms, the COVID-19 clinical data platform and the COVID-19 Clinical coalition. iv) Supported the development of two pieces of WHO work on a policy for data sharing and reuse and creating a vision to support open science.

Ongoing expected results by outcome	Indicators and progress against targets
<p>2.3.1 Collaborative networks (ESSENCE on Health Research) and engagement with global health initiatives:</p> <ul style="list-style-type: none"> i) Tools and reports used to inform policy and/or practice of global/regional stakeholders or major funding agencies; ii) Funding agencies continue to engage in policy dialogue with each other and with LMICs; and iii) LMIC capacity in research management, M&E strengthened; iv) Cases of TDR's research, RCS and KM activities benefit and are shaped by global health research agenda. 	<p>By 2021, two harmonized principles/ policies/practices introduced and adapted by funding agencies and LMIC researchers/research institutions.</p> <p>Progress:</p> <ul style="list-style-type: none"> i) <i>Two tools and reports used to inform policy and/or practice of global and regional stakeholders or major funding agencies.</i> ii) <i>A meeting of a mechanism to review and shape the investments in research capacity strengthening funding of major funders.</i>
<p>2.3.3 TDR Global:</p> <ul style="list-style-type: none"> i) A user-friendly, online platform that hosts the profiles of current and former grantees, trainees and expert advisors of TDR; ii) Community engagement activities that foster collaboration and networking; iii) Surveys/crowdsourcing that gather and prioritize ideas from trainees, grantees and experts to support mentorship and themes of interest for the community; iv) Enhanced efficiency and effectiveness via increased regional focus. 	<p>By 2021, thematic mobilization activities and country-based mobilization activities are taking place and communities of interest are created at grassroots level. By 2021, surveys/crowdsourcing tools collect ideas and prioritize them for action by the TDR Global community.</p> <p>Progress:</p> <ul style="list-style-type: none"> i) <i>The Africa node, the Latin-America and Caribbean node and the Asia node, as well as country node in Ethiopia conducted activities to mobilize members for mentorship initiative; and</i> ii) <i>Global and regional crowdsourcing contests on mentorship conducted, prioritized by regions and globally, and activities are being implemented.</i>
<p>2.3.4 Effective engagement in gender and equity:</p> <ul style="list-style-type: none"> i) Implemented TDR Strategy on gender and intersectionality across TDR projects and programmes; and ii) Mainstreamed gender responsive interventions in implementation research projects and programmes across TDR. 	<p>By 2020, TDR Strategy on gender and intersectionality launched and disseminated across regions and through RTCs.</p> <p>Progress:</p> <ul style="list-style-type: none"> i) <i>Completion of the curricula, course materials, and audio-visual production for the IR MOOC module on gender and intersectionality in infectious disease research to be launched and offered in 2022.</i> ii) <i>TDR initiates a new project on gender and social innovation in health, applying an intersectional gender lens.</i> iii) <i>TDR has strengthened its collaboration with HRP to increase research capacities that apply gender and sex dimensions in health research.</i> iv) <i>The revised version of TDR's Implementation Research Toolkit will include a module on gender and intersectionality that will be launched in 2022.</i> v) <i>TDR institutionalizes principles of Equality, Diversity and Inclusivity in upcoming calls for proposals and requirements for disaggregated data at least by sex and age.</i>

Progress description in 2021 and plans for 2022–2023

ER 1.3.5 Promotion and research on social innovation in health care delivery to combat infectious diseases of poverty

The Social Innovation in Health Initiative (SIHI) is a network of partner institutions and a community of stakeholders established in 2014 through TDR's leadership, in collaboration with the University of Cape Town's Bertha Centre for Social Innovation and Entrepreneurship, the University of Oxford's Skoll Centre for Social Entrepreneurship, and the London School of Hygiene and Tropical Medicine (LSHTM). Further, in 2016 the network expanded to engage LMICs where SIHI country hubs were established at the University of Malawi, Makerere University in Uganda, University of the Philippines, Manila, the Centro Internacional de Entrenamiento e Investigaciones Médicas (CIDEIM) in Colombia and the Social Entrepreneurship to Spur Health (SESH) in China. Since 2020 these hubs are partnering with research institutions to establish additional social innovation hubs in six new countries: Ghana, Honduras, India, Indonesia Nigeria and Rwanda. A new hub has been established in Sweden with the aim to enhance research on social innovation and develop new south-south-north collaborations.

SIHI also collaborates with various contributing partners at the global level, such as Fondation Mérieux, Ahimsa Fund, Make-A-Difference (MAD), the WHO Innovation hub, the Pan American Health Organization (PAHO), UNAIDS, the UN University, the WARN-TB Secretariat in Benin, UNDP and UNICEF; to advance and promote social innovation activities in the Global South. SIHI's expansion is illustrated in Figure 1.



Figure 1. SIHI network to advance social innovation in health through research, capacity strengthening and advocacy (2021)

The initiative aims to unlock the capacity of all health system actors and stakeholders, including communities, innovators, policymakers, frontline workers, private sectors and academics, to work in collaboration and advance community-engaged social innovation in health care delivery in the Global South. This is done through three steps: i) research to better understand what works, what does not work, and how to sustain, replicate or scale-up social innovations; ii) capacity strengthening to ensure that countries in the Global South take the lead in the promotion of and research on social innovation; and iii) advocacy to catalyse a global culture change and influence the health agenda at the local, national, regional and global levels. SIHI is aligned with the WHO Framework on integrated people-centred health services. It contributes directly to the pillars of UHC and through its community-based, multidisciplinary and multisectoral approach it strengthens national health systems and supports the achievements of the Sustainable Development Goals (SDG) (see Figure 2).

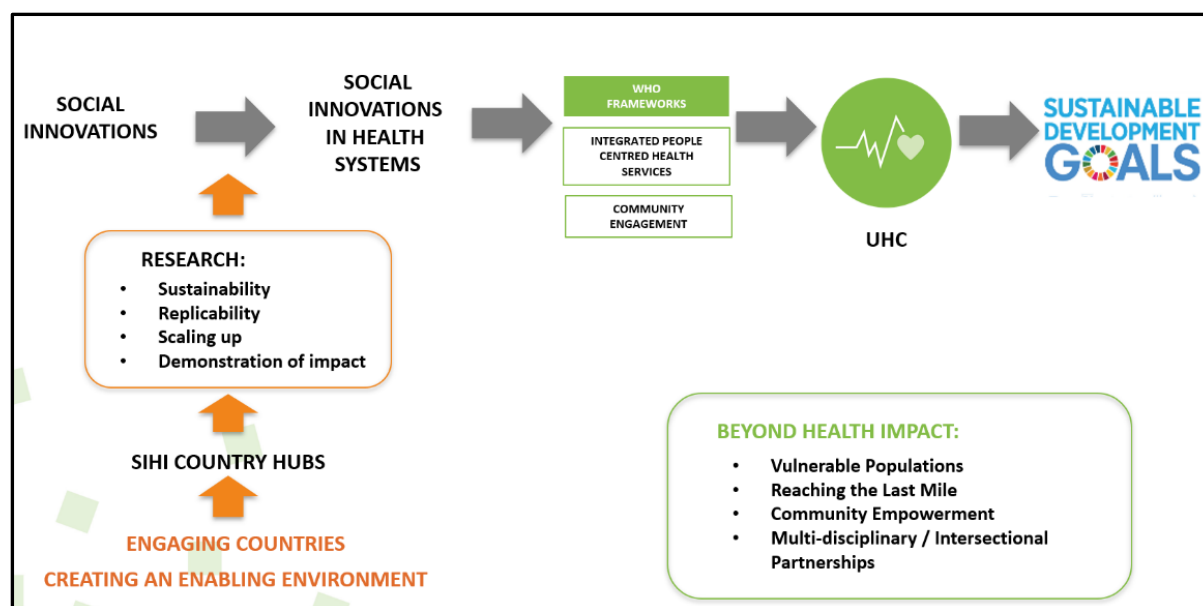


Figure 2. The SIHI results chain: A systems approach

SIHI vision is an increasing number of research institutions in the LMICs that promote and advance community-engaged social innovations to transform health care delivery. To this aim, SIHI country hubs and other SIHI partners will continue creating an enabling environment at the global, national and local levels through new partnerships and engaging new research institutions and countries to embed social innovation in their programmes.

SIHI's operational approach is based on two pillars: i) engaging countries through SIHI research hubs; and ii) creating an enabling environment to support research in social innovation in health to transform health systems. In 2021, SIHI focused on disseminating social innovation practice and research in new countries through a regional approach and creating new partnerships.

Progress in 2021

A. SIHI in the COVID-19 context

Turning issues into opportunities

The COVID-19 pandemic has transformed the world around us and highlights the need for continued innovation in health. SIHI country hubs have been innovative in order to continue advancing social innovation in health in their respective regions. They have reorganized their work and expect no major delays in deliverables planned for the 2020–2021 period. The hubs have maximized their use of digital meetings and workshops and addressed arising needs.

Enhancing health care delivery during COVID-19 through social innovation

All SIHI hubs have been involved in addressing the COVID-19 pandemic through social innovation. Examples of these are illustrated in this report; such as calls for social innovation to enhance health care during COVID-19 (e.g. Latin America and Caribbean region, the Philippines and China) and research studies to strengthen the health system in the Philippines during the pandemic.

B. Creating an enabling environment at global and regional levels to nurture community-engaged social innovation and transform health care delivery

Launch of two journal supplements on social innovation in the *Journal of Infectious Diseases of Poverty* (JIDP) (full supplement) and the *British Medical Journal* (BMJ) (call for papers)

The [special issue in JIDP features the work of SIHI](#) since 2014 in collaboration with research organizations and partners to advance social innovation through research, capacity strengthening and advocacy.

The special supplement on social innovations for health in the BMJ was coordinated by SESH and co-funded by TDR and PAHO. A [call for papers](#) was launched in September 2021 and selected papers are being reviewed.

Democratizing research: the social innovation monitoring and evaluation framework and social innovation research checklist

These research tools were developed to guide and engage innovators, researchers and other stakeholders in social innovation research. They were released in May 2021 under the leadership of SIHI China hub - SESH and in close collaboration with TDR. They aim to generate evidence and provide guidance to embed research in social innovation to understand what works and what doesn't, and to show impact. They were designed using an inclusive approach (crowdsourcing, Delphi survey, literature review) and target a large audience, including innovators, researchers, government leaders, community-based organizations and implementers. The tools complement the TDR Massive Open Online Course on implementation research and other TDR IR tools. View the interactive online version [here](#) and checklist [here](#). Read more on M&E [here](#).

Towards sustainable models

Two new self-financed hubs have been launched in India and Sweden and are piloting sustainable hub business models. The hub in India was established by the [Derbi Foundation](#). The hub in Sweden aims at providing leadership in research and catalysing north-south-south collaborations with SIHI hubs in LMICs.

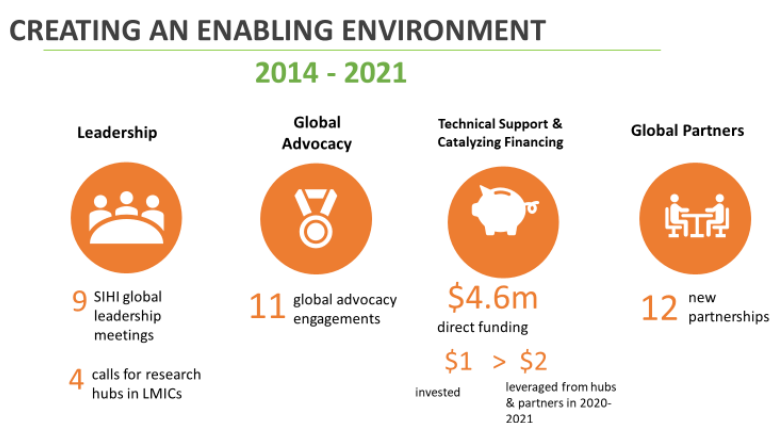


Figure 3. Key achievements from 2014–2021 in Creating an enabling environment

Expanding global partnerships

In August 2021, the WHO Innovation hub organized a webinar on 'Innovation for Youth Health' which highlighted the collaboration of TDR, SIHI and WHO to promote social innovation in health and research. The event was facilitated by WHO Director-General and featured awardees from the 2020 WHO Innovation call ([Reboot Health Winners](#)). Two of the three finalists were social innovations affiliated to SIHI. Watch the webinar [here](#).

C. Engaging countries: SIHI country research hubs are expanding and play an increasing leadership role

SIHI country hubs play a leadership role in advancing social innovation in health through research, advocacy and capacity strengthening. As research institutions, the hubs are well positioned to provide a unique platform to convene with social innovators, government and community representatives, researchers and other stakeholders.

In 2021, the country hubs further developed the partnerships established in 2020. Six new hubs were launched formally, in Ghana, Honduras, India, Nigeria, Rwanda and Sweden. Two of these are self-funded (India and Sweden) and are piloting a sustainable business model.

Together they identify and study community-engaged and citizen-led social innovations in health. To date, 326 social innovations have been identified in LMICs and 52 case studies have been conducted.

The hubs build capacity and apply research in social innovations to enhance their effectiveness and replicate or scale them up as relevant. The 2021 key achievements of the SIHI country research hubs are summarized in Figure 4.

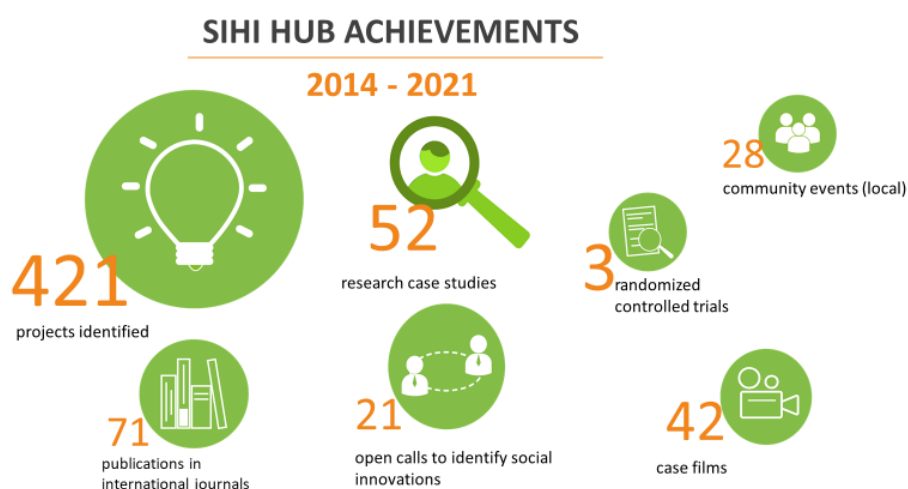


Figure 4. SIHI hubs achievements 2014–2021

SIHI Secretariat leadership in coordinating the SIHI network and establishing new partnerships

Effective network coordination – Established in 2020 at the University of the Philippines, Manila, the SIHI Secretariat enhances coordination, sharing and learning, and distributes resources among SIHI partners. Monthly virtual meetings provide hubs with an opportunity to share, collaborate and synergize efforts.

Maintaining SIHI branding – Strong branding and innovative communication strategies support the advocacy efforts when connecting to a wider global audience. The Secretariat developed new communication products to provide support to the country hubs and the SIHI website is routinely updated to ensure that key resources produced by the hubs are available to all. The Secretariat also supports the hubs in their communication strategy and key events.

Leveraging resources for network activities and creating new partnerships with the World Health Emergencies Programme - The SIHI Secretariat was selected by the World Health Emergencies Programme and awarded US\$ 150 000 to develop a community engagement training package to support health intervention implementations. The work was led by the SIHI Secretariat in collaboration with SIHI country hubs in Colombia, Honduras, Malawi, Nigeria, the Philippines and South Africa. The training package is in the process of being piloted.

Providing support to new country hubs – In July 2021, the Secretariat provided support to the Derbi Foundation to establish and launch a hub in India at the Dayananda Sagar University. They also facilitated discussions to establish a hub in Sweden, which will be launched by a consortium composed of members from Uppsala University, Karolinska Institute and the MAD Foundation.

Fostering SIHI country hubs' collaborations – The SIHI Secretariat is leading research on community-engagement self-monitoring approaches in social innovations. An approach has been developed and is being tested with social innovations in the Philippines.

SIHI Philippines hub partnerships with India and Indonesia: developing collaborations and leveraging resources

Fostering research through collaborations and leveraging of resources

- *Collaboration with the SIHI India hub* – Technical support was provided to the hub at the [Derbi Foundation](#) to launch their first nationwide call for solutions, “SIHI India Healthcare Excellence Award: A Recognition of Social Innovation and Health Impact Creators.” The two finalists were announced in June. See TDR news [here](#) and read more on SIHI India and the award [here](#).
- *Collaboration with the Center for Tropical Medicine, Universitas Gadjah Mada in Indonesia*. The first innovation call was issued in 2021. (See call [here](#))
- *The annual Gelia Castillo Award for Research on Social Innovations in Health, supported by the Philippine Council for Health Research and Development*, awarded the top three winners and seven finalists out of 67 submissions. The winners and finalists received training and mentoring sessions to help them develop research proposals and move their innovations forward.
- *A [Youth innovation call](#) was launched in collaboration with the WHO Regional Office for the Western Pacific (WPRO) and SIHI China* to identify ideas and social innovations from Filipino youth to enhance health care delivery during the COVID pandemic. Fifteen finalists were selected from 113 submissions and four were chosen as grand winners who joined a one-day online civic hackathon with mentoring activities to further develop their ideas and conduct research.
- *The SIHI Philippines hub was selected by the British Council to be the local partner of the University of Northampton (United Kingdom) to conduct a [landscape survey on social innovation and social entrepreneurship, teaching and research](#) in Indonesia, Malaysia, the Philippines and Viet Nam*. A country report on the Social Innovation and Higher Education landscape study was published. A series of webinars on social innovation and research are planned. Read the report [here](#).
- *SIHI Philippines participated in the development of the community engagement training package with the support of the World Health Emergencies Programme*. They were also contracted to conduct research to support the WHO country office in the Philippines to enhance the health system during the COVID-19 pandemic.

Embedding social innovation in medical education and training

- *Dissemination and further testing of the Introductory Module on Social Innovation in Health* – To embed social innovation in university training curricula, an introductory module on Social Innovation in Health was rolled out in 2019 at the University of the Philippines Manila School of Health Sciences, and in the Doctors to the Barrios Programme of the Department of Health. In 2021, the module was used and adopted in other programmes such as the TDR Massive Open Online Course on IR and social innovation modules.
- *Leveraging resources to introduce social innovation in new fields* – A train-the-trainer programme with Maastricht University (the Netherlands) funded by the Orange Knowledge Project of Nuffic, was developed and launched to introduce social innovation on “Sexual and Reproductive Health

and Rights”. Three train-the-trainer workshops were conducted for health professionals, community health workers and leaders to foster innovative community initiatives. Among the workshops, eight were themed on gender and intervention mapping.

- *Collaborating with The Network: Towards Unity for Health* for training in social innovation research.

SIHI Uganda hub partners with Ghana and Nigeria: enhancing country ownership and international partnerships

SIHI Uganda hub has nurtured its partnerships and further mentored the SIHI hubs in Ghana and Nigeria through regular virtual meetings.

Expanding partnerships and supporting the development of the SIHI hubs in Ghana and Nigeria

- *A total of six calls for social innovation in health successfully launched* - Since the establishment of SIHI Ghana and SIHI Nigeria in 2020 with the support of SIHI Uganda, the three SIHI hubs have successfully launched a total of six calls (two calls each, one at university level and one at country level). A total of 18 top innovations were identified and eight social innovation case studies were conducted and showcased nationally.
- *Advocacy events* – In 2021, four national advocacy events took place in Ghana, Nigeria and Uganda to promote and embed social innovation in governments.

In March 2021, the *SIHI Uganda* hub held the 3rd national social innovation in health advocacy workshop in Kampala. The workshop aimed to showcase and award the top community-based health innovations that were identified through two open calls for solutions launched in April and September 2020. It convened officials from the Ministry of Health, Ministry of Science, Technology and Innovation, and Makerere University, as well as innovators, partners and other stakeholders. Awarded innovations were the Ishaka Health Plan, My Pregnancy Handbook project, Saving Lives through Community Health Insurance and the SEEK-GSP (Social, emotional and economic empowerment through knowledge of group support psychotherapy) project.

SIHI Nigeria was officially launched in March 2021 at Nnamdi Azikiwe University and unveiled the three top innovations from its call in 2020. Participants included the Anambra State Commissioner for Health, Ministry of Health, Nnamdi Azikiwe University, philanthropists and relevant stakeholders. In August the hub, in collaboration with Federal Ministry of Science, Technology and Innovation, unveiled the three top social innovations in health from its call in February. These innovations focused on infectious diseases, namely schistosomiasis, tuberculosis and malaria. See local news [here](#).

SIHI Ghana held its national stakeholder dissemination workshop in July 2021. – The hub was officially launched at the University of Ghana in an event attended by university representatives, WHO, students and innovators. The event unveiled the finalist innovations from their call for innovation in July 2020.

- *A stronger network of local partners and SIHI champions* – SIHI Uganda has built a vibrant network of over 20 diverse Ugandan partners, including the College of Humanities and Social Sciences at Makerere University, the Transformational Business Network, Save the Children, World Vision, Rotary Club of Uganda, the Agha Khan Foundation and the Swedish Embassy in Uganda. The hub is exploring co-funding options with the Federal Ministry of Science and Technology to provide support.

Leveraging resources from international organizations and conducting research to scale up social innovations

- *Scaling up SIHI Uganda innovations on private sector engagement to manage childhood illness* – This project is supported by the award from [UNICEF and UNDP’s “Big Think Challenge”](#). UNDP’s Access and Delivery Partnership (ADP), UNICEF, TDR and SIHI Uganda build upon lessons learned in engaging the private sector, and conduct preliminary studies on private sector engagement to scale up the SIHI Uganda innovation. This project is conducted in collaboration with the TDR Research for Implementation unit and funds will be made available by UNDP in 2022. The hubs in Ghana and Uganda will lead the activities. The release of funds has been delayed however activities are planned to be implemented in 2022.

Embedding social innovation into university education

- *Engaging respective universities in the various countries* – Over ten engagement meetings (face-to-face and virtual) were conducted across universities in the three countries to promote social innovation in health and research collaborations. All three SIHI hubs encouraged respective university faculties to embed social innovation in their teaching and research. New ways to engage students and faculty are being explored.

SIHI Malawi hub partners with Rwanda: a partnership to advance research in social innovation in health in Southern and Eastern Africa

Fostering social innovation research and expanding partnership

- *Three new research case studies completed by the SIHI Malawi hub* – Following the 2019 call, the following social innovations have been identified, selected and studied. See the innovations’ impact through the following links: [Mother’s Fun Run](#), the [Managed Surgical Network through WhatsApp Group](#); and the [Online Clinic Yathu](#). Video production is ongoing.



Photo: Mother’s Fun Run is a national platform created to bring together a diverse group of change-makers from different sectors to consolidate efforts to achieve improved maternal and neonatal health outcomes. Over 15 years, MFR has mobilized over half a billion Malawi Kwacha (approximately US\$ 621 665), and supported 16 districts through resource provision and capacity building services for more than 70 health facilities.

- *Introducing social innovation research in the innovation centre in Rwanda* - In collaboration with the Ministry of Health, the SIHI Rwanda hub is committed to introduce social innovation research and practice within their existing innovation centre. In 2021 the hub conducted a mapping of existing social innovations in Rwanda. They tested the integration of social innovation within the student curriculum (innovation and entrepreneurship level 1 course). They also established new partnerships with the National Commission of Science and Technology and the Ministry of Health to support innovation projects. In 2021 a research study was funded to explore use of smartphones to increase accessibility to healthcare services for people with type 2 diabetes.
- *Joint fundraising efforts* have been initiated to identify opportunities and develop proposals.
- [The third national research and dissemination conference in Malawi](#) featured social innovations and the SIHI Malawi hub small grant schemes - The hub was a key partner in the organization of the conference.

Training future SIHI champions to accelerate social innovation

- *The “Educational training on social innovation in health” short course* featured cross-country, cross-institution social innovation practice-based education and research. In 2021 the Malawi team partnered with a young innovator at the [Malawi Union of the Blind](#), and a student researcher at the [Malawi Polytechnic Design Studio](#), to develop solutions to addresses mobility challenges for the visually impaired.
- *Piloting e-learning with students* – The SIHI Malawi hub and the Learning Technology Development Office joined efforts to develop a blend of synchronous and asynchronous learning approaches.
- *The new social innovation training programme for health systems actors* was first initiated by the Malawi hub in 2019. It resulted in: (i) the integration of social innovation into the National Commission for Science and Technology Conference in 2021; (ii) establishment of a small grants mechanisms for research and early-stage innovators; and (iii) a knowledge exchange platform.
- *Collaboration to bridge human-centred design and global health, innovation and development* – [Michigan State University \(MSU\)](#) and SIHI Malawi tested inclusion of the human-centred design approach developed by the hub in global health courses of the MSU Master’s degree in Public Health The first course took place in the spring semester which ended in April 2021, and the second cohort will run in spring 2022.
- In February 2021, SIHI Malawi and SIHI LAC (Latin-American countries) worked with the Kyoto University School of Public Health to conduct a short introduction course on social Innovation in health.

SIHI Latin America and Caribbean hub: expanding regional collaborations in partnership with PAHO (see the hub video report [here](#))

The SIHI LAC hub is hosted at CIDEIM, one of the TDR-supported regional training centres. Building upon prior achievements and the growing network in the region, they have gained audience and engaged partners in designing a sustainable business model.

Creating an enabling environment and expanding partnerships

- *The Honduran hub* was launched and integrated into the Global SIHI network and its activities. The hub expanded its institutional and external partners. It participated in the implementation of the LAC hub’s regional agenda, including the call for social innovations supported by PAHO.
- *The LAC regional network* was strengthened through the expansion of membership and participation in the virtual café and in other hub activities such as a mapping of social innovations

and partners and developing a comprehensive communications strategy. The “Café virtual” webinars have been held monthly with international outreach and multisectoral participation, including new partners from Argentina, Bolivia, Costa Rica, Ecuador, Paraguay and Peru.

- *Branding and effective communication has been a priority to enhance partnerships and fundraising* – Multimedia approaches including social media, podcasts, radio broadcasts, TikToks, an evidence brief, flyers and pedagogical tools were developed. The SIHI LAC hub’s website has been improved and made available in both English and Spanish.

Fostering research

- *Leveraging resources from PAHO to launch the first joint regional call to identify social innovations to improve healthcare during COVID-19 in the Latin America and Caribbean Region* – in collaboration with SIHI Honduras and SIHI LAC hubs, in May 2021 PAHO launched a regional call for social innovations that improved the delivery of equitable health services during the COVID-19 pandemic. A total of 128 applications were submitted (111 were fully completed i.e. submitted application forms and reference letters). Four projects were selected and four received honourable mention for being social innovations that have contributed significantly to the strengthening of health systems during the COVID-19 pandemic. There were four finalists: (1) Guatemala: a mobile call center for the exclusive use of Maya Tzutujil indigenous population; (2) Colombia: a programme for the exchange of health knowledge through radio; (3) Brazil: a communication campaign to reach vulnerable populations to inform about the latest health standards and prevention measures of COVID-19; (4) Trinidad & Tobago: a technology platform to help patients manage their medication, save time and cost, and improve accessibility; and (4) Mexico: Creation of a system to record and share problems related to access to health services and then inform the public and health authorities about these constraints so that they can be responded to. Read more about the call [here](#).
- *Institutionalization of social innovation across CIDEIM research projects* – Project teams in the hubs have been trained to integrate social innovation aspects in their proposals, e.g. the control of cutaneous leishmaniasis in rural Colombia by community leaders. In collaboration with the Wellcome Trust, the radio drama “Myths and realities of cutaneous leishmaniasis” consisting of six episodes is being co-created with the inhabitants of the Tumaco Municipality, local health workers and patients.
- *Integrating research for social innovation in the national research system* – This Internship Programme aims to enhance collaboration with partner universities and integrate research for social innovation in the national research system.
- Eight manuscripts based on SIHI activities of the LAC hub are either about to be published or have already been published.

Strengthening capacity

Training and capacity strengthening activities have been a great approach to institutionalize social innovation across institutions and countries.

- *These activities include the community-based participatory research short course*, the social innovation introduction module, e.g. training modules are integrated into the curriculum of relevant educational programmes at the National University of Honduras where more than 200 students were trained in 2021.
- *Disseminating the train-the-trainer programme for the short course for Community-based Participatory Research for Health (CBPR)* – [An introductory video of the course](#) and a virtual version of the CBPR have been developed. SIHI LAC and SIHI Honduras conducted a 20 hour workshop on CBPR with 18 participants from both countries.

- *Strengthening capacity in implementation research* in different institutions and sectors, including members of the “Latin American and the Caribbean Alliance in Social Innovation for Health” (ALACISS).
- *Leveraging* - The hubs participated in the *development of the community engagement training package* supported by the World Health Emergencies Programme and coordinated by the SIHI Secretariat.

SIHI China (SESH): Fostering research, collaboration and fundraising efforts across the SIHI network

Democratizing research

- *Launch of an M&E framework and research checklist for social innovation in health* – The SIHI China hub engaged other hubs and relevant stakeholders to develop a monitoring and evaluation framework and a research checklist for social innovation in health. See the section on Creating an enabling environment at global and regional levels for social innovation in health.

Supporting the network of SIHI hubs

- [*The SIHI China hub crowdsourcing clinic*](#) continues to support and strengthen crowdsourcing skills to effectively engage communities – The hub has organized various crowdsourcing challenges in collaboration with other hubs and TDR projects such as TDR Global and will continue to build capacity for crowdsourcing across the hubs.
- *Leading the development of funding proposals for the SIHI hub network* – SIHI China led discussions with other hubs to identify potential collaborations and develop grant applications. These include the WHO/WPR crowdsourcing open calls for youth social innovations and the future, which was successfully funded. Three pending grant applications related to COVID-19, gender issues and community-based multidisciplinary hackathons were submitted to various donors.

Fostering the development of social innovation initiatives

- *Leveraging resources to engage youth in social innovation to respond to the COVID-19 pandemic* – The crowdsourcing challenge, “Imagining the World: A call for youth voices on COVID-19” in China and the Philippines was launched in November 2020 by the China hub in partnership with the Philippines hub, and was funded by WPRO. It aimed to engage youth in the response to the COVID-19 pandemic through social innovation and nurtures innovative ideas amongst youth in the two countries. An online social innovation youth summit will be organized and training and mentorship will be provided to the finalists.
- *Rebuilding caregiver trust in childhood influenza vaccination in China* – SESH led a nationwide crowdsourcing open call contest aiming to develop an intervention package to rebuild caregiver trust in childhood vaccine programmes in the country. The open call was transitioned to a mostly digital format due to COVID-19. The open call website was viewed 7151 times according to analytics, and received 305 submissions with six finalists selected.
- [*Pay-it-Forward*](#), a social innovation developed by SIHI China - SESH, won the award from the first WHO Innovation Challenge entitled “[Reboot youth health and well-being](#)” in 2020. In August 2021 the SIHI China hub participated in a webinar on social innovation organized by the WHO innovation hub.

SIHI South Africa – The Bertha Centre for Social Entrepreneurship and Social Innovation: Focusing on system change approaches and supporting SIHI network efforts

The Bertha Centre for Social Entrepreneurship and Social Innovation is the first academic centre in Africa dedicated to advancing social innovation and entrepreneurship. This hub is self-financed and has been active in the SIHI network, taking part in cross-learning activities in close collaboration with the SIHI Secretariat.

Engaging SIHI to “change the way to change the world”: a podcast discussion

In 2021 the Bertha Centre launched a Podcast “[Just for Change](#)”, in collaboration with other hubs. The podcast focuses on the broad topics of social innovation and social justice. It highlights change-makers in the global south and their collaborations in the health sector. Listen to the episode [here](#).

Strengthening capacity of innovators

The Bertha Centre organized a workshop to showcase social innovations, synthesize stakeholders and provide training. During the past two years, they have provided technical advice to TDR for the development of the MOOC on implementation research modules on social innovation and on community engagement. In 2021 they participated in the development of the community engagement training package supported by the World Health Emergencies Programme and coordinated by the SIHI Secretariat.

Innovative financing

The Bertha Centre initiated a new project on innovative financing and social impact. Interested SIHI hubs are welcome to engage and join forces.

D. Collaborations and synergies across TDR

Development of two MOOC modules on social innovation and on community engagement included in the TDR MOOC for Implementation Research

The development of these modules has been led by the TDR Research Capacity Strengthening unit in collaboration with the [Pan-African Community Initiative on Education and Health](#), the SIHI hubs in China, the Philippines and South Africa, and international experts. The script has been finalized but completion of the module has been delayed due to the difficulty of filming during the pandemic. It is expected that these modules will be launched during the first quarter of 2022.

Identifying good practices in community engagement in implementation research and in social innovation in health

In January 2021, SIHI, in collaboration with TDR’s Research for Implementation unit, the gender work area and WHO regional offices, issued a call for proposals to identify good practices in engaging communities in research for implementation and in social innovation in low- and middle-income countries. Ten out of 114 proposals received were selected and are being implemented across the world. Read more about this [call for proposals](#).

Creating gender transformative responses to infectious diseases through research and social innovation

With additional support from the Swedish International Development Cooperation Agency (Sida), this new project was launched in 2021. It is coordinated by TDR’s gender work area, in close collaboration with the SIHI Secretariat, and will create synergy between the two work areas, gender and social innovation. It aims to support the implementation of [TDR’s new strategy on intersectional gender research](#), which calls to incorporate and strengthen an intersectional gender lens across TDR’s projects, from research capacity strengthening to implementation research and social innovation.

Currently, five SIHI country hubs (China, Colombia, Malawi, the Philippines and Uganda) have been engaged to explore the gender dimensions of social innovation in health at community level. At the end of 2021 TDR launched a call for proposals to further engage interested hubs in this activity. Read about TDR's strategy on intersectional gender research [here](#).

Innovative financing: crowdfunding to finance social innovation research

Building upon the successful work on crowdfunding research activities led by SIHI China - SESH, in close collaboration with and support from TDR Global, a crowdfunding guide was developed in 2021 and will be tested through the SIHI hubs in 2022.

Remaining challenges

As the network expands and creates opportunities for evolution, this brings with it challenges of effective coordination, maintaining the SIHI brand and quality and ensuring efficiency, synergy and sustainability. The SIHI Secretariat has shown great leadership in coordinating the network, supporting communications activities and identifying funds and creating opportunities for cross-hub research collaborations. The China hub supports other hubs in democratizing research for social innovation. Collaborations and synergies across TDR also enhance dissemination of the social innovation approach and possible co-funded research activities.

Contributions towards TDR key performance indicators

Partnerships and collaborations

Various partners contributing to SIHI's mission have helped to synergize efforts and leverage resources. These include the Ahimsa Fund, the Bertha Centre, Fondation Mérieux, LSHTM, PAHO, the Schwab Foundation for Social Entrepreneurship (Switzerland), UNAIDS, UNDP, UNICEF, Derbi Foundation, Zuellig Family Foundation, MAD group.

Estimated leverage created by this project

Various SIHI partners and stakeholders at global and country levels contribute directly to promote and advance social innovation in health care delivery. TDR funding has leveraged resources from: i) established academic centres whose regular activities focus on social innovation (e.g. the self-funded hubs in India, South Africa and Sweden); ii) global partners who dedicated time to support SIHI and embed social innovation in their programmes (e.g. LSHTM, Fondation Mérieux, the Ahimsa Fund, UNAIDS, MAD); iii) experts (meetings, external review, strategic support); and iv) SIHI country hub partners (including ministries of health, universities, advisory experts and other stakeholders).

Resources leveraged in 2020–2021 through SIHI amount to approximately US\$ 2.2 million

Gender aspects and vulnerable populations

At the organizational level, the SIHI Ad hoc Review Committee has five members: 80% women (4) and 20% men (1) and the chair is a woman. Eight out of 13 (60%) hubs are led by women.

Social innovations by nature directly or indirectly assist poor and vulnerable populations to access healthcare. SIHI supports implementation of the WHO framework on people-centred integrated health services which aims to leave no one behind. SIHI calls for social innovations often target vulnerable populations such as children, pregnant women and tribes and communities living in remote or hard-to-reach areas. SIHI case studies highlight how social innovations not only help to improve health but also to enhance community members' dignity and their economic situation.

TDR's intersectional gender research strategy covers and addresses gender inequalities and health inequities in access to healthcare, with a specific focus on vulnerable populations. The strategy is being tested with SIHI hubs.

Training

All SIHI hubs support student training across the academic spectrum where collaboration exists.

Strengthened institutions or networks

As part of the SIHI network, hubs in LMICs are becoming increasingly stronger and developing more partnerships. They further develop and implement sustainability plans to evolve and become autonomous.

Publications

Peer reviewed publications:

- Special issue in the *Journal of Infectious Diseases of Poverty* on “Social innovation to transform health care delivery” is being finalized: see here 12 articles: <https://www.biomedcentral.com/collections/SIHI>.
- Halpaap BM, Tucker JD, et al Social innovation in global health: sparking location action. *Lancet Glob Health*. 2020 May; 8(5):e633-e634. Doi: [https://doi.org/10.1016/S2214-109X\(20\)30070-X](https://doi.org/10.1016/S2214-109X(20)30070-X)
- Mothe, J. Vacaflor, L. Castro-Arroyave, D.M. Cuervo, L. Gore Saravia. Exploring Social Innovation in Health in Central America and the Caribbean. *Revista Panamericana de Salud Pública/Pan American Journal of Public Health*. 2020 Aug; 44: e77. doi: [10.26633/RPSP.2020.77](https://doi.org/10.26633/RPSP.2020.77).
- Omoleke, S.A. et al - The WHO Community Engagement Package: Strengthening an Inclusive Global Public Health Approach. *Int J Epidemiol Health Sci* 2021; 2(7):e16. Doi: [10.51757/IJEHS.2.7.2021.244835](https://doi.org/10.51757/IJEHS.2.7.2021.244835)
- Halpaap BM, Tucker JD, et al Social innovation in global health: sparking location action. *Lancet Glob Health*. 2020 May; 8(5):e633-e634. Doi: [https://doi.org/10.1016/S2214-109X\(20\)30070-X](https://doi.org/10.1016/S2214-109X(20)30070-X)
- Kpokiri EE, Chen E, Li J, Payne S, Shrestha P, Afsana K, et al. (2021) Social Innovation For Health Research: Development of the SIFHR Checklist. *PLoS Med* 18(9): e1003788. <https://doi.org/10.1371/journal.pmed.1003788>

Other publications:

- [SIHI compendium 2020](#): SIHI compendium has been updated and presents a summary of the 46 social innovation cases studied by SIHI since 2015
- New case studies and resources for new SIHI partners have been published on the [SIHI website](#).

Podcasts and radio

- SIHI South Africa/SIHI Honduras hub/ SIHI Secretariat: Participation in the podcast Just for a change powered by the Bertha Centre for Social Innovation and Entrepreneurship South Africa. Episode: [“Change makers in the global South - collaboration and innovation in the health sector”](#) 07-16-2021
- TDR/ PAHO/ SIHI LAC innovator – Contribution to the TDR Global Health Matters podcast. Episode: [Mothers of the Amazon River: a social innovation for health](#). 15-07-2021

Related news

[SIHI news articles in TDR eNews](#)

[SIHI newsletters](#)

[SIHI YouTube channel](#)

[Facebook/Twitter](#): @SIHIglobal

[LinkedIn](#)

New videos in 2021

[Gelia Castillo Award for Research on Social Innovations in Health 2020](#)

[Social Innovation 2020 // Zika Kids – Colombia, Barranquilla](#)

[Social Innovation 2020 // Mothers of the River Programme – Loreto, Peru](#)

[The Innovator’s Journey and Long version available in English, French and Spanish](#)

Results dissemination and uptake

To advance social innovation in health there is a great need to promote this approach at the global, national and local levels. Evidence provided through case studies and other research has been widely disseminated as illustrated in this report. Dissemination was done through numerous advocacy events at regional and global levels, through publications, participation in international conferences, social media, SIHI and TDR newsletters, radio and videos. The SIHI website is comprehensive and updated on a continuous basis.

Plans for 2022–2023

Planting the seeds to accelerate universal health coverage

To achieve SIHI's vision, country hubs and other partners will synergize efforts to: (i) support the engagement of new research institutions and institutionalize social innovation in them and in their respective governments, with the aim to transform health care delivery systems; and (ii) create an enabling environment at the global, national and local levels.

Building upon its work and expansion during its two initial phases, SIHI will further concentrate on Phase 3 to disseminate social innovation practices and research in new countries through a regional approach.

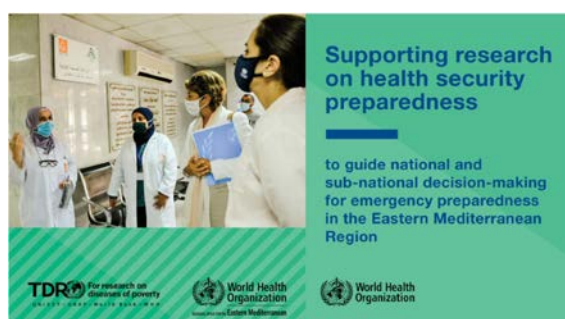
- 2014–2015 – Phase 1: SIHI launch – Making the case and WHO call for action
- 2016–2019 – Phase 2: Expanding the network to LMICs – SIHI country hubs
- 2020–2023 – Phase 3: “Planting the seed and cross-pollination” – Network expansion in the regions

The following activities are planned for 2022–2023 and efforts will be made to identify specific funds to leverage TDR's core funding and implement the regionalization phase:

- Enhancement of SIHI network coordination, sharing and learning, and sustainability, led by the SIHI Secretariat.
- Consolidation of existing and new country hubs and enhancement of partnerships with local and national partners.
- SIHI partner research collaborations.
- New mechanisms for enhancing cross-hub “pollination” and sustainability (e.g. fellowship programme, innovative financing initiative, tools to support social innovations).

ER 2.1.1.2 Regional office collaboration and small grants

TDR has a history of schemes supporting researchers and public health practitioners, in collaboration with the WHO regional offices, through small grants (ranging from US\$ 10 000 to US\$ 20 000). Since 2015, the programme's focus has been on IR and each region has taken more responsibility for jointly identifying, with TDR, the research priorities to be funded. The Small Grants Scheme embodies the overall TDR strategy by incorporating research capacity strengthening, research for implementation and global engagement. The programme has included all WHO regions since 2016.



Progress in 2021

Despite challenges related to the COVID-19 pandemic, new calls were issued jointly with EURO, EMRO and WPRO in 2020 despite the challenges of the pandemic. A special call was issued in 2019 with a focus on IR for antimicrobial resistance in the WHO European Region, which included priority countries identified by the Structured Operational Research and Training Initiative (SORT IT) on Antimicrobial Resistance (AMR) programme (to begin in 2020). Also in late 2019, TDR partnered with HRP to develop a call for research on migration and health in the Americas, which began in 2020. In 2021, TDR and EMRO added two new calls that specifically focused on health and migration, as well as implementation of the International Health Regulations (2015). This was an opportunity to engage with broader WHO initiatives focused on health and migration and health emergencies.

As reported in 2020, a review of the programme was conducted in consultation with all regional office focal points. The results of this review will help shape the programme. The priority areas of calls are listed below by region (developed in collaboration with each WHO regional office) and by number of applications received and funded.

Review and synthesis of the TDR Small Grants Scheme

A consultancy specialized in knowledge synthesis was engaged to review and synthesize the Small Grants Scheme's past five years of activities (2015–2019). This included: i) a scan of outputs; ii) highlights of useful findings and results produced by research projects; iii) a summary of generated knowledge and learning and products; iv) suggestions for principle investigators on transferrable results and practices from their projects; and v) feedback on their experience with the Small Grants Scheme and suggestions for improvement.

Information was sourced from a desk study of outputs, reports submitted by projects, and a web survey sent to 162 grantees, of which 90 responded.

Feedback from projects

Project leaders' feedback gave useful perspectives to the grants scheme, e.g. respondents mostly found the funding adequate to achieve their goals; a number of grantees requested increased funding to support scaling-up of results, diagnostic and field work and for more opportunities to share results among countries; administrative delays and delays receiving payment were noted; and some requested clear guidance from the TDR team at the start of the process, as well as timely feedback needed on reporting of results.

Knowledge base report

The review produced a useful knowledge base report that captures and presents the grant scheme's results in a practical package. It opens up the learning and experience of these 162 projects to all those interested in tropical disease policy, practice and control. The knowledge base will be made available as a public good on the TDR website and other platforms recommended by the consultants. It will also be promoted over several months on the Internet and social media, to encourage a new group of global health professionals to use and share the material and ideally to better connect professionals across LMICs. Further work was done in 2021 to identify specific projects to demonstrate impact in countries.

Review highlights and knowledge products

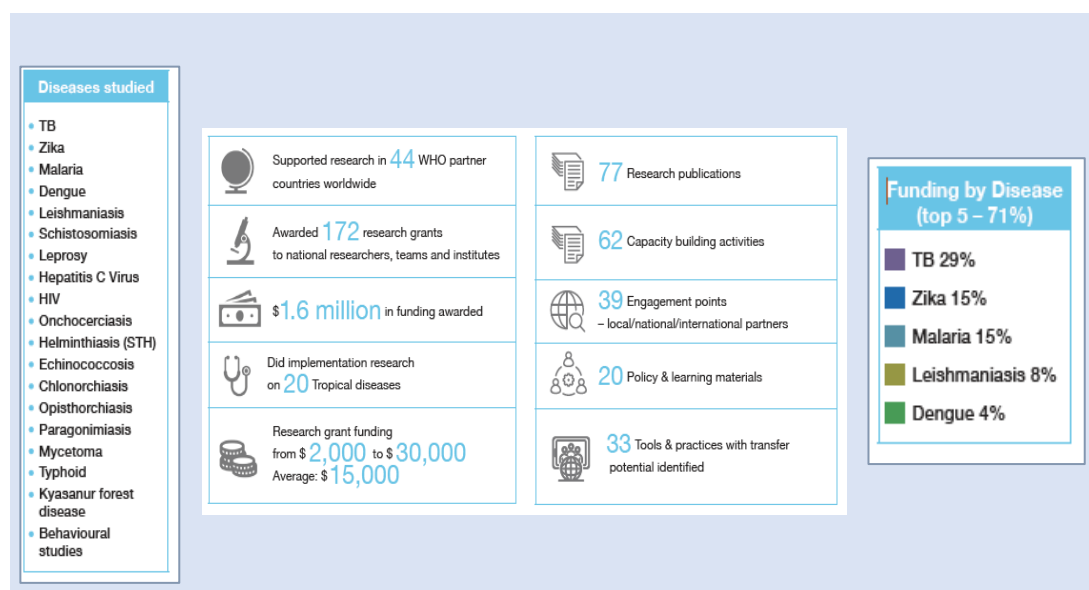


Figure 5. Highlighted information on diseases studied, knowledge products and funding distribution.

Common research topics across countries and WHO regions

These topics are opportunities to connect research teams and expand knowledge in these areas to inform a larger body of work.

- Advocacy and awareness to increase use uptake and adherence to treatments
- Virtual/Mobile Health
- Maternal and child health
- Tuberculosis
- Experience with GeneXpert Molecular Diagnostic tool for TB
- Household burden of TB – catastrophic costs
- Malaria – treatment/control strategies
- Leishmaniasis and vector control
- Snakebite
- Hepatitis C Virus economic analysis
- Antimicrobial/multidrug resistance

Policy and learning materials produced

Project teams reported using a range of approaches and materials to inform and educate policy-makers, public health officials, students, health care professionals, and local health advocacy groups. These materials were used in national public health programmes to build partner capacity and to share results with decision-makers.

Tools and practices with transfer potential

Small grants Principal Investigators have suggested 33 findings, tools and practices from their projects that have potential to be transferred for use by other public health and research professionals to address tropical diseases in LMICs.

Knowledge products

The consultants present examples of useful ‘knowledge briefs’ that compile results of small grants research on common themes across different locations. Summarizing results in practical knowledge tools helps increase the sharing of research results, team learning, and experience on tropical diseases. Some examples are:

- decentralizing TB care: transition from in-patient to out-patient model;
- approaches to leishmaniasis detection, prevention and control;
- molecular diagnostics for rapid TB detection (Gene Xpert); and
- reducing the impact of catastrophic TB costs for households.

Recommendations

Reviews suggest that the Small Grants Scheme can increase both the value of its public goods created in the project, and the uptake of results and wider use of the knowledge it creates through the following points.

- Building **learning and knowledge sharing** into the project cycle for each grant.
- Pinpointing **common research themes** emerging across regions that may be useful to combine or enrich with further targeted funding.
- Documenting **and compiling policy engagement processes** resulting from projects, and sharing these across countries with other TDR programmes, as a TDR public good.
- Starting **a debriefing process for each project** to capture and synthesize useful and transferrable results, as they close.
- Creating **TDR knowledge and learning products** in a simple, useful format that presents approaches and practices tested in projects.

The results summarized in the knowledge base report are useful material that can be used for communications, for example in short web articles, social media posts or tweets. A consistent use of the report’s language gives more visibility of a project’s results to partner institutions and their publications.

Remaining challenges

The Small Grants Scheme programme is implemented in close collaboration with WHO regional offices, with varying capacity to implement joint calls, conduct reviews, obtain ethics approvals and final approval of the proposals. TDR will continue to adapt to the needs of each regional office during programme implementation and will continue to balance between the need to develop activities jointly and use the programme as an effective tool in regional collaboration. There have been opportunities for capacity strengthening workshops on IR that helped facilitate implementation of the grants. Efforts will be made to continue with these workshops.

Contributions towards TDR key performance indicators

Partnerships and collaborations

All WHO regional offices plus EDCTP, HRP and AHPSR and the SORT IT AMR programme. WHO health and migration and emergencies programmes.

Estimated leverage created by this project

A total of US\$ 1 million was leveraged from EDCTP, AHPSR, SORT IT AMR programme, HRP and WHO.

Gender aspects and vulnerable populations

Small grants were awarded to an equal gender distribution of investigators.

Related news

- [Embedded implementation research grant awards announced](#)
- [TDR/EMRO Small Grants Scheme awards announced](#)
- [Grants awarded in the Western Pacific Region to address health system bottlenecks](#)

Plans for 2022–2023

Based on the review of completed small grants, further priority setting processes will be developed jointly with each regional office and will be undertaken to ensure that future calls address joint TDR and regional priorities. The advocacy impact of small grants in regions where research is not well funded has been enormous and this will continue through additional policy dialogue with each regional office. Further opportunities will be explored with AFRO, EURO and SEARO based on successful policy dialogue while under the umbrella of regional priority-setting processes. Emphasis will be placed on using the priorities of advisory committees on health research in regions to which TDR has been successfully linked since 2015.

In light of the recognition of the impact these grants are having by focusing on regional priorities, enhancing capacity and broadening engagement of stakeholders in research, as of the TDR biennial programme in 2022–2023 the small grants will be renamed. This change is supported by TDR's STAC, which felt that "small" diminishes the power and impact that these grants are having. The new name will be: **Impact grants for regional priorities**.

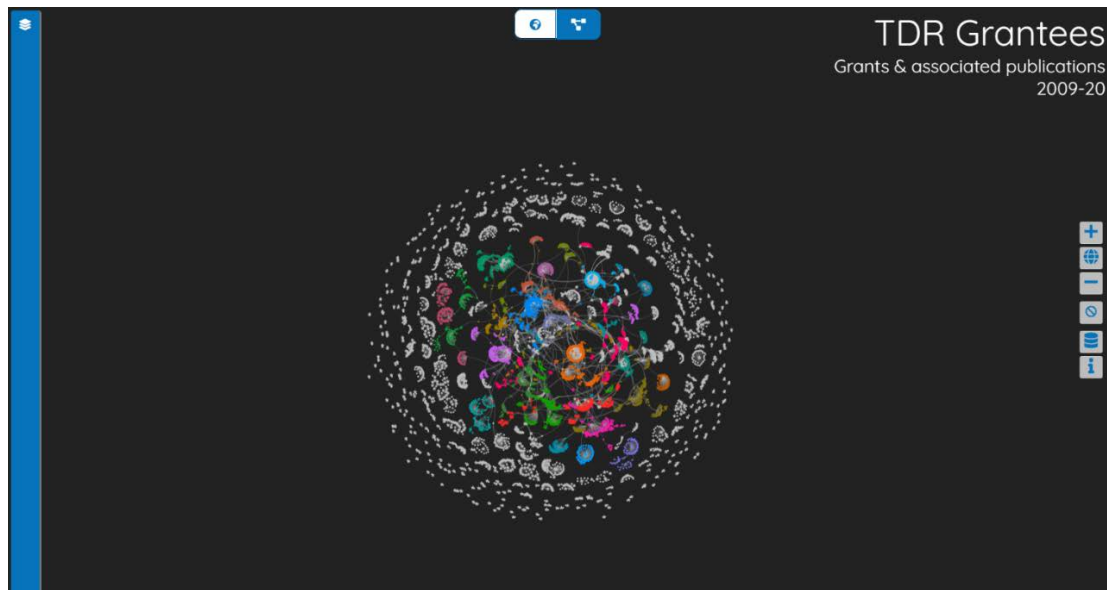
ER 2.2.1 Shaping the research agenda

Shaping the research agenda addresses the health issues affecting vulnerable and neglected populations, within the framework of the Sustainable Development Goals. It does this by:

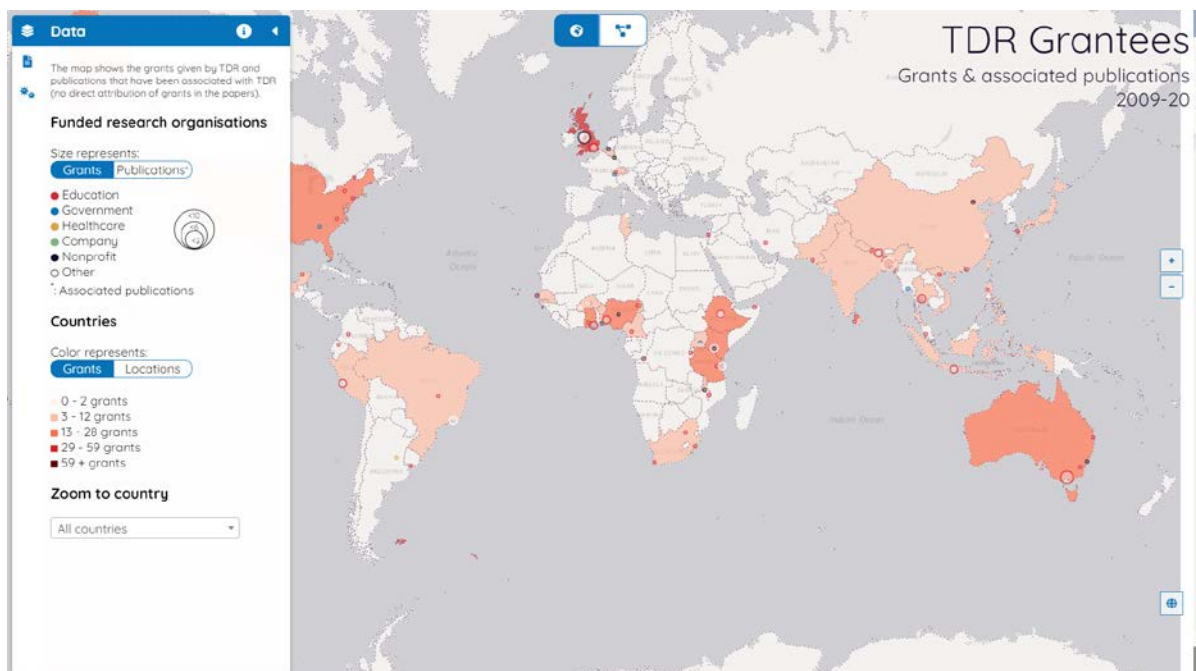
- Engaging with many stakeholders, including the WHO control programmes and regional offices, to identify and support demand-driven research priorities.
- Maintaining a governance system that brings together the disease-affected countries and research funders for joint decision-making and complementarity in programme development.
- Developing policy and new approaches to support and finance research and development through the commissioning of research and scoping studies.

Progress in 2021

TDR updated the work started in 2020 with a research analytics company, Digital Sciences, to provide an analysis of a sample of 10 385 TDR grants awarded and the 4000 associated papers published over the period 2009–2020. The [TDRExplorer](#) database shows the different research communities created and their associations, the countries where research was undertaken and, if attribution was clear, the publications that resulted from the research.



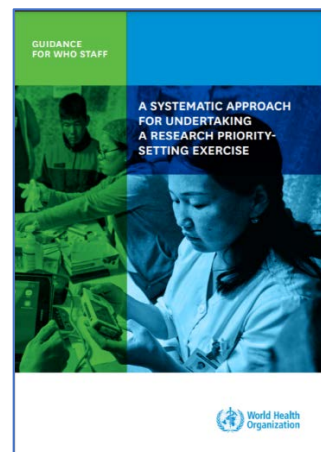
This data can also be searched on an interactive map. A short video on the two interfaces explains what the graphics represent and how they can be interpreted.



In 2020 TDR led a Science Division working group to develop [guidance](#) for WHO staff managing research priority setting exercises. In 2021 TDR used this guide to provide technical assistance to three WHO-led priority setting exercises:

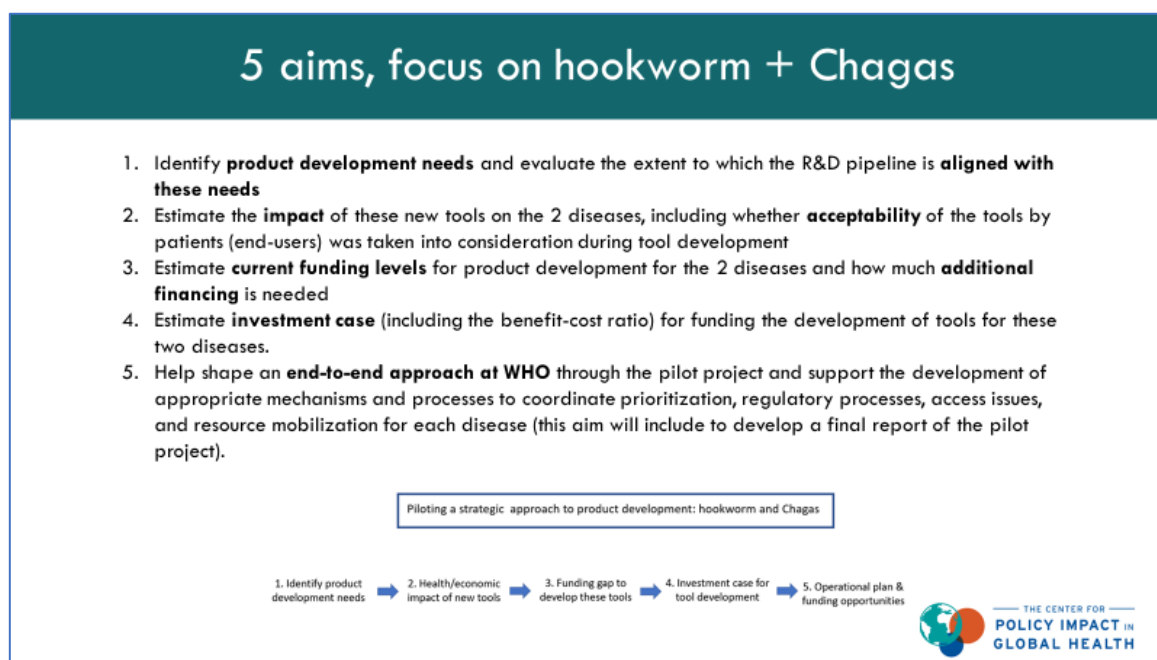
- [WHO public health research agenda for managing infodemics](#) – published
- One Health research priorities to tackle AMR - ongoing
- Research priorities to investigate the barriers to implementing known interventions in human health to tackle AMR – ongoing

The guide has subsequently been translated into Arabic, French, Portuguese, Spanish and Urdu by the WHO Regional Offices for Africa, the Americas and the Eastern Mediterranean.



TDR and the WHO Department of Control of Neglected Tropical Diseases worked to mentor a group of students studying in the United Kingdom that are part of Polygeia - a non-partisan student-run think tank that aims to create collaborations between students and global health-focussed organizations. The result was a report reviewing the literature to analyse the role of gender, health equity and human rights in the fight against neglected tropical diseases. The [report](#), published in January 2021, will feed into the new [NTD Roadmap](#) for tackling NTDs

In recent years TDR developed the Portfolio-to-Impact (P2I) R&D modelling tool and the Health Product Profile Directory to assist in the analysis of the product pipeline for poverty related neglected diseases. In a final round of analysis TDR, in partnership with the NTD Department, supported a collaboration led by the Centre for Policy Impact in Global Health at Duke University to develop a complete analysis of the pipeline for Chagas and Soil Transmitted Helminths (STH). The new strategic approach being piloted involves prioritizing product development needs for these two disease areas, estimating the health and economic impact of new tools, estimating the likely resource needs to develop such tools, and matching these needs to different financing instruments. The resulting end-to-end method will inform WHO on how its approach to identifying and describing priorities for product development and feed directly into implementation of the new [Road Map for NTDs](#).



Remaining challenges

TDR will continue to provide strategic advice on good practice methodology for priority setting and. If the restrictions on movement ease, there might be greater opportunity to support in-country exercises. The new eTDR grants management database will enable TDR to more easily keep TDRExplorer up-to-date.

Contributions towards TDR key performance indicators

Partnerships and collaborations

Duke University, USA; Policy Cures Research, Australia; Polygeia, UK; Digital Sciences, UK

Estimated leverage created by this project

The Polygeia project was completed by volunteers.

Gender aspects and vulnerable populations

Gender issues were a central theme of the Polygeia report and will feed directly into the implementation of the NTD Road Map.

Training

Technical assistance was provided by TDR to WHO in research priority setting methodology.

Publications

- Protecting the neglected from disease: the role of gender, health equity and human rights in the fight against neglected tropical diseases. Simone R. de Rijk, Katherine M. Klemperer¹, Delphine M. Depierreux, Ziruo Fu and Kirsty M. L. Mackinlay. Supervised by Robert F. Terry and Pamela S. Mbabazi January 2021. <https://osf.io/preprints/socarxiv/m7kpu/>
- Calleja N, AbdAllah A, Abad N *et al* A Public Health Research Agenda for Managing Infodemics: Methods and Results of the First WHO Infodemiology Conference. JMIR Infodemiology 2021;1(1):e30979 URL: <https://infodemiology.jmir.org/2021/1/e30979> DOI: 10.2196/30979
- Walker M, Freitas LT, Halder JB *et al*. Improving anthelmintic treatment for schistosomiasis and soil-transmitted helminthiases through sharing and reuse of individual participant data [version 1; peer review: 1 approved]. *Wellcome Open Res* 2022, 7:5 (<https://doi.org/10.12688/wellcomeopenres.17468.1>)
- TDRExplorer: <http://www.digital-science.com/consultancy/tdrexplorer>

Results dissemination and uptake

The guide on research priority setting launched in 2020 is being used by four WHO departments to develop research priorities in public health and information related to COVID-19, the NTD roadmap, HIV and AMR.

ER 2.2.2 Evidence to policy

This forms part of strengthening the research system: innovating and supporting new approaches that improve the efficiency and maximize the impact of research for health by:

- Facilitating equitable open innovation through, for example, platforms to share and analyse research data and research tools, and open access to research literature;
- Building capacity in the translation of research evidence to inform policy; and
- Supporting open innovation and greater sharing of research data.

Progress in 2021

The main achievement in 2021 has been to finalize the development and launch of a new knowledge management (KM) module for the SORT IT course. This was launched as part of the ongoing project tackling antimicrobial resistance (AMR) with participants from seven countries. Due to the pandemic and restrictions on international travel, the curriculum, developed with input from a group of 25 experts in this area, had to be adapted further to be delivered online using a virtual platform purpose-

built for TDR. This KM module provides participants with training, tools and practice to be able to effectively communicate the findings and the implications of their research. This enables them to improve the update and influence decision- and policy-making. We focus on five areas: developing a stakeholder map and communications plan; producing a two page plain language summary (handout); developing a 10 minute technical PowerPoint presentation; developing a less than three minute Lightning presentation, and finally, writing a script to use in short oral presentations, for example when meeting someone at a conference (also known as an Elevator Pitch). The module has been delivered three times in 2021 with 30 participants completing these milestones. The final day of the module is a plenary with invited guests that includes decision-makers, and key stakeholders who receive the handouts and listen to the Lightning presentations, followed by a question and answer session. As this is a cross-TDR initiative, further details are provided in the Research for Implementation report (1.1.7 Maximized utilization of data for public health decision-making) and recordings of the Lightning presentations can be viewed on the [SORT IT YouTube](#) channel.

To provide background to the development of the curriculum, a systematic review was commissioned with Dr Evelina Chapman from the Oswaldo Cruz Foundation (Fiocruz), Assessing the impact of knowledge communication and dissemination strategies targeted at health policy-makers and managers: an overview of systematic reviews.

TDR is an active member of the cOAlition S group promoting open access publishing. TDR provides the Chair of the Funding Group for Europe PubMed Central – the preferred repository for WHO/TDR published papers. TDR Gateway, the open access publishing platform managed by F1000, continues to grow and now has more than 30 papers published on its site.

TDR has partnered with the Infectious Diseases Data Observatory ([IDDO](#)) to develop secure platforms to share clinical data related to a number of diseases, including malaria, schistosomiasis, leishmaniasis and, more recently, Ebola. The Ebola platform has approved [seven applications](#) to access and use these data with three of these having a Principal Investigator from Guinea, Liberia and Sierra Leone, where these data were originally collected.

TDR has also accepted a request from the International Severe Acute Respiratory and Emerging Infections Consortium (ISARIC) and IDDO to provide the Chair for the Data Access Committee (DAC) for a new COVID-19 data platform. TDR also contributed to the development of the governance mechanisms. The database contains more than 630 000 patient records from 2000 institutions in 60 countries; this has enabled more than [44 studies](#) to date. Data have been curated to a standard format and shared with international researchers to enable 44 novel analyses (to date) gain insight into [persistent complications](#), thrombosis, acute kidney injury, [patient pathways](#), case definitions, neurological outcomes and more, in COVID-19.

TDR continues to be a major contributor to the [COVID-19 Clinical Research Coalition](#). Specifically, contributing to the Data Sharing Working Group and supporting six research projects that include: a survey of literature and collation of the current practices on clinical data sharing through a rapid evidence synthesis (RES); a mapping of compliance to data sharing policies in the context of COVID-19 clinical research; a scoping review of published research papers focused on drug treatments for COVID-19 and /or vaccines against SARS-CoV-2 virus and mapping the compliance / adherence to stated data sharing policies; a training needs assessment conducted through an online workshop to determine existing gaps in knowledge and skills among researchers in LMICs to effectively share and use COVID-19 research data; an analysis of data sharing in clinical trials using the ICTRP; a review of data sharing platforms and alignment to FAIR principles and judging how they rate for ethics, equity and efficacy and willingness to support capacity building for researchers in LMICs and a scoping review of literature; and a survey of attitudes from Ethics Review Committees in Columbia with respect to secondary use of individual patient data for research.

TDR has used this experience in data sharing to work with a WHO-led working group developing a WHO position statement on the sharing and reuse of health data for research. TDR led the development of guidance documents for WHO staff and researchers on good practice in sharing health data in ways that are effective, ethical and equitable. TDR has also contributed to the steering group for the first ever [WHO Health Data Summit](#).

Remaining challenges

The AMR–SORT IT programme will be completed in 2022 with the aim of having 72 participants complete all modules. The data reuse policy will be adopted following public consultation.

TDR normally supports up to 20 fellows each year from LMICs to attend the meetings/workshops organized by the Cochrane Collaboration on systematic review methodology. These are currently on hold.

Contributions towards TDR key performance indicators

Partnerships and collaborations

Ministries of health in Sierra Leone, Liberia and Guinea; IDDO; ISARIC; COVID-19 Clinical coalition; Mahidol Oxford Tropical Medicine Research Unit, University of Oxford, Thailand; The George Institute of Global Health India; South African Medical Research Council; Klinikum Der Universität Heidelberg

Estimated leverage created by this project

TDR managed the COVID-19 projects with the coalition with US\$ 120 000 funding from WHO.

Gender aspects and vulnerable populations

Gender considerations are built into assessments of proposals to access data platforms.

Training

TDR ensured capacity building for LMIC researchers was written into the access agreements of the data sharing platforms it works with.

72 participants in the AMR–SORT IT course completed the knowledge management module 4.

Strengthened institutions or networks

All participants on the AMR–SORT IT course are working within ministries of health, environment or agriculture.

Publications

- Lauren Maxwell, Priya Shreedhar, Delphine Dauga, Peter McQuilton, Robert F Terry, Alisa Denisiuk, Fruzsina Molnar-Gabor, Abha Saxena, Susanna-Assunta Sansone. (2021). FAIR, ethical, and coordinated data sharing for COVID-19 response: a review of COVID-19 data sharing platforms and registries (Version 1). Zenodo. <https://doi.org/10.5281/zenodo.5642635>
- Chapman, E., Pantoja, T., Kuchenmüller, T. *et al.* Assessing the impact of knowledge communication and dissemination strategies targeted at health policy-makers and managers: an overview of systematic reviews. *Health Res Policy Sys* **19**, 140 (2021). <https://doi.org/10.1186/s12961-021-00780-4>

Related news

- [Communicating research findings with a KISS](#)
- Thirty of the plain language briefing notes produced by participants on the AMR SORT course to date to communicate their research findings to decision makers are available on the TDR website: <https://tdr.who.int/activities/sort-it-operational-research-and-training/communicating-research-findings>

Results dissemination and uptake

Each knowledge management module of SORT IT ends with a plenary session to present the research findings to invited decision-makers and key stakeholders. By the end of 2021 this module had been successfully completed in Ghana, Nepal, Sierra Leone and Uganda.

Plans for 2022–2023

TDR will continue to develop the knowledge management module and expand to other SORT IT courses. The data management and sharing policies will be published. The key challenge of how to build capacity in LMIC researchers to manage and share data will continue to be explored.

TDR is a major contributor to two pieces of WHO research policy work. One will be a policy on sharing health data for research and an associated guidance document. The second is a broader policy on actions to support and enable open science. Both publications will be launched in 2022.

ER 2.3.1 Collaborative networks and engagement with global health initiatives

The ESSENCE on Health Research initiative, to which TDR provides technical support, continues to be unique within the global health architecture, producing notable achievements. ESSENCE is an effort to harmonize internationally funded research programmes and align them with the priorities of disease endemic countries and the principles of aid effectiveness. While the focus of ESSENCE is on harmonization of research capacity strengthening, by doing so, it contributes positively to the more complex efforts of harmonizing research funding overall.

Table 2 summarizes the objectives and deliverables for 2021. Building on the success of various good practice documents developed by ESSENCE, TDR facilitated harmonization efforts of ESSENCE members with their support to research management and other important aspects of the research environment in general. Following review of the ESSENCE@7 initiative, which was completed in 2016, members revised the main document *Essentials of ESSENCE*, developing a new 2020–2021 workplan which was successfully implemented. The main focus of the workplan is on research management and IR. In addition, ESSENCE was mentioned in a major report focusing on coordination of research for infectious disease outbreaks and was requested to develop a mechanism to review investments from funders in research capacity building. An ESSENCE sub-committee worked together with the WHO Observatory on Health Research and World RePORT to develop this mechanism. A consultation was convened at WHO in March 2019. In 2020 and 2021, meetings were held of the mechanism to conduct the reviews was held and the mechanism was further developed to allow funders better investment coordination. The Steering Committee and co-chairs continued to lead the efforts of the initiative and demonstrated substantial interest by member agencies in the initiative. In addition to results and deliverables, ESSENCE plays an important advocacy function in the global health research arena by proving that collaboration and harmonization of efforts is possible and can be effective, especially in the area of the Sustainable Development Goals. The TDR Secretariat continues to play a critical role in the success of the initiative and has been acknowledged by ESSENCE members as an indispensable part of its success.



Contributions towards TDR key performance indicators

Partnerships and collaborations

ESSENCE members continue to include a broad range of funding agencies in all income countries. Engagement of various parts and divisions of ESSENCE member funding agencies has increased.

Estimated leverage created by this project

US\$ 300 000 was leveraged mainly through voluntary support provided by ESSENCE members to host a meeting for the revision of the good practice documents. The NIH/FIC, IDRC and the African Academy of Science contributed to the development of a mechanism to coordinate funders' capacity-building efforts.

Gender aspects and vulnerable populations

Four women and three men are members of the ESSENCE Steering Committee.

Training

Workshops on research management were held at the Southern, Eastern and Western African Research and Innovation Management Associations (SARIMA, EARIMA and WARIMA).

Related news

- [ESSENCE Brochure](#)
- [Mechanism to review investments in capacity building](#)

Plans for 2022–2023

The 2022–2023 workplan will be developed and approved by the ESSENCE members early in 2022. The focus on research management and IR will continue, led by the established working groups. Additional work will expand research management support in LMICs, a priority issue for all funding agencies. More emphasis will be placed on the dissemination of good practice documents and additional capacity-building activities will take place to support the use of good practices.

Table 2. ESSENCE objectives and deliverables in 2020

Objectives	Achievements and progress
ESSENCE good governance and management	<p>ESSENCE has engaged more members with whom there is close interaction and a sense of partnership, including several new member agencies.</p> <p>Two virtual meetings were held in 2021 to monitor progress of the initiative, including a standalone face-to-face meeting of members hosted by IDRC. The Steering Committee (co-Chair from NIH/FIC and Sida, plus the Wellcome Trust, USAID, EDCTP, Institut Pasteur, HRP and TDR) conducted monthly teleconferences.</p>
Enhanced policy dialogue between funders of research for health and grant recipients for better shared understanding of funding opportunities, needs of LMIC scientists and broader research ecosystem challenges	<p>ESSENCE engaged with African health research funding agencies/councils, including policy dialogue at the annual Southern African Research and Innovation Management Association (SARIMA) conference which identified strategic directions for potential collaboration. A mechanism to enhance coordination of investments from funders in research capacity has been developed.</p>
Provide mechanisms for funders to share, discuss and sustain coordination of their respective programming, as well as inform LMIC scientists of funding opportunities	<p>ESSENCE presentations at several meetings/conferences promoted harmonization, coherence and alignment principles through stakeholder panels addressing research capacity strengthening needs, opportunities and modalities of funding. Efforts continued to collect and make available to members information on various initiatives/projects and activities (e.g. through the World Report). Members receive regular communications with structured updates on activities. ESSENCE meetings and other informal gatherings on capacity building took place throughout the year.</p>
Identify and share good practices on specific aspects of research between funders and with LMIC scientists	<p>The good practice document on costing is revised and published in English, French and Spanish. The IR good practice document was developed and finalized. Research management and implementation research/science were identified as priority areas and working groups were established in late 2017 to continue to advance the work in this area.</p>
Communicate successes, lessons learned, and good practices (ESSENCE documents) in LMIC-based health research management to increase its use and impact	<p>A good practice document on the impact of health research on development was completed in 2017 and was disseminated in 2018–2019. The 2011 edition of the Planning, Monitoring and Evaluation Framework good practice document has been updated. A Spanish version of the good practice document on costing of research (currently under revision) has been completed. The new implementation science good practice document and costing were widely disseminated in 2021 via various associations, conference and webinars, including TDR Global.</p>

ER 2.3.3 TDR Global community of grantees, trainees and experts

TDR Global¹ is a worldwide community of passionate scientists and experts who have been working with TDR on research on infectious diseases of poverty.²

TDR Global receives input and oversight by an external working group³ that includes expert adviser members and observers from institutions that collaborate closely with TDR. A community engagement strategy was developed by the advisory group in 2016 and is being implemented with a specific focus on mentorship.

TDR GLOBAL MISSION

TDR Global supports the action of local scientists associated with TDR by catalysing collaboration between people and helping them fulfil their mission. This facilitation role is undertaken through innovative communication and engagement tools, methods and events that stimulate dynamic participation and strengthens local capacity.

PURPOSE

- Foster mentorship to help members of TDR Global increase their capacity and profile.
- Catalyse collaborations by showcasing TDR Global members' profiles.
- Identifying experts to be considered for review of grants or expert committees for TDR and its partners.
- Encourage networking and connections between people.

Progress in 2021

This section presents progress made on the implementation of the TDR Global Strategies for Community Engagement which were endorsed by the TDR Global working group, September 2016, and further refined in 2018.

REGIONALIZATION OF TDR GLOBAL ACTIVITIES

The aim of this approach is to engage TDR Global members in regions by creating a TDR Global community through three specific objectives:

1. Generate interest among scientists, experts and other relevant individuals for TDR Global community activities;
2. Promote TDR Global crowdsourcing challenge contests; and
3. Engage more scientists, experts and other relevant individuals from the regions in TDR Global activities through the implementation of the best research mentorship idea.

¹ For more information on TDR Global see: <https://www.who.int/tdr/partnerships/tdr-global/TDR-Global-One-Pager.pdf>.

² For insight on community member perspectives, see TDR Global: <https://youtu.be/jR3Ct4-BxEs>.

³ For a list of external working group members, see: <https://www.who.int/tdr/partnerships/tdr-global/TDR-Global-ad-hoc-working-group.pdf>.

TDR Global Africa node

Aim

The TDR Global Africa node engagements in 2021 seeks to further enhance engagement activities within the TDR Global African community, through a crowdsourcing open call on research mentorship and community engagement through webinars. This aims to consolidate gains and learnings from our previous engagement activities, including the 2019 research mentorship contest. The ultimate goal is to highlight mentorship opportunities, networking, collaborations, etc., by appealing to the TDR Global African community to enrol and/or update their profiles on the TDR Global Discovery Platform.

Research mentorship crowdsourcing contest

The call for submissions in the 2021 mentorship contest was launched on 1 June 2021 and the closing date was extended to 30 July 2021. In the end, 51 submissions were received, and after initial screening for eligibility and scope, 39 were eligible for evaluation. Nine TDR Global members from seven countries in Africa, including one Assessor from SESH Global, assessed the submitted mentorship ideas. At the end of the second round of assessments, 15 submissions (scoring between 7 and 10) were shortlisted for final assessment. In the final round, the top three finalists emerged. The finalists competed for a global prize involving winners from the other regional nodes in December 2021.

Awards for contest winners

The winner received US\$ 2000, a plaque and a certificate of recognition. The second and third winners each received US\$ 500, a plaque and a certificate of recognition. Their mentorship ideas will be shared via webinar or podcast sessions organized by regional nodes in 2022.

Community engagement through webinars

Five webinars have been organized or co-organized by nodes and TDR. These are:

1. TDR Global Web seminar on ORCID - 25 March 2021
2. Scientific Data Sharing - 4 June 2021
3. Sharing Institutional Mentorship Experiences to Strengthen Mentorship for Research in Health in LMICs - 29 July 2021
4. ESSENCE on Health Research: Five keys to improving research costing and pricing in low- and middle-income countries - 17 August 2021
5. Outdooring winners of the 2021 research mentorship contest - 27 October 2021

Our sixth and final webinar for 2021 was successfully held on 9 December with SIHI Malawi and collaborators to continue engaging with mentorship in social innovation. The theme of the webinar was “the role of institutional partnerships in building social innovation ecosystems”. The aim is to use this as a starting point to highlight and have discussions about the importance of institutional mentorship in strengthening institutional partnerships in building social innovation ecosystems.

Outcomes

Our engagement activities in 2021 resulted in an increased number of individuals who have expressed interest in registering or updating their details on the Discovery platform and our social media platforms.

- The number of people following us on the TDR Global Africa Node Facebook page has increased from 165 in 2020 to 261 as at November 2021
- Membership on the TDR Global Africa Node LinkedIn page has increased to 58 members from the initial seven members in 2020.

- The number of TDR Global members in Africa with valid email addresses on the discovery platform has increased from 787 in 2020 to 857 as at November 2021.

Way Forward

In 2022, we intend to provide support to the winners of both the 2019 and 2021 research mentorship contests to implement their research mentorship ideas in their institutions. Also, as part of our main community engagement activities, we intend to organize a crowdsourcing open call on institutional mentorship, where we will focus on getting institutions in Africa to present ideas/strategies on how institutional mentorship could be initiated or strengthened in their respective institutions.

TDR Global Latin America node

Communication strategies/activities

As the backbone of the project and aligned with the objectives of the proposal, a communication plan was established and is being implemented in order to increase visibility of TDR in the Latin America and Caribbean (LAC) region, as well as to strengthen active participation and inter-institutional collaboration among members of the TDR global community.

Different communication strategies such as mailings, social media posts, institutional newsletter and website banners have been used to:

- Promote TDR's mission and highlight TDR news among the general research community in the region.
- Disseminate opportunities for research, training and career development among the TDR Global community.
- Promote registration and profile completeness on the TDR Global platform among the regional TDR Global community.

Open call on mentorship in research for health in Latin America and the Caribbean

During May and June 2021 we established a steering committee with seven members from Colombia, Honduras, Panama and the United Kingdom, who helped us in the definition of the Terms of Reference for the call and the evaluation criteria, as well as provided support for the promotion of the call within their networks. One member also supported the translation of materials to Portuguese.

Development of communication materials

- Expectation campaign – 20 June
- Call launched in Spanish – 21 June
<https://www.cideim.org.co/cideim/es/component/content/article/535.html>
- Call launched in Portuguese – 25 June
<https://www.cideim.org.co/cideim/es/component/content/article/4-noticias/536-2021-06-23-20-09-19.html>

The primary channels for call promotion were:

- CIDEIM website
- Institutional monthly newsletter
- Web banner
- Social media networks (Twitter, Facebook, LinkedIn).
- Eleven mailing communications sent to our two databases of 3043 contacts registered at TDR Global and participants of the RTC network
- Announcement in the TDR Global institutional mentorship webinar
- Identification and contact of six focal points in Brazil who helped us to disseminate the call (Brazil has the largest TDR Global community in the LAC region)

The call was extended to 22 August.

Increased direct communication to potential focal points in the different countries of the LAC Region. We contacted TDR Global members with the most complete profiles in different countries to ask for support in the dissemination of the call.

Partial results:

- By the end of the call (22 August), 19 applications had been received which were evaluated for eligibility.
- Evaluation process started at the end of August.
- A finalist and semi-finalist have been selected and recognized in the region and are now preparing their participation for the global award.

Video tutorials promoting use of the new Discovery platform

In order to promote the use of the TDR Global Discovery platform, the LAC node, jointly with TDR and Because Stories, developed a first “outline” for a video (motion graphic story) presenting the benefits of the platform from the perspective of a hypothetical TDR Global member who has taken full advantage of the platform, leading to extraordinary results for his/her research career.



Figure 6. Frames from the motion graphic.

Additionally, an instructional video guiding users through the Elements platform and the most frequently asked questions is being developed, which will feature on YouTube and include chapter indexing for ease-of-use.

Digital TDR Global events

Three TDR Global digital events have been organized as a collaborative effort of the three nodes (Asia, Africa and Latin America):

- Web seminar on ORCID (Led by Asia node), April
- Webinar on data sharing (Led by Africa node), May
- Web seminar on Institutional Mentorship (Led by the LAC node), July

TDR Global Asia node

Main objectives

1. Enhance the number of TDR Global members in Asia with complete profiles on the TDR Global platform.
2. Identify member needs and potential contribution to TDR Global.
3. Connect TDR Global members with experts.
4. Strengthen research mentorship in LMICs from the WHO regions of South-East Asia and the Western Pacific.

Objective 1

- We identified 639 members from 24 Asian countries (Bangladesh, Bhutan, Cambodia, China, Fiji, India, Indonesia, Japan, Korea, Laos, Maldives, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Taiwan, Thailand, Timor Leste and Viet Nam). A Google form was sent to members with incomplete profiles asking them to complete the form and the information was added to their profile. Sixty-seven profiles were completed for members (13 from Bangladesh, 5 from Bhutan, 2 from Cambodia, 14 from India, 10 from Indonesia, 19 from Nepal, 2 from the Philippines, 1 from Malaysia and 1 from Thailand).
- We invited a total of 149 2021 RTC training participants to register as TDR Global members. A link to the registration form was sent to all training participants.

Objective 2

- A survey was sent to 78 TDR Global members from Nepal, 36 (46%) of whom responded. The majority (58%) of respondents participated in training organized by TDR followed by TDR postgraduate IR students and TDR grantees. Only 17% are working in collaboration with other TDR Global members.
- A survey was conducted to identify members' issues regarding data sharing.

Objective 3

- Co-organized a TDR Global ORCID webinar with 108 attendees.
- Organized a webinar on research ethics.
- Co-organized a webinar on research data sharing.
- Co-organized a TDR Global webinar on institutional mentorship attended by 132 TDR Global members. Link to download recording video:
https://www.icloud.com/icloudrive/0mHBQT6H2M1lsu2W1NtPbax9w#TDRG_Mentorship_contest
- Co-organized an ESSENCE on Health Research webinar in August 2021 attended by 173 participants. Link to download the video:
https://www.icloud.com/icloudrive/0FW8NIwR1APJkDuStl15PNHnw#TDR_ESSENCE_Webinar

Objective 4

- Organized an Implementation Research Mentoring series in collaboration with the Philippines Society for Public Health Practitioners in May 2021.
- Launched a research mentorship contest in July 2021.

CATALYZING THE ESTABLISHMENT OF NATIONAL NODES

Strengthening the Ethiopia node

The TDR Global Ethiopian node is active and working to establish a mentorship programme. A training workshop on mentorship was organized in August 2021. The Ethiopia node, together with the developing United States node, are steering the joint work across all nodes for the development of an Institutional Mentorship Guide, to help institutions in LMICs strengthen their mentorship environment and a new generation of scientists.

<https://ahri.gov.et/tdr-global-ethiopia-node-tdrgen-conducts-a-hybrid-training-on-mentorship/>

Establishment of a United States of America node

A node in the United States could help support global mentorship, collaboration and development. Following a series of discussions, a TDR Global pilot programme was launched at the University of North Carolina in Chapel Hill to develop a United States TDR Global node. This will commence with a UNC Honors student who will be mentored by Dr Joe Tucker. The student started in August 2021 and will provide assistance on TDR Global projects for two academic terms at approximately 20 hours per week.

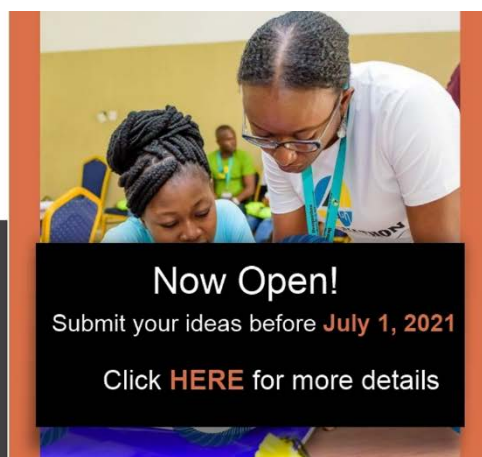
REGIONAL AND GLOBAL CROWDSOURCING CONTESTS TO PROMOTE INNOVATIVE MENTORSHIP

Africa

Mentorship is a fundamental part of health research. But many research institutions around the world, especially in low and middle-income countries, lack specific tools to enhance mentorship. In addition, COVID-19 has radically changed the mentorship environment, changing the nature of research collaboration, networking, supervision and mentorship. Thus, a TDR Global open call focused on research mentorship in Africa is needed. The purpose of the 2021 TDR Global Mentorship Open Call was to identify actionable tools, innovative resources and support related to research mentorship during and after COVID-19. The Africa mentorship open call was initially launched in May 2021 and



**2021
RESEARCH MENTORSHIP
CONTEST (AFRICA)**



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Submit your ideas before **July 1, 2021**

Click **HERE** for more details

was extended to 30 July. Following extensive community engagement and promotion of the contest, a total of 51 submissions were received. They were thoroughly screened and a total of 39 were found to be eligible, meeting the eligibility criteria for selection. The eligible submissions were sent to nine assessors to be scored as part of the semi-final stage of assessment. A final stage of assessment (those scoring from 7 to 10) was done to determine the first, second and third best mentorship ideas.

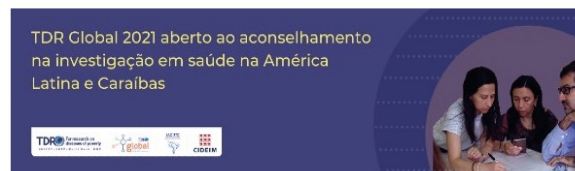


Latin America and the Caribbean

Convocatoria abierta sobre mentoría
 en investigación para la salud en
 América Latina y el Caribe



TDR Global 2021 aberto ao
 aconselhamento na investigação em
 saúde na América Latina e Caraíbas



An online platform was built and initiated for submissions. The call for submissions was developed in Spanish and Portuguese. The contest was posted on CIDEIM's website and was promoted through different social media networks (Twitter, Facebook, LinkedIn), the institutional monthly newsletter, as well as the TDR Global network. The deadline for submission was 22 August. A total of 117 new unique registration requests have been received through the TDR Global platform since the launch of the contest. Currently 15 have been verified and considered eligible and are already registered on the platform. A finalist and semi-finalist have been selected and recognized in the region and are now preparing their participation for the global award.

Asia



The Asia open call contest was launched in July 2021. The contest invitation email was successfully delivered to 801 recipients, including 359 TDR Global Asia members. An information session was held on 28 July 2021 (3pm Jakarta time). The contest will also invite TDR Global members to vote for the best idea and there will be a separate prize for most voted idea.

Your Digital Mentor podcast

“Your Digital Mentor” was a finalist from a TDR Global crowdsourcing open call. The purpose of the podcast is to enhance mentorship, focusing on people in low- and middle-income countries. The podcast now has over 5000 listeners in 93 countries. According to media analytics, it is now ranked in the top 5% most popular out of 2.5 million podcasts globally. Funds have been pledged from Wellcome Connecting Science to complete a third season in 2021–2022.

Your Digital Mentor podcast



INNOVATIVE FINANCING MODEL: TDR GLOBAL PUBLIC ENGAGEMENT AND CROWDFUNDING

Up to now, all three of the finalists from 2020 who launched crowdfunding campaigns in 2021 have been successful, resulting in strong community engagement, in-kind donations from research institutions, and achievement of their financial campaign goals. Estimated leverage created by that project is US\$ 40 000, including SESH personnel in-kind for crowdsourcing open calls – US\$ 15 000 from the United States National Institutes of Health, the United Kingdom Medical Research Council, and other research grants, plus regional and country node technical support.

The crowdfunding model is being considered by the SIHI network and hubs for inclusion among innovative ways for social innovators to raise support from academia and the local communities where they conduct their activity. Training materials and interfaces will be explored for this purpose.



Congratulations

to Dr Asha Wijegunawardana and her team on reaching their crowdfunding target to finance community-based leishmaniasis research in Sri Lanka.

Celebrating another success from TDR Global's initiative on innovative financing for research.



Dr Asha Wijegunawardana, a Senior Lecturer at Rajarata University in Sri Lanka, raised US\$ 7244 to support her community-engaged leishmaniasis research in Sri Lanka. She spoke to leishmaniasis patients who were included in her brief video pitch, enhancing her public engagement. She also received in-kind support from Rajarata University to create her video pitch, support crowdfunding and enhance her communications strategy.

The second finalist, Dr Teerawat Wiwatpanit, was also successful in public engagement and crowdfunding. His research project focuses on neutralizing Zika transmission from mother to child during pregnancy. In partnership with the National Center for Genetic Engineering and Biotechnology in Thailand, he created a detailed plan for public engagement, including a press conference, science conference event and a trip to the local farmers market. He received mentorship support from TDR Global member Dr Jackie Alger. Despite competing demands from COVID-19, he was able to exceed his crowdfunding campaign goal, ultimately raising US\$ 8180 for his research study.



\$8,180

Raised of \$8,000 Goal

102%

Funded on 11/29/20

Successfully Funded

How does this work?

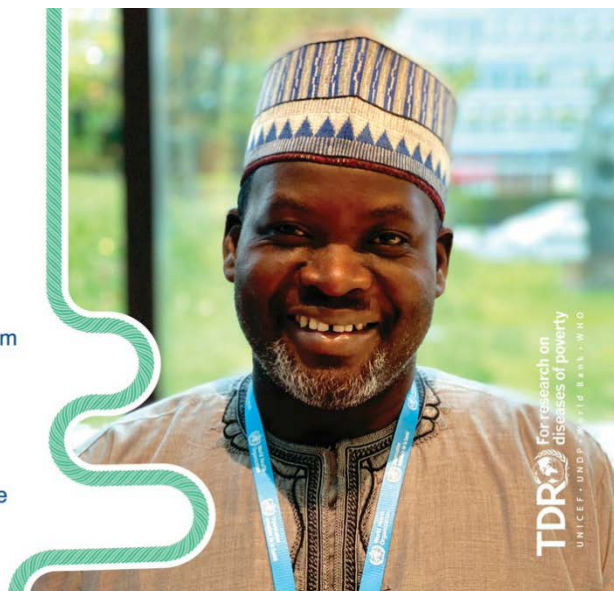
Finally, Mr Mahmud Ali Umar led the third crowdfunding campaign focused on supporting urogenital schistosomiasis research in Kano State, Nigeria. He worked closely with community leaders to develop the project, including a quotation from a local village chief in his video pitch. He worked with community leaders, Nigerians living abroad, clean water foundations and others to build momentum. His crowdsourcing pitch was also shared through community radio in Nigeria, amplifying its effect. He also exceeded his goal and raised a total of US\$ 11 122.



Congratulations

to Mr Mahmud Ali Umar and his team on reaching their crowdfunding target to finance schistosomiasis research in Kano State, Nigeria.

Celebrating another success from TDR Global's initiative on innovative financing for research.

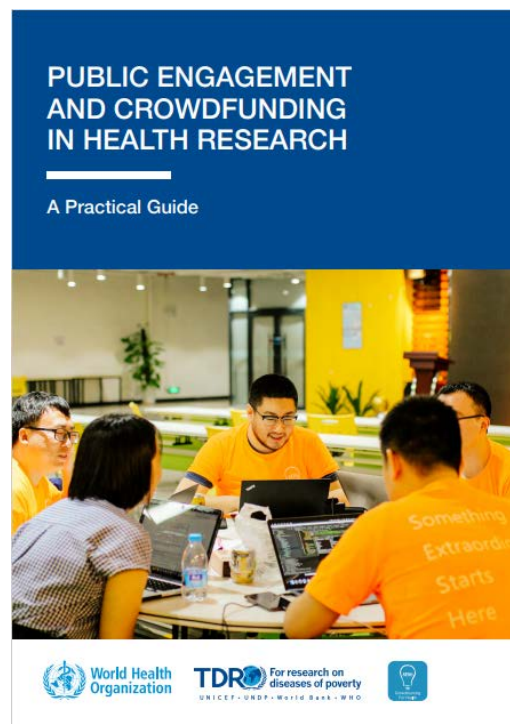


DEVELOPMENT OF PUBLIC ENGAGEMENT AND CROWDFUNDING IN HEALTH RESEARCH PRACTICAL GUIDE

TDR Global, in partnership with SESH and SIHI, developed a Crowdfunding Guide, including successful campaign examples from finalists in the research crowdfunding campaign. It also explains the crowdfunding process and links to open access resources. The guide is being translated into other languages for broad circulation, so that more LMIC researchers can learn innovative ways of funding their projects.

The guide is available in PDF format, and an interactive online version⁴ as well as a motion graphic video were developed to help explain the guide and encourage dissemination. This was communicated via Twitter and other online platforms. A social media toolkit was also developed for TDR Champions willing to help with dissemination.

A few examples from the campaign elements are included below.



⁴ See [TDR Crowdfunding \(crowdfundinghealth.org\)](https://crowdfundinghealth.org)

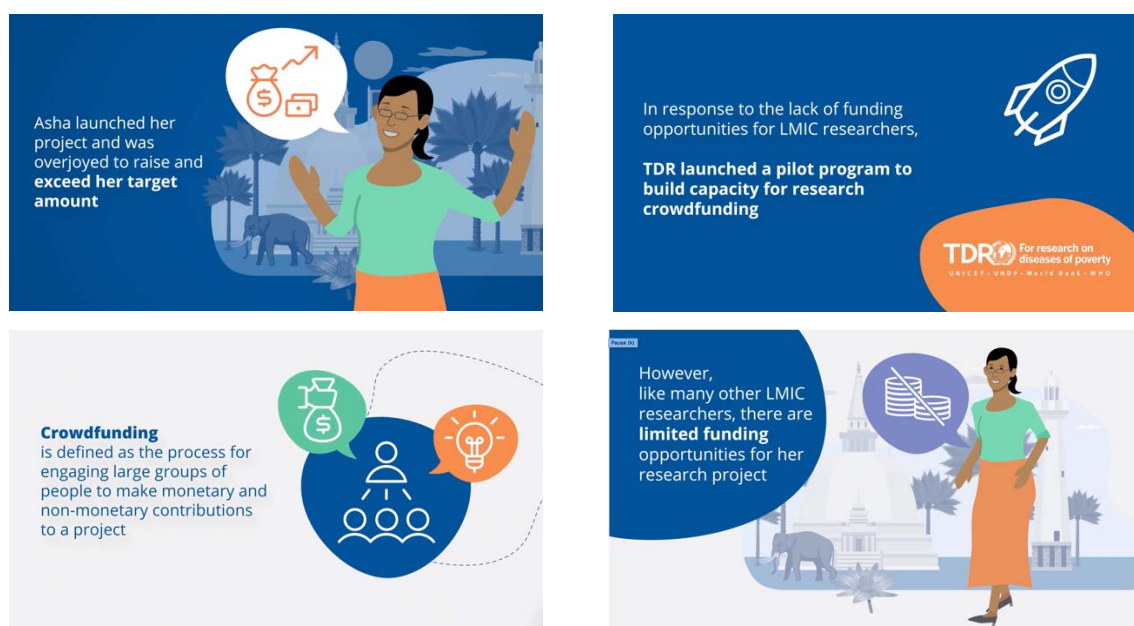


Figure 7. Frames from the motion graphic video.

ADDING NEW MEMBERS

In 2021, 222 new members were registered. Of these, 77 (50 men, 27 women) came from the WHO African Region, 50 (15 men, 35 women) from the WHO Region of the Americas, 19 (11 men, 8 women) from the WHO Eastern Mediterranean Region, 4 (1 man, 3 women) from the WHO European Region and 72 (33 men, 39 women) from WHO the WHO South-East Asia Region. Of the new members, 112 are women and 110 men. The regional nodes' focal points have been instrumental in increasing inscription to the TDR Global platform. As of late 2021, the platform had 3477 active members with known contact information.

In 2021, there were 22 764 sessions recorded on the TDR Global Discovery public platform, with 47 800 pages viewed. 20 067 users from 170 different countries accessed the platform in 2021.

ADVOCATING EFFECTIVELY FOR TDR CORE VALUES

Advocacy and communication activities covered two broad themes: a dissemination campaign for the TDR Global Discovery platform and disseminating the first Women in Science compendium.

TDR Global Discovery platform video series

The TDR Global Discovery platform is the public face of TDR Global, and it is a significantly improved collaboration tool that reflects the feedback received from users.

Feedback from the TDR Global community identified the need for a motion graphic promoting the general benefits of having an updated profile on the Discovery platform.

A 3-minute motion graphic telling the story of a scientist whose career benefited from taking advantage of the Discovery platform is being developed.

Women in Science compendium⁵ - launch campaign

Historically, being a woman meant more obstacles in achieving a fulfilling career in science. While using innovative methods to support and increase the number of women researchers' participation in TDR activities as trainees, principal investigators and experts, the compendium showcases success stories of respected scientists who have collaborated with TDR over the past decades.

We created a collection of inspiring stories to showcase the incredible work of a range of women scientists. The vision of this TDR Global compendium is to motivate those working in the field by sharing success stories of these women in research. It all started a few years ago when TDR interviewed a group of women scientists we have supported at some point in their careers to track their progress and careers since.

With this compendium, we decided to go one step further and re-interviewed the women from the original group of interviewees to get in-depth knowledge of their one-of-a-kind journeys as women in science. These scientists come from many different places—Colombia, Ghana, Kenya, Malawi, Mali, Morocco, Myanmar, Nigeria, Pakistan, Philippines, Somalia, South Africa, Sudan, Swaziland (Eswatini), Uganda and the United Kingdom of Great Britain and Northern Ireland. Each woman featured in the compendium has her own unique story to tell. None of their paths were without challenges, but it is how they reacted, embraced and overcame these challenges that impressed us.

Following the completion of the Women in Science compendium, we embarked on a dissemination campaign via Twitter and Facebook to raise awareness of the compendium, in celebration of International Women's Day (8 March 2021). The campaign was very successful, reaching up to 17 221 impressions, 405 engagements and 60 retweets on certain messages/Tweets of this campaign.

The Compendium is being translated into other languages for broad circulation, for dissemination to researchers, students and institutions in LMICs.

Social media strategy

TDR's communications group conducted a social media strategy to investigate industry trends and best practices for social media for future dissemination of TDR Global messaging. Interviews were conducted with node members, TDR Global members and TDR staff.

Following the strategy process, a presentation was made of key recommendations for the future, including: social media channels, messaging architecture, how best to support nodes, hashtags and tagging.

A key recommendation was made to develop a website repository of communication tools, acting as a one-stop shop for TDR Global nodes and other parties interested in disseminating TDR Global messaging.

⁵ See <https://apo.who.int/publications/i/item/women-in-science>

Web repository of communication tools

We are in the process of developing a web repository, where relevant messaging will be pre-packaged for use on relevant communication and social media channels, including Twitter, Facebook, LinkedIn and YouTube. The repository will also house the TDR Global branding guide and how-to guides serving as training manuals for best practice usage on relevant social media channels.

Remaining challenges

- How do we use other platforms such as WhatsApp to reach more people?
- Need to look for ways to approach both old and new members. More difficult to approach older members. Need a plan for inviting them to be more active in mentorship.
- How do we link TDR Global to synergize with other areas of TDR? Work is ongoing to build a bridge between TDR Global and future mentorship activities across TDR, to avoid duplication.

Contributions towards TDR key performance indicators

Partnerships and collaborations

- Social Innovation in Health Initiative (SIHI). Many of the SIHI partners helped disseminate crowdsourcing open calls within their respective region.
- TDR Global nodes. The TDR Global Research Mentorship Contest was organized as a partnership between SESH and SIHI hubs as well as the TDR Global regional nodes and the TDR Global community. An online platform was built and launched for submissions. Announcements, including promotion materials, were developed, translated into different languages and shared with representatives from the TDR RTCs for dissemination. TDR Global posted the contest information on their website and it was constantly promoted through different social media platforms by using the hashtag #TDRMentorshipContest.

Estimated leverage created by this project

The 2021 leverage is estimated at US \$140 000, including SESH personnel in-kind for crowdsourcing open calls – US\$ 15 000 (from National Institutes of Health (USA), the Medical Research Council (UK) and other research grants), plus regional and country node technical support. An estimated US\$ 100 000 was leveraged from regional nodes and the Ethiopia node, in technical expertise, meeting organization, volunteer participation, communications, local infrastructure, etc.

Gender aspects and vulnerable populations

TDR Global membership is being surveyed on the topic of gender identity. Following a recommendation from STAC to consult with grantees and trainees in the field regarding the best way for collecting, analysing and reporting gender identity data while assuring the PI safety and confidentiality of information, a questionnaire was developed to assess this aspect within the TDR Global community. The results may inform any future change in TDR's current policy of collecting binary gender information as part of the grant application process.

Strengthened institutions or networks

The crowdfunding project benefited from strong local, institutional and regional contributions. Each of the three finalists were successful in reaching their crowdfunding campaign goals.

Regional nodes learned how to conduct crowdsourcing contests, to gather new ideas and promote the best of them through delving into the wealth of wisdom that the community of scientists harbours.

Publications

- Liu E, et al. 'When she rises, we all rise': a crowdsourcing challenge to increase women's participation in an infectious diseases research fellowship. BMC Infect Dis. 2020 Sep 29;20(1):715. doi: 10.1186/s12879-020-05433-5. PMID: 32993542; [PMCID: PMC7526393](#).
- Liu E, et al. Women's global health leadership in LMICs. Lancet Glob Health. 2019 Sep;7(9):e1172-e1173. doi: 10.1016/S2214-109X(19)30308-0. [PMID: 31401998](#).

- Kpokiri et al., Social innovation research checklist : A crowdsourcing open call and digital hackathon to develop a checklist for research to advance social innovation in health. medRxiv [Preprint] doi: 10.1101/2020.11.03.20225110. PMID: 33173931; PMCID: [PMC7654927](https://pubmed.ncbi.nlm.nih.gov/33173931/).
- Kpokiri E, Wu D, Srinivas M, et al. Using a crowdsourcing open call, hackathon and a modified Delphi method to develop a consensus statement and sexual health survey instrument. *Sex Trans Infection*. 2021. PMID : [33846277](https://pubmed.ncbi.nlm.nih.gov/33846277/).

Related news

TDR Global Research Mentorship Challenge Contest

2021 TDR Global Mentorship Open Call - Africa

<https://publichealth.ug.edu.gh/artc/news/extension-2021-tdr-global-mentorship-open-call-africa>

2021 TDR Global Mentorship Open Call- Spanish

<https://www.cideim.org.co/cideim/es/component/content/article/535.html>

2021 TDR Global Mentorship Open Call- Portuguese

<https://www.cideim.org.co/cideim/es/component/content/article/4-noticias/536-2021-06-23-20-09-19.html>

TDR Global Career Impact Contest

https://www.seshglobal.org/?post_type=products&page_id=19473

TDR Global Crowdfunding contest

https://www.seshglobal.org/?post_type=products&page_id=17564

Results dissemination and uptake

The results of these studies have been disseminated in open access peer-reviewed manuscripts and findings presented at global and regional conferences on public health and social innovation in health. For example, Dr Tucker gave a presentation on crowdsourcing at the International AIDS Society Conference (Virtual IAS, July 2021). In August 2021, the SESH participated in a Youth Day event organized by the WHO Innovation Hub.

Owing to the COVID-19 pandemic, most of the dissemination and uptake activities in 2021 have been digital.

ER 2.3.4 Effective engagement in gender and equity

This new expected result aims at guiding and supporting TDR's intersectional gender research agenda by strengthening gender-responsive efforts in research on infectious diseases across different department activities and programmes. For this purpose, this expected result considers the need to base gender equality and health equity efforts on solid evidence and in strengthened research capacities, drawing on materials that emphasize the need for a comprehensive approach to effectively address gender and equality dimensions in research on infectious diseases of poverty.

Key elements of this expected result include:

- Disseminating, promoting and implementing TDR's intersectional gender research strategy;
- Supporting an intersectional gender approach across research and training-related activities and programmes;
- Facilitating gender and intersectionality analyses in research for implementation training; and
- Advocating for a research agenda guided by the principles of diversity, inclusivity and equality.

Progress in 2021

Exploring and incorporating gender dimensions in social innovation

In June 2020, TDR launched its strategy on intersectional gender research as a pathway to a more inclusive and effective response to infectious diseases.

Gender norms, roles and relations are all known to influence people's susceptibility to different health conditions, particularly those associated with infectious diseases in LMICs. Sex and gender are key drivers of health outcomes, including through delivery and access to health products and services for the prevention and control of infectious diseases. The new strategy aims at strengthening TDR's research programmes to address these issues and emphasize gender as an entry point into a deeper intersectional analysis. Gender has always been a critical area for TDR and this is a step forward in shaping TDR's work alongside the TDR strategy for 2018–2023.

The Social Innovation in Health Initiative has strong potential to develop more inclusive, gender transformative (Fig.8) and effective responses to infectious diseases. SIHI aims to unlock the capacity of all health system actors and stakeholders, including innovators, communities, policy-makers, frontline health workers, the private sector and academics, collaborating to advance community-engaged social innovation in health care delivery in the global south.

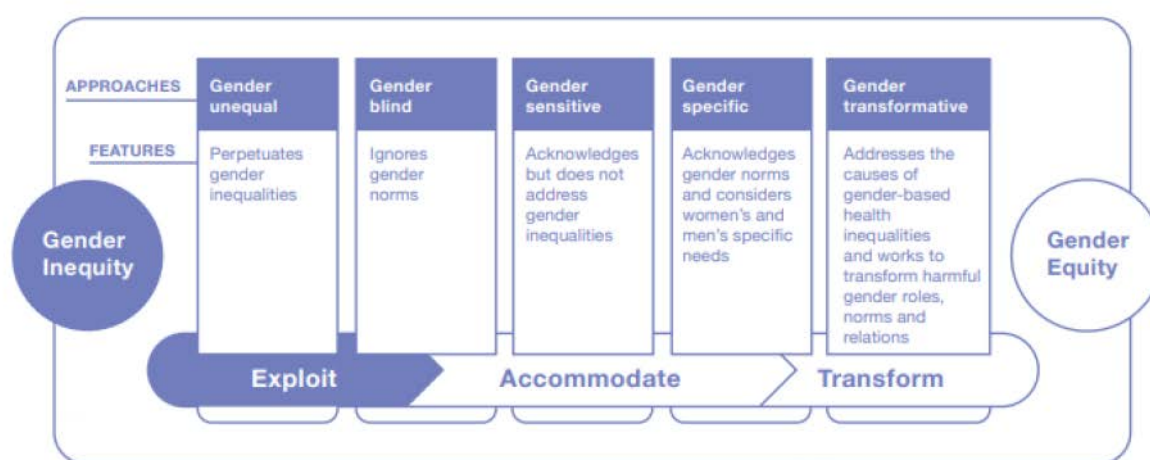
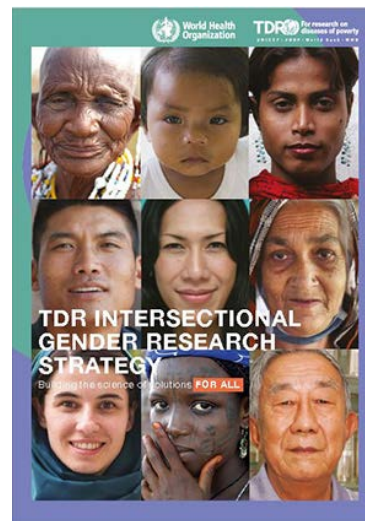


Figure 8. TDR Intersectional Gender Research Strategy. Extracted from “A continuum of approaches for integrating sex and gender. Lorraine Greaves, Ann Pederson, Nancy Poole (Eds). Making it Better: Gender transformative health promotion. Canadian Scholar's Press/Women's Press. 2014.

At the end of 2021, TDR initiated a new project on gender and social innovation in health, applying an intersectional gender lens. This approach will allow to explore how gender intersects with other social variables and how they influence social innovation processes and strategies at country level that contribute to prevent and control infectious diseases in LMICs from five different geographical regions.

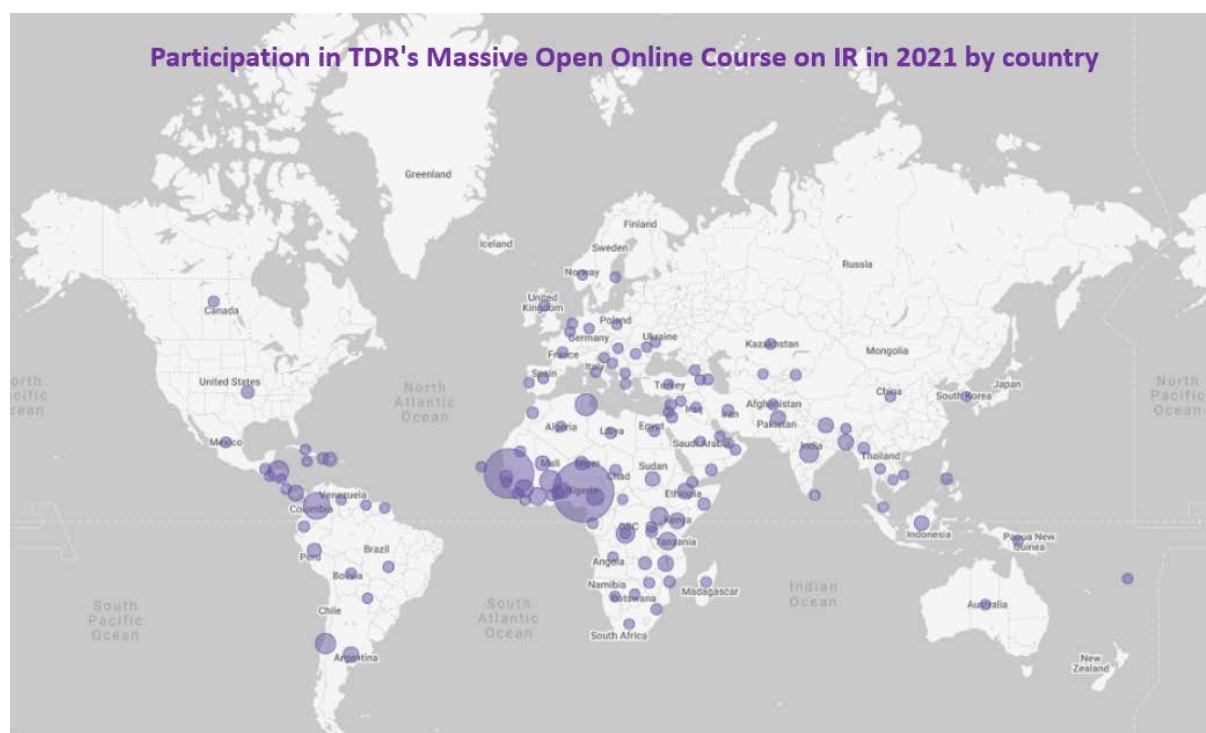
Drawing on SIHI's vision, the project will contribute to implementing TDR's intersectional gender research strategy, working with an increasing number of research institutions in the global south that play a fundamental role in implementation research and in advancing social innovations to transform

health care delivery, from Latin America to Asia. To this aim, teams based in LMICs as well as SIHI country hubs will jointly explore and identify the gender dimensions that underpin and influence social innovations, and locally tailored strategies to address gender intersecting inequalities in access to treatment and care and disease prevention and control efforts. It will also explore lessons learned from identified gendered aspects and dimensions that interplay within social innovations in health at community level.

Implementation Research MOOC module on Gender and Intersectionality

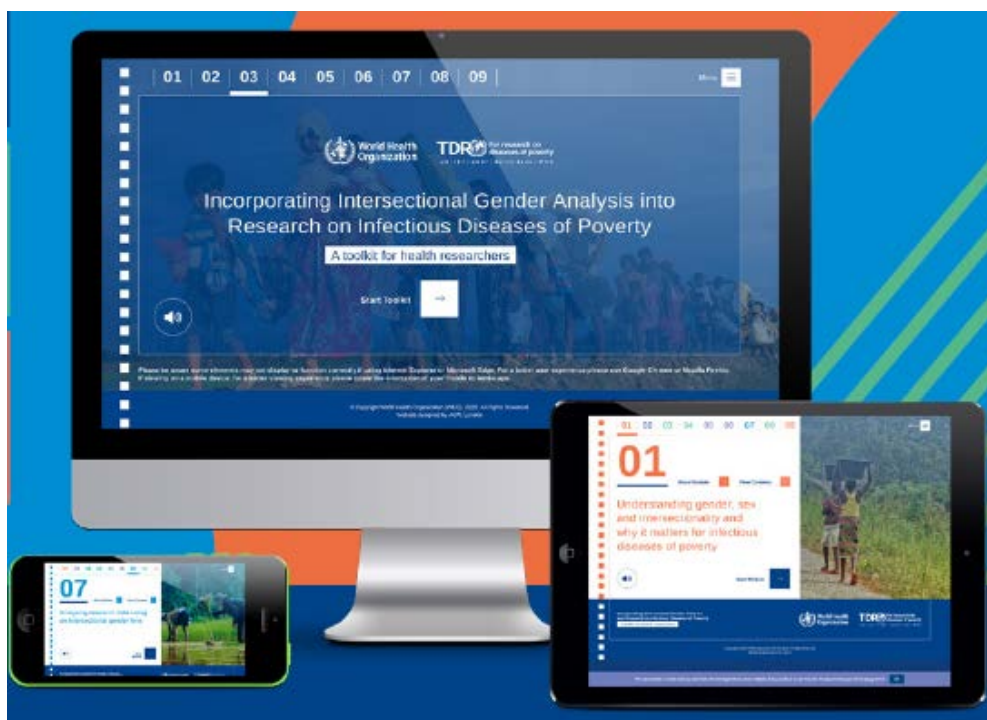
TDR-GE is active in facilitating the dissemination of IR concepts among main stakeholders in the fight against infectious diseases of poverty: public health researchers and decision-makers, academic and research institutions and public health practitioners in the North and in the South. To this end, TDR identified sex and gender as key drivers of health outcomes, including through delivery and access to approaches and products for the prevention and control of infectious diseases. The aim is that research programmes adequately and appropriately address sex and gender and their intersections with other drivers of ill-health.

TDR is completing the final stages of production of an IR MOOC module on gender and intersectionality that illustrates IR concepts with real case studies. The course development benefits from input of experienced public health researchers, practitioners and academics. Utilizing IR concepts, the IR MOOC on Gender and Intersectionality is being developed in collaboration with the United Nations University, International Institute for Global Health (UNU-IIGH) and will be part of the TDR MOOC.



This module was completed at the end of 2021 and will be launched in 2022. Throughout the delivery of the module, examples used in existing IR MOOC modules will connect the new content to previously presented material in the MOOC. The project team will also identify supporting audio-visual content to enhance the delivery of the module, covering real experiences from research country teams in LMICs. The materials will also be incorporated into the interactive online version of TDR's Toolkit to incorporate intersectional gender analysis into research on infectious diseases of poverty.

<https://tdr-intersectional-gender-toolkit.org/cover/0001.html>



Drawing on key concepts and elements pertaining to gender and intersectionality approaches, this new module will describe and illustrate how and why intersectional gender analysis is a powerful approach when studying infectious diseases of poverty in the field of implementation research. Importantly, students will be able to learn, among other things:

- How intersectional gender analysis can be integrated into the needs assessment phase of implementation research.
- How the strategy development phase of implementation research can be informed by the results of intersectional gender analyses.
- How intersectional gender analysis can be used to formulate implementation research questions.
- How integrated knowledge translation can be applied to implementation research that has used an intersectional gender lens.

The course will walk through various studies, including the TDR supported projects in Nepal and Uganda, connecting key concepts presented in prior chapters with examples from real case studies.

TDR Implementation Research Toolkit: Development of a gender module

TDR and WHO collaborate with UNDP and PATH in the Access and Delivery Partnership (ADP) (<https://www.who.int/tdr/capacity/access-delivery/en/>). This unique partnership recognizes that the introduction of new health technologies can place significant burden on existing health systems in LMICs, including challenges relating to social determinants of health. ADP strengthens the capacities in LMICs with the aim of promoting well-functioning health systems that are essential for access to, and delivery of, health technologies for all. By accelerating efforts to address these challenges, ADP seeks to support and contribute to efforts in LMICs to attain universal health coverage and the sustainable development goals. One of the areas of capacity strengthening is implementation research for effective service delivery and patient access while ensuring no one is left behind.

In line with the TDR intersectional gender research strategy (<https://www.who.int/tdr/news/2020/TDR-publishes-strategy-for-intersectional-gender-research/en/>) that promotes building the science of solutions for all, TDR is currently updating the online version of the IR toolkit (<http://adphealth.org/irtoolkit/en/>) with a module on gender considerations in IR as a pathway for more inclusive and effective response to infectious diseases. This Toolkit is being designed to guide researchers and health practitioners to develop an implementation research proposal incorporating an intersectional gender lens.

TDR and HRP expand their collaboration to strengthen capacities to incorporate sex and gender in health research

The WHO hosted special programmes TDR and HRP are working together to understand how partners integrate sex and gender into health research conducted at HRP Alliance Hubs, TDR Regional Training Centres and the TDR Postgraduate Training Scheme. The joint initiative, whose initial activities included a broad partner consultation, include exploring information about:

1. Current understanding of the value of including sex and gender as variables in health research;
2. The extent to which institutions include sex and gender within health research previously conducted; and
3. Training needs of institutions related to the inclusion of sex and gender in their own workplans.

The findings will be used to inform the development of programmes to strengthen the integration of sex and gender in health research.

TDR formalizes its commitment to principles of Equality, Diversity and Inclusivity in science and explicitly encourages researchers to apply, irrespective of their gender identity, sexual orientation, social background or (dis)ability status, among other. To continue TDR's implementation of its Intersectional Gender Research Strategy and systematically mainstream gender and equity dimensions, TDR calls for proposals formalize requirements to ensure disaggregated data at least by sex and age (and other social stratifiers wherever possible as appropriate) in upcoming calls for proposals.

KEY PRINCIPLES GUIDING THE STRATEGY

Equality, Diversity and Inclusivity (EDI) are key principles that are embedded in the organizational culture and in all three core areas of TDR's work (Research for implementation, Research capacity strengthening, and Global engagement). These include:



Inclusive, diverse engagement with stakeholders who can make changes happen at all levels, from funders to communities.



Ensuring research findings are made available to a wide range of audiences to improve allocation of resources that will improve health outcomes for all.



Ensuring key principles are reflected in appropriate benchmarks and timeframes for achieving gender equality mainstreaming goals.

Other global initiatives:

TDR contributed to the global initiative led by the Gender and Health Hub at UNU-IIGH on the Gender and Health Research Agenda Setting Process for COVID-19, which was launched at the end of 2021.

Remaining challenges

Incorporating an intersectional gender lens and creating and strengthening gender-transformative research agendas takes time and progress may differ across programmes and activities, which is an expected circumstance. Efforts to incorporate an intersectional gender lens happen progressively and require dedicated resources under each of the expected results to ensure sustainability.

Due to COVID-19, research project activities in Nepal and Uganda were slightly delayed, and some activities had to be postponed due to lockdown restrictions but will resume in early 2022.

Contributions towards TDR key performance indicators**Partnerships and collaborations**

HRP, TDR Regional Training Centres, TDR Postgraduate Training Scheme, SIHI country hubs, HRP Alliance Hubs, The Gender & Health Hub at the United Nations University International Institute for Global Health

Estimated leverage created by this project

TDR's intersectional gender research strategy is expected to continue to be a vehicle to sustain and increase funding support across TDR core areas and programmes, to ensure gender responsive research and training activities and projects.

Gender aspects and vulnerable populations

Gender and intersectionality dimensions embedded across all activities under this ER.

Training

TDR ensures capacity building for LMIC researchers through the development of the IR MOOC module on gender and intersectionality.

Strengthened institutions or networks

RTCs across regions.

Publications

[TDR Intersectional Gender Research Strategy](#)

Related news

Gender research

<https://tdr.who.int/publications/i/item/2020-06-05-tdr-intersectional-gender-research-strategy>

Results dissemination and uptake

TDR continues to provide technical advice and support to regions that are willing to draw on the intersectional gender research strategy within their programmes and countries.

Plans for 2022–2023

Dissemination of the newly developed IR MOOC module on Gender and Intersectionality is expected to take place in 2022 and continue into 2023. In addition, it is planned to strengthen the gender and intersectional lens within the Impact grants for regional priorities (formerly Small Grants Scheme) and explore avenues to support regional offices and RTCs in the incorporation of intersectional gender analysis within their workplans and research programmes.

Outcomes of past projects

<i>Past expected results</i>	<i>Progress on outcomes</i>
2.2.1 Shaping the Research Agenda	<p>The guide developed by a WHO working group led by TDR has been used by three WHO global priority setting exercises.</p> <p>The Health Product Profile Directory has been transferred to the Science Division and embedded in the WHO end-to-end process of product development.</p>
2.2.2 Evidence into policy – data sharing	<p>June 2020 saw the first applications to access data stored on a new Ebola Data Platform. Three of the successful applications were from Guinea, Liberia and Sierra Leone.</p>

Budget and financial implementation

TABLE 3: Approved Programme Budget 2020–2021 and funds utilized

Expected result	Global Engagement	\$40m scenario			Revised planned costs (September 2021)			Implementation at 31 December 2021			Implementation rate*		
		UD	DF	Total	UD	DF	Total	UD	DF	Total	UD	DF	Total
1.3.5	Research on social innovation to enhance healthcare delivery	150 000	200 000	350 000	350 000	900 000	1 250 000	350 000	864 727	1 214 727	100%	96%	97%
2.1.1.2	Regional office collaboration and small grants	1 000 000	100 000	1 100 000	700 000	0	700 000	704 588	0	704 588	101%		101%
2.2.1	Shaping the research agenda	100 000	100 000	200 000	60 000	168 000	228 000	5 655	164 722	170 377	9%	98%	75%
2.2.2**	Capacity strengthening to bring research evidence into policy	100 000	100 000	200 000	60 000	0	60 000	63 089	0	63 089	105%		105%
2.3.1	Collaborative networks & engagement with global health		200 000	200 000	0	200 000	200 000	0	185 358	185 358		93%	93%
2.3.3	TDR Global	300 000		300 000	300 000	0	300 000	248 986	0	248 986	83%		83%
2.3.4	Effective engagement in gender and equity	100 000		100 000	200 000	136 000	336 000	177 580	134 350	311 930	89%	99%	93%
	Delays from prior biennium				60 000		60 000	65 442		65 442	109%		109%
	Total	1 750 000	700 000	2 450 000	1 730 000	1 404 000	3 134 000	1 615 340	1 349 156	2 964 497	93%	96%	95%

* Implementation against revised planned costs

** ER 2.2.2: planned expenditure amounting to \$420,000 is reported under ER 1.1.4

TABLE 4: Approved Programme Budget 2022–2023

Expected result	Global Engagement	2022-2023					
		\$40m scenario			\$50m scenario		
		UD	DF	Total	UD	DF	Total
1.3.5	Research on social innovation to enhance healthcare delivery	150 000	300 000	450 000	400 000	800 000	1 200 000
2.1.1.2	Regional office collaboration and impact grants for regional priorities	1 000 000	100 000	1 100 000	1 350 000	200 000	1 550 000
2.2.1	Shaping the research agenda	100 000	750 000	850 000	100 000	950 000	1 050 000
2.2.2	Capacity strengthening to bring research evidence into policy	100 000	150 000	250 000	100 000	150 000	250 000
2.3.1	Collaborative networks & engagement with global health initiatives	0	300 000	300 000	150 000	300 000	450 000
2.3.3	TDR Global	300 000	0	300 000	500 000	0	500 000
2.3.4	Effective engagement in gender and equity	100 000	100 000	200 000	250 000	100 000	350 000
2.3.5 (new)	Community engagement and ethics	100 000	0	100 000	220 000	0	220 000
	Total	1 850 000	1 700 000	3 550 000	3 070 000	2 500 000	5 570 000

Projects and activities funded

Project ID	Principal Investigator	Supplier Name (Institution)	Project title	Funding in US\$	Disease or topic	Countries involved
TDR	Maha Abdulaziz	University of Science and Technology	Research Project: "Knowledge of and adherence to the National Guidelines for Malaria Case Management: A survey among physicians in Sanaa & Aden private hospitals, Yemen (SGS 20-68).	13 000	Malaria	Yemen
(blank)	Jose Maria Angeles	University of the Philippines Manila	To evaluate of recombinant antigen ELISA for the detection of human schistosomiasis in endemic areas nearing elimination	14 991	Schistosomiasis	Philippines
(blank)	Joseph Magbitang	College of Public Health, University of the Philippines Manila (Cph-Upm)	Factors affecting the control of soil-transmitted helminth infections in pregnant and lactating women in selected areas in the Philippines in the time of COVID-19 and the new normal	14 900	Helminth	Philippines
TDR	Abdulla Sharief	Sudanese National Academy of Sciences	Research Project: "Determination of risk factors for severity and death from visceral leishmaniasis (VL) among seasonal migrant and resident agricultural workers in Gallabat area, eastern Sudan (SGS 20-12)	12 000	Visceral leishmaniasis	Sudan
C00004	Abiodun Oladapo	Oladapo, Abiodun Oluwakemi	Assist TDR with various activities of the ESSENCE initiative secretariat and workplan for 2021.	15 400		Switzerland
TDR	Nafisa Tahir	National University of Medical Sciences (Nums)	"Comparative assessment of Sodium Stibogluconate Intralesional Therapy versus combination of Thermal Therapy with Sodium Stibogluconate Interlesional Therapy for Skin Lesions in Cutaneous Leishmaniasis in Pakistan (SGS 20-21)	15 000	skin lesions in cutaneous leishmaniasis	Pakistan
GHE	Andreas Alois Reis	Ethics Review Committee	Protocol submission cost recovery	790		Switzerland
P21-00166	Maria Hoole	Because Stories	To produce the final version of a module on how to embed research in Social Innovation to be linked with the pre-existing TDR MOOC on Implementation research by developing a storytelling.	47 241	Social Innovation	South Africa
P21-00163	Evelina Chapman	Chapman Evelina Gracia Maria**S210297	Conduct a scoping review for WHO/TDR on knowledge translation strategies and approaches to measuring their impact	18 800		Chile

Project ID	Principal Investigator	Supplier Name (Institution)	Project title	Funding in US\$	Disease or topic	Countries involved
(blank)	Gerardo Turdanes	Philippine Leprosy Mission, Inc.	The Feasibility of Using Telehealth for Training Health Care Workers (HCWs) and Persons with Disability on Integrated Rehabilitation and Prevention of Impairments and Disabilities of Leprosy	15 000	Leprosy	Philippines
(blank)	Mingzhou Xiong	Dermatology Hospital of Southern Medical University	To assess malaria and dengue prevalence and health service utilization among African migrant in Guangzhou	15 000	Malaria and dengue	China
P20-00149	Liz Allen	F1000 Research Ltd	Invoice F1000 Research for article 29057 Analysis of diagnostic product portfolios using the Portfolio-To-Impact.	1 350		United Kingdom
P21-00188	D. Majumdar	Majumdar, Debashree	Copy-editing a Social Innovation document "SOCIAL INNOVATION IN HEALTH MONITORING & EVALUATION FRAMEWORK" using the WHO style guide	350	Social Innovation	Switzerland
B80331	Paul Sockol	Digital Science & Research Solutions Inc	Update mapping TDR research outputs and their impact 2008 – 2019 – with addition new data in 2021	25 485		United States
P21-00194	Maria Hoole	Because Stories	The contractual partner will adapt existing short and long videos titled "Innovator Journey" from their English original version into French and Spanish language while adding subtitles.	974		South Africa
B80203	M. Devlin	Science For Development	Assist TDR in conducting further analysis and knowledge management strategies based on the review of the small grants scheme program conducted in 2020 and creating knowledge products of most impactful research.	24 500		Belgium
(blank)	Raffy Jay Fornillos	University of the Philippines Diliman	An integrative diagnostic approach in detecting human and animal schistosomiasis in situations of varying levels of prevalence in the Philippines	15 000	Human and animal schistosomiasis	Philippines
P20-00071	Ova Emilia	Kerjasama Penelitian Pusat Kedokteran Tropis Fk Ugm	To enhance the TDR Global Asian Community Engagement	40 000	Community engagement	Indonesia
B80176	Joseph Tucker	Sesh Global LLC	TDR Global Community Engagement enhancement	60 000	Community engagement	China
B80182	Phyllis Dako-Gyeke	University of Ghana	To enhance the TDR Global African Community Engagement	40 000	Community engagement	Ghana
B80190	Nancy Saravia	Cideim	TDR Global Latin American Community Engagement enhancement	40 000	Community engagement	Colombia

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MTD	Duoquan Wang	National Institute of Parasitic Diseases, Chinese Center For Disease Control and Prevention	Adapting the local “7” response package to consolidate the malaria elimination efforts through evaluation of the “1-3-7” system performance in the China–Myanmar border region	15 000	Malaria	China
C00011	Ana Hernandez Bonilla	Hernandez Bonilla, Ana Gerlin**Trl224323	Consultancy to support the further development and implementation and sustainability of Social Innovation in Health Initiative programmes.	90 000	Social Innovation	Switzerland
P20-00149	Liz Allen	F1000 Research Ltd	Invoice F1000 Research for monthly Article Processing Charges (APC)	1 000		United Kingdom
(blank)	Benny Obrain	Universiti Malaysia Sabah	Environmental management as an ecological intervention in reducing Anopheles balabacensis population, vector of monkey malaria in Sabah	15 000	Monkey malaria	Malaysia
B80137	Imelda Bates	Liverpool School of Tropical Medicine	Action plan linked to the joint TDR-HRP Alliance-AHPSR (‘three entities’) Theory of Change for strengthening research capacity in implementation research	24 915	Theory of Change	United Kingdom
P21-00235	Olena Hankivsky	Hankivsky Olena Areta Renata**Trl159911	Intersectionality analytical review and inventory of promising practices.	13 500	Intersectional gender	Canada
P21-00211	Gavin Yamey	Duke University Accounts Receivable	The Duke University proposal for the "Piloting a Strategic Approach to Funding Product Development for Poverty-related and Neglected Diseases.	85 570		United States
P21-00249	Chandani Kharel	Kharel Chandani **Trl200523	Implementation research and gender domains: in line with TDR intersectional gender research strategy (https://www.who.int/tdr/news/2020/TDR-publishes-strategy-for-intersectional-gender-research/en/)	14 000	Intersectional gender	Nepal
B80261	Bakhytkul Sarymsakova	Regional Training Centre in Health Research	Financial support for the "TDR Small Grant Scheme implementation in European region for 2019"	191 865		Kazakhstan
P21-00270	Jaime Munoz	Munoz Martin, Jaime	Provide graphic design services for gender and infectious diseases research materials.	5 862		Spain
MTD	Nguyen Diep Tran Bich	National Institute of Malariology, Parasitology and Entomology (Nimpe)	Application of mobile app to alert users to the risk of dengue fever	15 000	Dengue	Viet Nam
P21-00285	Fabio Zicker	Fabio Zicker	Adapt the ESSENCE good practice document on research costing to Portuguese speaking countries research settings	14 850		Brazil

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GHE	Andreas Alois Reis	Ethics Review Committee	Protocol submission cost recovery CERC	500		Switzerland
C00004	Abiodun Oladapo	Oladapo, Abiodun Oluwakemi	Assist TDR with various activities of the ESSENCE initiative secretariat and workplan for 2021.	19 600		Switzerland
P21-00326	Executive Directorhelen de Guzman	Women's Health Care Foundation (Whcf), Inc.	Sustaining Gains in Community Engagement in the Study on Gender Responsiveness in TB Prevention and Management in a High TB-Burden Area in the Philippines: Promoting Enablers and Overcoming Barriers	29 927	TB	Philippines
P21-00348	Doctoruche Veronica O Amazigo	Amazigo, Uche Veronica O.	Community Engagement Self-Monitoring (CE-SM) Strategy for Social Innovation.	15 000	Community engagement	Nigeria
P21-00350	Hu_Profnoel Juban	University of the Philippines Manila	Develop and test a Community Engagement Self-Monitoring (CE-SM) Strategy for Social Innovation.	24 000	Community engagement	Philippines
P21-00339	Jemal Abafita	Jimma University	Identification, synthesis, and translation of good practices and evidence for engaging communities in research and social innovation in health care delivery for infectious diseases of poverty in sub-Saharan Africa.	30 000	Community engagement	Ethiopia
P21-00340	Maryam Khazaie	Mazandaran University of Medical Sciences	Social Innovation in Health and Community-Driven Engagement as a Key Opportunity to Address COVID-19 Crisis Challenges: Reflections on the Multicultural Society of Iran.	30 000	Social Innovation and community engagement	Iran, Islamic Republic of
P20-00149	Liz Allen	F1000 Research Ltd	Invoice F1000 Research, APC invoice April 2021	1 350		United Kingdom
B80155	Mihai Simion	Simion, Mihai Marian	Amendment to add 15 days work. Completing the TDR Global membership mapping by adding the missing information on gender equity, socioeconomic equity, members 'countries and user profile completeness and user contact	15 494		France
P21-00346	Claudine Akondeng	Brain Research Africa Initiative	Best practices in engaging communities in research in Sub-Saharan Africa	29 000	Community engagement	Cameroon
P21-00363	Joseph Tucker	Sesh Global Llc	Publication of the special collection "Social innovation in health" as a series of articles, blogs, and related content within the British Medical Journal (BMJ) family of journals	24 500	Social innovation	China
P21-00353	Phyllis Awor	Makerere University School of Public Health	Community Engagement in Social Innovation: A Mixed Methods Analysis from the Social Innovation in Health Initiative	30 000	Community engagement	Uganda

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P21-00364	Chibuzor Mokelu	West African Research and Innovation Management Association (Warima)	No cost extension until 31 December 2021 Coordination of the facilitators and administrative processes at the WARIMA Annual Training Workshop and Conference in Dakar, Senegal from 30 August to 2 September 2021.	12 000		Nigeria
P21-00352	Arti Singh	Knust	Building evidence to facilitate effective community engaged research in Sub-Saharan Africa.	30 000	Community engagement	Ghana
P21-00359	Chairbakhytkul Sarymsakova	Forum of Ethics Committees	Mapping Ethics Committee (IEC/IRB) Practices for Engaging Communities in Health Research in Eastern Europe and Central Asian countries: social innovative models for implementation and transferring the results.	29 850	Ethics and community engagement	Kazakhstan
P21-00383	Tahereh Pashaei	Kurdistan University of Medical Sciences	Research Project: "Exploring the challenges Kurdish migrant workers during the covid-19 pandemic" (AP21-00234)	8 000	Migration	Iran, Islamic Republic of
P21-00319		Tehran University of Medical Sciences	Research Project: "The situation analysis of migrants and refugees who live in Tehran and providing an evidence-based solutions to prepare health care services for them" (AP21-00246)	8 000	Migration	Iran, Islamic Republic of
P21-00382	Neil Saad	United Nations Relief & Works Agency	"COVID-19 vaccine attitudes among Palestine refugees in Syria". (AP21-00138)	8 000	COVID-19 vaccine	Jordan
P21-00320	Ali.Ghaddar@OppheaIth.Org	Observatory of Public Policies and Health	Access of Syrian Refugees to COVID-19 Testing in Lebanon" (AP21-00144)	5 000	COVID-19 vaccine	Lebanon
P21-00381	Touria Essayagh, Assistant Professor of Public Health, Université Hassan 1er	Université Hassan Premier, Institut Supérieur des Sciences de La Santé	Research Project: "Diseases burden among immigrants in Morocco: a cross sectional study" (AP21-00145)	7 988	Migration	Morocco
P21-00328	Farkhanda Ghafoor	Businessmen Hospital Trust	Research Project: "Knowledge, Attitude, Practice towards COVID-19 infection of Afghan Refugees living in city of Lahore Pakistan" (AP21-00205)	8 198	COVID-19 vaccine	Pakistan
P21-00389	Priti Patnaik	Patnaik, Priti	TDR Podcast Analyst (episode proposals)	4 125		Switzerland
P21-00455	Alireza Olyaei Manesh	Health Equity Research Center (Herc)	The TSA is in respect of the research project titled "Developing a model for sustainable healthcare financing for documented Afghan refugees along the pathway towards UHC in Iran (AP21-202)".	8 000	UHC	Iran, Islamic Republic of

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P21-00392	Hu_Profnoel Juban	University of the Philippines Manila	Establishment and Coordination of Grantees of the TDR Community Engagement Research Grantees Network	14 580	Community engagement	Philippines
P21-00398	Maria Hoole	Because Stories	Communication bundle including flyer and 1 Social Media Card for TDRG Improving Reserach costing webinar	567		South Africa
P20-00149	Liz Allen	F1000 Research Ltd	Invoice F1000 Research, APC invoice August 2021	675		United Kingdom
P21-00394	Beatrice Halpaap	Beatrice M.M. Halpaap	Enhancing SIHI network sustainability and coordinating SIHI/TDR activities	24 600		France
P21-00399	Maria Hoole	Because Stories	Provide TDR Global with Video Clips and Motion Graphic.	5 543		South Africa
P20-00073	Obadiah George	Cognosco Consulting Inc.	TDR Podcast Specialist (technology)	15 750		Canada
P21-00456	Khaled Abu Ali	National Institute For Environment and Development (Nied)	The TSA is in respect of the research project titled "COVID-19 Crisis and Its Impact on Delivery of Essential Health Services in the Southern Governorates (AP21-00131)".	8 000	COVID-19 vaccine	Palestinian Territory,Occupied
P21-00457	Engy Mohamed El-Ghitany	High Institute of Public Health (Educational Services Box)	The TSA is in respect of the research project titled "A primary survey of some communicable and non-communicable infections of public health importance among Syrian migrants in Egypt (AP21-00151)".	8 000	Migration	Egypt
P21-00458	Hu_Profsalim Daccache S.J.	Universite Saint Joseph de Beyrouth	The TSA is in respect of the research project titled "COVID-19 Vaccination preparedness to outreach both local and migrant elderly subjects: the one-thousand populations based survey (AP 21-154)".	8 000	COVID-19 vaccine	Lebanon
P20-00072	Lindi Van Niekerk	Van Niekerk Lindi **Trl161832	To support the work in producing the TDR podcast series, season 2, particularly the content production, metrics and input from the audience.	24 750		South Africa
P21-00459	Nadia Ismail Abu Sabrah	Jordanian Society Against Tuberculosis & Lung Disease	The TSA is in respect of the research project titled "Extent of under-notification of tuberculosis cases among migrants in the health system in Jordan during the period from May-October 2021 (AP 21-155)".	7 000	TB	Jordan
P20-00149	Liz Allen	F1000 Research Ltd	Invoice F1000 Research, APC invoice, September 2021, for publication "A Randomized Control Trial to Test Effects of Cash Incentives and Training on Active Casefinding for Tuberculosis...	675		United Kingdom

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P21-00425	Noah Fongwen	Fongwen, Doctor Noah Takah	TDR Global survey on gender identity.	9 360	Gender	United Kingdom
P21-00436	Allan R. Ulitin	Ulitin, Allan Rodriguez	Support TDR with the implementation of its Intersectional gender research strategy.	9 600	Intersectional gender	Philippines
P21-00437	Phyllis Awor	Makerere University School of Public Health	Contribute to TDR's implementation of its Intersectional gender research strategy. SIHI Hub Uganda.	24 950	Intersectional gender	Uganda
P21-00439	Weiming Tang	Sesh Global Llc	Contribute to TDR's implementation of its Intersectional gender research strategy. SIHI Hub China.	24 950	Intersectional gender	China
P21-00441	Hu_Profnoel Juban	University of the Philippines Manila	Contribute to TDR's implementation of its Intersectional gender research strategy. SIHI Hub Philippines	24 950	Intersectional gender	Philippines
P21-00442	Don Mathanga	University of Malawi - College of Medicine	Contribute to TDR's implementation of its Intersectional gender research strategy. SIHI Hub Malawi.	24 950	Intersectional gender	Malawi
P21-00444	Luzdivia Villa Hoyos	Cideim	Contribute to TDR's implementation of its Intersectional gender research strategy. SIHI Hub LAC region.	24 950	Intersectional gender	Colombia
P21-00451	Sarah Ssali	Makerere University School of Women and Gender Studies	Video recording and footage generation for subsequent editing to contribute to IR MOOC module on Gender and Intersectionality	5 000	Intersectional gender	Uganda
P21-00450	Abriti Arjyal	Herd International Private Limited	Video recording and footage generation for subsequent editing to contribute to IR MOOC module on Gender and Intersectionality	5 000	Intersectional gender	Nepal
(blank)	Sharmam@Who.Int	La Corporation de L'ecole Polytechnique de Montreal	APW between WHO-SEARO, New Delhi and La Corporation de l'Ecole Polytechnique de Montreal: For assessment and optimization of Nepal's laboratory network for COVID-19.	20 273	COVID-19 vaccine	Canada
AP21-00460	Abdalla Hassan Sharief	Institute of Endemic Diseases	The TSA is in respect of the research project titled "Current influx of Ethiopian migrants and refugees in eastern Sudan: rapid health assessment and challenges to access health care (AP21-00140)".	8 000	Migration	Sudan
P21-00163	Helene Faure	Biomed Central Ltd	Payment invoice for publication in BioMed Central journal	2 811		United Kingdom
P21-00466	Gaye Ahmadou	Gaye,Ahmadou **Trl204510	Translation from English to French of the document "Women in Science compendium"	1 585		Senegal

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P21-00468	Patricia Bourdelle Cazals Kirsh	Bourdelle Cazals Kirsch, Patricia Marianne Guadalupe	Translation from English to Spanish of the document "Women in Science compendium"	1 110		Mexico
P21-00281	Luis Mora	Unfpa Representative	"Evaluating the impact of violence against women and girls migrants on the sexual and reproductive health and rights, in Morocco" (AP21-00129).	8 000	Migration	Morocco
HEG	Andreas Alois Reis	Ethics Review Committee	Protocol Submission cost recovery for ERC.	500		Switzerland
P21-00312	Lindi Van Niekerk	Van Niekerk Lindi **Tr161832	Global Health Matters podcast - social media and website design	2 400		South Africa
TDR	Muzamil Mahdi Abdel Ham	Institute of Endemic Diseases	This is in conjunction with PO# 202617675 (TSA)“: Investigating the role of the newly introduced invasive Asian malaria vector Anopheles stephensi in malaria transmission in eastern Sudan. (SGS 20-66)	9 750	Malaria	Sudan
(blank)	Khaled Abu Ali	National Institute For Environment and Development (Nied)	To assess the International Health Regulations’ core capacities to respond to public health emergencies in Palestine.	6 750	Public Health emergencies	Palestinian Territory,Occupied
P20-00149	Liz Allen	F1000 Research Ltd	Invoice F1000 Research, Annual Service Fee	1 500		United Kingdom
TDR	Abdulla Sharief	Sudanese National Academy of Sciences	TSA in conjunction with PO 202631283 : “Determination of risk factors for severity and death from visceral leishmaniasis (VL) among seasonal migrant and resident agricultural workers in Gallabat area, eastern Sudan (SGS 20-12)	3 000	Visceral leishmaniasis	Sudan
CPI	Info@Ust.Edu	University of Science and Technology	AP21-00529//To assess COVID-19 vaccine hesitancy and its predictors among HCPsin Sana’a city, Yemen	3 750	COVID-19 vaccine	Yemen
(blank)	Rjalabneh@Hcac.Com .Jo	Health Care Accreditation Council	Title of research:Upholding Quality and Patient Safety during COVID19 across the public, private, military, and University affiliated hospitals in Jordan	6 750	COVID-19 vaccine	Jordan
P21-00312	Lindi Van Niekerk	Van Niekerk Lindi **Tr161832	Global Health Matters podcast - social media and website design	2 100		South Africa
P21-00520	Neil Pakenham-Walsh	Global Healthcare Information Network	Exploring good practice in communicating global health research evidence and findings to influence behaviour and policy.	5 000	Global health	United Kingdom

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P21-00523	François Wavre	Lundi13 / Wavre, Ackermann, Merz, Righetti	Invoice for set of photos for TDR Podcast, Global Health Matters	651		Switzerland
CPI		Solutions Pakistan (Pvt) Ltd	AP21-00579///Research Title: Assessing the capacity of the provincial laboratory system of Khyber Pakhtun Khwa province of Pakistan in accordance with IHR indicators for responding to COVID 19 pandemic	1 000	COVID-19 vaccine	Pakistan
P21-00540	Gaye Ahmadou	Gaye,Ahmadou **Trl204510	Translation from English to French of the document "Public Engagement and crowdfunding in health research: a practical guide"	1 036		Senegal
P21-00541	Patricia Bourdelle Cazals Kirsh	Bourdelle Cazals Kirsch, Patricia Marianne Guadalupe	Translation from English to Spanish of the document "Public Engagement and crowdfunding in health research: a practical guide".	777		Mexico
P21-00543	Maria Hoole	Because Stories	Invoice to pay Artwork: Design of a communication bundle including a flyer and 3 x Social Media cards for the TDRG Institutional Mentorship webinar.	570		South Africa

TDR funding in 2021

Core contributions	Amount (US\$)
Sweden	4 804 002
Switzerland	1 925 255
United Kingdom of Great Britain and Northern Ireland	1 662 159
Germany	1 659 850
Luxembourg	1 331 719
Nigeria ¹	1 097 398
Belgium	675 676
Norway	349 365
China ²	165 000
Spain	112 613
India	55 000
Japan	50 000
Thailand	49 751
Malaysia	25 000
Panama	14 000
Mexico	10 000
Miscellaneous	518
World Health Organization ³	
Subtotal	13 987 305
Contributors providing project-specific funding	Amount (US\$)
National Institute of Health Research (NIHR), United Kingdom	2 546 199
United Nations Development Programme (UNDP)	1 352 000
Sweden	1 190 970
Bill & Melinda Gates Foundation	1 133 360
United States Agency for International Development (USAID)	987 274
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) ⁴	814 387
World Health Organization ⁵	706 895
Luxembourg	404 030
Medicines Development for Global Health Limited (MDGH)	93 041
Robert Koch Institute (RKI)	58 048
Subtotal	9 286 203
Total contributions	23 273 508

1. The contribution from the Government of Nigeria for the period 2015 to 2020 will be reported in the certified financial statement in 2022 due to the timing of its receipt in TDR.
2. The 2020 contribution from the Government of the People's Republic of China will be reported in the certified financial statement in 2021. The contribution for the year 2021 will be reported in 2022. This is a result of timing of receipt in TDR.
3. The 2020-2021 core contribution from WHO was received in full in 2020.
4. The 2021 designated contribution from GIZ includes funding from BMBF.
5. The 2021 designated contribution from WHO includes funding from UNPDF (the United Nations Peace and Development Trust Fund) for joint TDR/Global Malaria Programme activities.