

KNCV  
TUBERCULOSIS  
FOUNDATION  
**ANNUAL  
REPORT  
2023**

AT A GLANCE

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**KNCV**  
TB | PLUS

# 1. INTRODUCTION

2023 witnessed a significant recovery in the performance of KNCV Tuberculosis Foundation's (KNCV) tuberculosis (TB) program. The highest number of persons with TB diagnosed and put on treatment; a moderate reversal of the damaging impact of the COVID-19 pandemic on the number of people dying or falling ill with TB. There was an improved uptake and utilization of rapid diagnosis and shorter treatment regimens. Other successes included the second United Nations High Level Meeting (UNHLM) on TB with a new political declaration to end TB by 2030, the establishment of the Vaccine Accelerator Council by the World Health Organization (WHO), and significant cost reductions in TB Preventive Treatment (TPT) and GeneXpert cartridges. Unfortunately, TB is still the deadliest infectious diseases worldwide; and global crisis and the impact of climate change are worsening the drivers of the TB epidemic.

Thanks to the support of our donors and partners, KNCV participated in 56 projects in which we were privileged to work with global and national TB stakeholders to accelerate recovery efforts for all TB activities. KNCV supports the uptake and optimization of innovation (including approaches) and new tools and medicines, whilst generating and documenting additional evidence and best practices.



**Mustapha Gidado,**  
Executive Director  
KNCV Tuberculosis Foundation

As part of our knowledge management strategy KNCV is partnering, collaborating, and participating as guest faculty at a number of universities globally and creating opportunities for MSc and PhD candidates within projects. KNCV staff contributed to at least 62 abstracts at the 2023 Union Conference in Paris and published 54 peer-reviewed articles. KNCV also participates in both global and regional scientific, policy, and advocacy platforms, as well as in a number of WHO and Stop TB partnership technical working groups.

Looking ahead to 2024, we are filled with optimism and determination as we continue to strengthen and expand the KNCV national entities, support countries in advocating and putting the new UNHLM political declaration into action, and to work with our partners to accelerate the TB recovery efforts. Quality assurance and improvement, operational research, data-driven planning at the subnational level, and ensuring a framework for early uptake of innovation and new tools. None of this would have been possible without the generous support of our donors, partners, supporters, and staff. I would like to extend my deepest gratitude to each and every one of you for your staunch commitment to our cause. Your contributions have made a visible difference in the lives of countless individuals and communities around the world.

# 2. KNCV AT A GLANCE

## Who we are

KNCV is an international non-profit organization dedicated to the fight against tuberculosis (TB), TB related health problems and Antimicrobial Resistance (AMR).



### 3 Diseases

- TB and TB related health problems
- AMR
- Pandemics

## Mission

Our mission is to end human suffering from TB through the global elimination of TB, TB related health conditions and AMR.



### 3 Sources of Inspiration:

- Engagement with affected communities, putting people first
- Global movement for social justice and collaboration
- Role of technology and the digital environment

## Vision

Our vision is to save lives and accelerate the decline of the TB epidemic through the implementation of effective, efficient, and sustainable situation specific strategies that combine patient-centeredness with epidemiological impact and government leadership.



### What? - 3 Strategic Approaches:

- Evidence generation
- Policy development and strategic planning
- The development of supportive systems

## How

KNCV is guided by its strategic plan, which aligns with global targets. Through its network, KNCV collaborates and coordinates with national and international, public and private, partners, and works with National TB Programs and Health Ministries/Departments to strengthen national health care systems.



### How? - 3 Implementation Approaches:

- Research
- Technical assistance
- Capacity building



**KNCV Global** with **branch offices** in Ethiopia, Kazakhstan, Nigeria, Tanzania, Vietnam and Philippines.  
**Affiliated national entities** in Indonesia, Nigeria, Kenya, Kyrgyzstan and Tajikistan.  
**> 56 ongoing research projects**

# 3. KNCV'S TECHNICAL ROLE

## Introduction

Ten Innovation Pathways lie at the heart of KNCV's strategic direction. These innovation pathways are designed to support the development and implementation of country driven, efficient, and sustainable solutions towards a TB free future. KNCV's innovation pathways focus on either 'systems' or 'services':

- Systems focused pathways support the development of strong, effective, people-centered systems enabling countries to End TB and related health problems.
- Services focused pathways support the development

of services to ensure that all adults, children, and adolescents have indiscriminate access to people-centered TB prevention, diagnosis, treatment, and care. All pathways focus on evidence based, people-centered approaches along the care pathway and are committed to follow the innovation path from design/development, to demonstration, and scale-up, ensuring evidence generation, development of supportive systems, and policy development for enhanced strategic planning and programming along the way (Figure 2).

## Innovation as central theme of KNCV

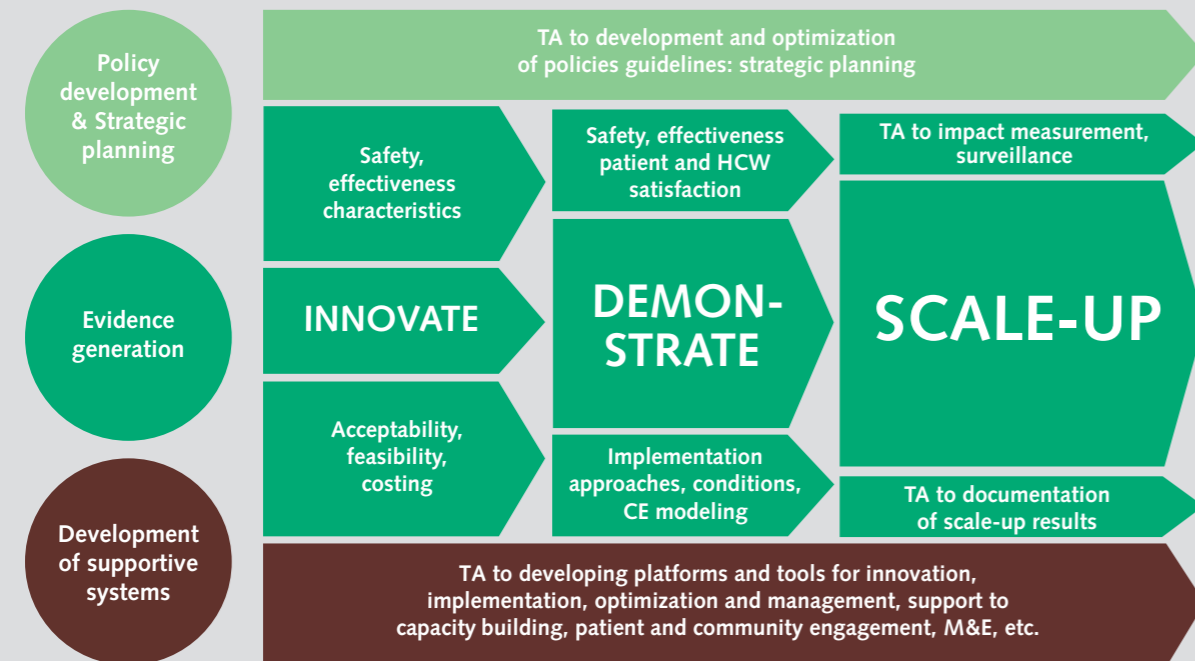


Figure 2: Innovation as central theme of KNCV - showing the stages of innovation (design & development, demonstration projects, and scale-up) and the KNCV implementation strategies applied in each of these stages. Abbreviations: Technical Assistance (TA), and Monitoring and Evaluation (M&E).

Focus area	KNCV's innovation pathways	Objectives
Increasing the sustainability and resilience of people-centered health systems	<ol style="list-style-type: none"> <li>1. Improving and developing improved methodologies for epidemiological measurements and models for optimized programming towards ending TB and related health conditions.</li> <li>2. Strengthening health systems and multi-sectorial solutions along the patient pathway, including integrated disease surveillance.</li> <li>3. Reducing the stigma of TB and related health conditions.</li> <li>4. Development of electronic information systems and digital health solutions: Including integrated disease surveillance systems.</li> </ol>	<ul style="list-style-type: none"> <li>• Improved scientific methods and models for programming to end TB.</li> <li>• Stronger health systems and data driven planning.</li> <li>• Zero TB related stigma.</li> <li>• Optimized digital health solutions for individuals and programs.</li> </ul>
Development and optimization of people-centered health services	<ol style="list-style-type: none"> <li>5. Building system-readiness for the deployment of new or improved TB vaccines.</li> <li>6. Improving early management of TB.</li> <li>7. Early identification of all patients with all forms of TB in all age groups and vulnerable or at-risk populations, with community ownership.</li> <li>8. Innovation and optimization of diagnostic technologies and strategies: especially the use of multi-disease testing platforms.</li> <li>9. Improving people-centered treatment of active TB, including drug-resistant TB and TB related health conditions.</li> <li>10. Improving post-TB health and care.</li> </ol>	<ul style="list-style-type: none"> <li>• Availability of TB vaccine access strategies.</li> <li>• Access to TB services for all and community ownership of TB service delivery models.</li> <li>• Access to short, effective, and safe TB prevention.</li> <li>• Access to a rapid diagnosis of all forms of TB and related diseases, regardless of where people seek care.</li> <li>• Access to short, safe, and effective treatment for all forms of TB, TB infection, post TB care and comorbidities, close to people's home.</li> <li>• Access to people-centered post-TB health care and support.</li> </ul>

KNCV implemented activities through 56 projects of different sizes in over 20 countries in 2023. KNCV applied a mix of our three implementation approaches (the development of evidence, policies and strategic plans, and supporting systems globally) in each project. KNCV and our partners made important progress in each KNCV's innovation pathways in 2023. The nine innovation pathways and the number of projects that KNCV worked on per pathway are set out in Figure 3. KNCV participated in additional stigma reduction and vaccine preparedness projects in 2023 (compared to 2022).

KNCV's projects also significantly contributed to projects that cut across multiple target areas and infectious diseases: 41% of projects contributed to Antimicrobial

Resistance stewardship, 34% to TB in children and adolescents, 23% to dual TB/HIV infections, 14% to dual TB/Diabetes Mellitus infections, and 66% of projects engaged directly in capacity building. COVID-19, which cuts across multiple innovative pathways (and was a component in 16% of KNCV's projects contributed), has been developed into a broader pandemic preparedness approach as part of the prevention focus area; this will be implemented in 2024.

Lastly, KNCV successfully completed its' second three-year collaboration with World Health Organization (WHO) in 2023. KNCV contributed as a non-state actor to the realization of WHO's strategic objectives. Approval have been granted for a new collaboration between KNCV and WHO, for the period 2024 – 2026.

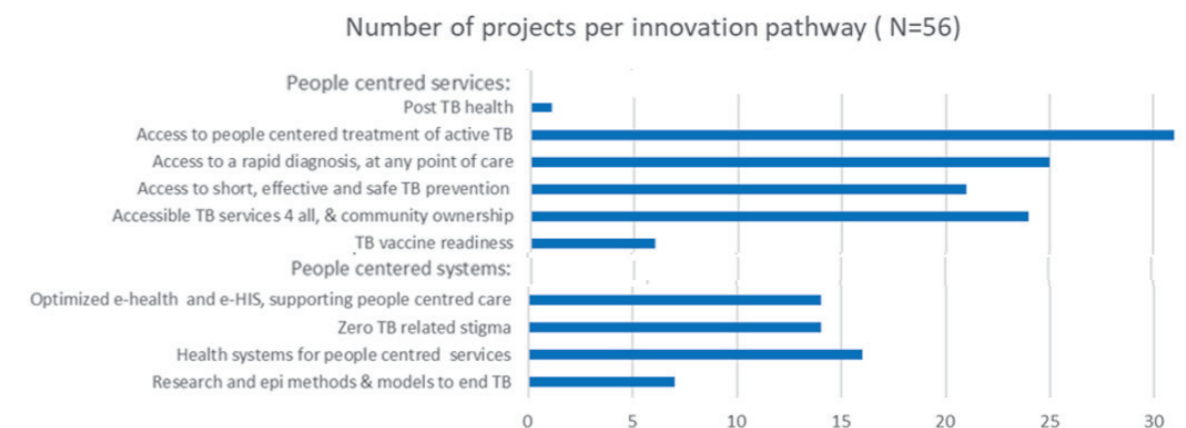


Figure 3: The number of projects directly contributing to driving developments along the KNCV innovation pathways.

## 4. KNCV NETWORK

KNCV maintains KNCV offices as well as building strong partnerships with national entities (KNCV and non-KNCV) in other countries. At the start of 2023, the KNCV Network consisted of the following organizations:

- Yayasan KNCV Indonesia,
- KNCV Kenya,
- KNCV Kyrgyzstan,
- KNCV Global (including the KNCV Branch Offices).

The creation of two new (financially independent) affiliated national entities – in Tajikistan and Ethiopia

- was agreed in 2023. The (financially independent) affiliated national entity Office in Tajikistan – KNCV Tajikistan – was finalized in 2023 and the office received the registration certificate from the authorities. The (financially independent) affiliated national entity in Ethiopia is still in the process of registration. The expansion of the KNCV Network ensures that KNCV continues to have a country presence in important high burden countries. KNCV Global has signed a partnership agreement with the respective national entities.

Figure 5: Based on commencement dates, maturity, number of projects and budget.



## 5. KNCV HIGHLIGHTS IN 2023

### Celebrating heritage

- In 2023 KNCV celebrated its 120th anniversary. To commemorate this anniversary and to profile our ongoing work in the fight against TB, KNCV held two events in 2023: The first event was held in the Netherlands and the second at the Union World Conference on Lung Health 2023 in Paris, France.

### Projects

- KNCV strengthened country level TB modeling capacity in 2023. Under KNCV's technical leadership, gender parameters were introduced in the EndTB model (formerly TBVax model), enabling countries to perform gender disaggregated TB modeling.
- KNCV, in collaboration with WHO and the Global Fund, supported the implementation of the People-Centered Framework (PCF) in six countries (Ethiopia, Nigeria, Rwanda, Namibia, Eswatini, and Lesotho) in 2023.
- The KNCV team also provided support for countries generating evidence on the feasibility and acceptability of COVID-19 self-testing. KNCV's support included enabling supportive systems, providing technical assistance in the design and conduct of assessments, and integrating digital support systems within the DHIS-2 platform.
- KNCV, working through various technical networks, has actively contributed to the global deliberations on combatting the growing threat of AMR. KNCV's work in the AMR field also included an updated systematic review on lessons from TB programs to inform AMR programming.
- KNCV finalized adapting the Allies Approach, a stigma reduction intervention, targeting healthcare providers. This approach can now be adopted by country TB programs and tailored to their country context and needs.
- KNCV completed the demonstration and scale-up phases of the ASCENT project in 2023, with over 20,000 patients enrolled in TB treatment with support of DATs. [foto toevoegen, bijschrift: The smart pillbox tested during KNCV's ASCENT project.]
- As part of the global DAT Task Force, KNCV provided in-country technical assistance and capacity building for planning, demonstration and implementing DAT enabled interventions in Eswatini, Kenya, Somalia and Uganda.
- KNCV also developed an Application Programming Interface (API) for direct integration and standardized use of smart pillbox data within existing in-country supportive systems and patient management systems:

- and a DAT application that can be mapped with every disease program within DHIS2.
- Digital technology within diagnostics: The Dream Fund project has been the main driver for the development of the MinION digital tool approach within KNCV's TB work in 2023. [foto toevoegen, bijschrift: KNCV's No More Pandemics project.]
- KNCV continued the concept development and business case refinement for the mobile ECG tool, considering its application in various use cases scenarios and exploratory discussions with potential country and vendor partners.
- As part of the SMART4TB project, KNCV conducted a scoping review: "Mapping the existing body of knowledge on new and repurposed TB vaccine implementation". The results of this scoping review were presented during the World Lung Health Conference 2023.
- Also as part of the SMART4TB project, KNCV collected information on past, current, and future TB vaccine readiness projects and knowledge gaps among TB vaccine experts.
- KNCV undertook a number of TPT projects in 2023: a new demonstration study in Indonesia, comparing the treatment outcomes and safety of a one-month and a three-month TPT regimen among HIV-negative contacts of people with TB, a programmatic assessment of 3HP TPT regimen delivery in Ethiopia among a cohort of People Living with HIV (PLHIV), to generate critical knowledge to improve TPT uptake, implementation and outcomes. In Ethiopia, in collaboration with Johns Hopkins University and the Aurum Institute, KNCV also demonstrated a community-based TPT model, which resulted increased identification and TPT treatment rate of child contacts of people with TB. And in Malawi, KNCV demonstrated that making the prescription of TPT the default option for PLHIV on anti-retroviral therapy (ART) care is feasible and acceptable. The results of this study have been published.
- With KNCV support, enrolment continued in the Triage Test for All Oral DR-TB regimen (TriAD) study, combining Xpert Ultra testing with the Xpert XDR test as a reflex test in Ethiopia for rapid allocation of effective treatment for drug-resistant forms of TB. KNCV is leading the feasibility and acceptability study regarding this triage approach.
- KNCV is supporting the Nigeria Cepheid Authorized Service Provision Project in updating its' standardized operation protocols for providing services in conflict zones or other hazardous situations.
- The SOS stool processing method for Xpert testing,



The smart pillbox tested during KNCV's ASCENT project.



KNCV participating in global platform, technical working groups and guideline development committees.

## KNCV HIGHLIGHTS IN 2023

developed by KNCV, was further scaled up in 2023. At least seven countries have now included routine stool testing in their TB guidelines and 12 countries had implemented stool testing at selected sites in 2023.

- KNCV coordinated two projects on innovative genome sequencing in 2023: The 'No More Pandemics' project and the "portable adaptive sequencing to detect antimicrobial resistance" (PAS4AMR) project.
- KNCV continued to provide support for the implementation of BPaL based regimens in 8 countries as part of the "Leveraging Innovation for Faster Treatment of TB" (LIFT-TB) and the Stichting Mondiale Tuberculosebestrijding (SMT) Nigeria projects. 574 patients enrolled for BPaL in the LIFT-TB project and 34 patients enrolled for BPaL in the SMT Nigeria project. Interim treatment outcomes (end 2023) indicate a 91% success rate.
- KNCV actively supported countries to prepare for BPaL-based regimen scale-up and early uptake of the new WHO recommendations as part of both the LIFT-TB project and the ASCENT MDR-TB project.
- Endline assessments of the "PhArmaco Vigilance Africa" project (PAVIA) (strengthening pharmacovigilance in Africa), were conducted by KNCV in Eswatini, Tanzania, and Nigeria.
- KNCV completed the update of the TB in children and adolescents benchmarking tool. This tool was included in the third edition of the WHO's "Roadmap towards ending TB in children and adolescents" as planning and program management resource.
- KNCV also worked on the development of guidelines for nursing care for people treated for TB and TBI in the Netherlands.

### Knowledge sharing

- KNCV published 54 scientific articles in peer-reviewed journals in 2023. Figure 6: Shows the distribution of the publications against KNCV's priority areas.
- KNCV staff contributed to TB knowledge exchange with the academic institution in the Netherlands and globally with three aims: capacity building on TB, engaging and generating interest of young professionals in TB work, and promoting KNCV work globally. This is a crucial component of KNCV's knowledge sharing initiative.
- KNCV provided supervisory support for MSc and PhD students, further enhancing our commitment to nurturing the next generation of public health leaders.

### Participation in global platforms

- KNCV staff contributed in various capacities to over 27 global forums, technical working groups and guideline development committees in 2023.
- KNCV staff contributed to TB knowledge exchange with the academic institution in the Netherlands and globally with three aims: capacity building on TB, engaging and generating interest of young professionals in TB work, and promoting KNCV work globally. This is a crucial component of KNCV's knowledge sharing initiative.
- In 2023, KNCV staff members were officially affiliated to over 15 universities as fellows or guest lecturer/speakers.
- KNCV provided supervisory support for MSc and PhD students, further enhancing our commitment to nurturing the next generation of public health leaders.

Figure 6: KNCV publications per priority area in 2023

