



The
Fleming Fund



TANZANIA



The Department of Health and Social Care (DHSC)'s Fleming Fund is a UK aid programme that supports up to 25 countries across Africa and Asia to tackle antimicrobial resistance (AMR), a leading public health threat, globally. The Fleming Fund invests in strengthening surveillance systems through a portfolio of Country Grants, Regional Grants, and Fellowships managed by Mott MacDonald and Global Projects managed by DHSC partners.

Country Context

The Republic of Tanzania launched a National Action Plan on AMR (2017-2022) in April 2017. Governance mechanisms were set up: a Multisectoral Coordinating Committee, chaired by the Chief Medical Officer and involving academia from Muhimbili University of Health Sciences and Sokoine University of Agriculture; and AMR Technical Working Groups linked to the Prime Minister's office. The Fleming Fund supported the development of an AMR surveillance plan and costed second phase AMR National Action Plan (2023-2028).

Several key policy documents and guidelines have been developed in the animal health (AH) and human health (HH) sectors. Tanzania has a National Reference Laboratory (NRL) and the Central Veterinary Laboratory (CVL) which support diagnostic activities in One Health sectors.

The Tanzania Country Grant in phase 2 aims to build on and maximise the impact of investments made to date. This involves consolidating surveillance toward an integrated One Health system to produce data-driven decisions and policymaking.

Phase 2 Country Grant – Expected Results



Train staff on AMC data collection, develop and implement AMR and AMU data collection strategies in private sector hospitals and community pharmacies.



Strengthen the national data repository to host AMR/consumption/use (AMC/U) data from all sectors.



Strengthen and institutionalise key governance structures.



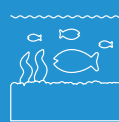
Support 2 reference laboratories and 10 surveillance sites to operate at the core level.



Support training and establish genomic surveillance for pathogen analysis. Train staff at the national reference laboratories on advanced microbiology.



Support the government to report AMR/U/C data internationally.



Develop an aquaculture surveillance plan and protocols, pilot AMR surveillance, and support one aquaculture site to progress to core level.



Develop a national AMU protocol for poultry, and active surveillance in the poultry and dairy sectors; enhance the AH sample transportation system.



Support the use of WHO Point Prevalence Survey methodology to collect AMU data from hospital sites.



Support a pilot burden of disease study at selected hospitals to collect data on antibiotic prescribing practices.



Support the establishment of stewardship committees in selected sites and promote engagement between the microbiology laboratories, pharmacy teams, and prescribing physicians.

Phase 2



Country Grant

Grantee: American Society for Microbiology
Value: £3,000,000
Duration: Feb 2024 - Dec 2025

Fellowships

No. of Fellows: 10
Host Institute: African Society for Laboratory Medicine
Total value: £654,501
Total duration: Nov 2024 - Dec 2025

Regional Grants

(Across multiple countries, including Tanzania)

International Vaccine Institute

Regional Antimicrobial Resistance Data Analysis for Advocacy, Response and Policy (RADAAR)
Value: £1,999,956
Duration: Dec 2023 - Dec 2025

African Society for Laboratory Medicine

Qualifying the Workforce for AMR Surveillance in Africa and Asia (QWARs)
Value: £2,200,050
Duration: May 2023 - Dec 2025

Fondation Merieux

Technical Assistance for Clinical Engagement Africa (TACE Africa)
Value: £1,822,408
Duration: Feb 2024 - Dec 2025

African Society for Laboratory Medicine

Mapping Antimicrobial Resistance and Antimicrobial Use Partnership (MAAP)
Value: £2,997,523
Duration: Dec 2023 - Dec 2025

African Society for Laboratory Medicine

External Quality Assurance in Africa (EQuAfrica)
Value: £2,458,558
Duration: Oct 2023 - Dec 2025

Technical University of Denmark

Whole Genome Sequencing and Bioinformatics Capacity Building in Africa (SeqAfrica)
Value: £3,595,802
Duration: Oct 2023 - Dec 2025

Liverpool School of Tropical Medicine

Gender, Equity and Antimicrobial Resistance Mainstreaming (GEAR up)
Value: £2,199,925
Duration: Feb 2024 – Dec 2025

African Society for Laboratory Medicine

Technical Assistance for Data and Evidence Use Africa (TADEU Africa)
Value: £1,800,005
Duration: Feb 2024 - Dec 2025

International Livestock Research Institute

AMR and One Health East and Southern Africa (AMROH ESA)
Value: £1,800,000
Duration: Jan 2024 - Dec 2025

Strategic Alignment Grants

(Across multiple countries, including Tanzania)

Brigham and Women's Hospital

WHONET: Management and Analysis of Microbiology Laboratory Data
Value: £453,328
Duration: Mar 2024 - Dec 2025

Commonwealth Pharmacists Association

Surveillance and Prescribing Support for Antimicrobial Stewardship Resource Capacity Building (SPARC)
Value: £806,742
Duration: Mar 2024 - Dec 2025

Phase 1



Country Grants

Grantee: American Society for Microbiology

Value: Country Grant 1: £2,878,150, Country Grant 2: £3,319,826

Duration: March 2019 - Dec 2023

Fellowships

Number of Fellows: 8

Host Institution: African Society for Laboratory Medicine

Value: £720,000

Duration: Jun 2019 - Feb 2022

Regional Grants

(Across multiple countries, including Tanzania)

African Society for Laboratory Medicine

Mapping Antimicrobial Resistance and Antimicrobial Use Partnership (MAAP)

Value: £7,054,881

Duration: Nov 2018 - Nov 2023

African Society for Laboratory Medicine

External Quality Assurance in Africa (EQuAfrica)

Value: £4,091,587

Duration: Oct 2019 - Sep 2023



African Society for Laboratory Medicine

Qualifying the Workforce for AMR Surveillance in Africa and Asia (QWArS)

Value: £3,924,506

Duration: Oct 2019 - Apr 2023

Technical University of Denmark

Whole Genome Sequencing and Bioinformatics Capacity Building in Africa (SeqAfrica)

Value: £6,633,221

Duration: May 2019 - Sep 2023

Ending Pandemics

PARSE: Common Protocols to Support AMR Surveillance

Value: £2,194,068

Duration: Sep 2019 - Jan 2022

Strategic Alignment Grants

(Across multiple countries, including Tanzania)

Brigham and Women's Hospital

WHONET: Management and Analysis of Microbiology Laboratory Data

Value: £887,722

Duration: Apr 2022 – Feb 2024

Commonwealth Pharmacists Association

Surveillance and Prescribing support for Antimicrobial Stewardship Resource Capacity Building (SPARC)

Value: £1,077,569

Duration: Dec 2021 – Feb 2024

Foundation for Innovative New Diagnostics

FIND: Enhance Laboratory Capabilities, Data Visualisation, and Digital Health Platforms

Value: £2,586,227

Duration: Apr 2021 - Feb 2024



Phase 1 – Key Achievements

12

12 HH and AH surveillance sites supported with infrastructure renovations and procurement of equipment, reagents, and consumables.



Sample transportation established from zonal and regional laboratories to the NPHL and CVL for confirmatory testing.



Strengthened pathogen identification and anti-microbial susceptibility testing processes for AMR surveillance and reporting.



Kilimanjaro Clinical Research Institute, one of four SeqAfrica consortium centres in Tanzania, strengthened whole genome sequencing (WGS) capacity and extended as regional sequencing centre for South Africa.



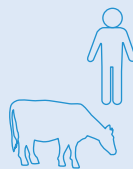
60% increase in data reported at national and international levels, through World Health Organisation Global Antimicrobial Resistance and Use Surveillance System (WHO GLASS).



77,550 culture results were collected from 16 laboratories and hospitals in Tanzania and pharmacy data was successfully collected in 16 targeted pharmacies.



1,327 patients enrolled in a Urinary Tract Infection (UTI) study and 364 cases were identified with a high rate of multi-drug resistance observed.



Fellows conducted a collaborative project reviewing methodology and data analysis for AMR/AMU surveillance in HH and AH, involving data collection, key stakeholder discussions, and training research assistants.



613 surveillance site staff trained and 465 mentored and supervised on quality management systems, data management, and microbiology techniques.

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Five training courses curated on laboratory standards, audits, calibrations, regulations, and biosafety.



Data analysed and shared with national stakeholders, with information on surveillance capacity, data availability, resistance epidemiology, and AMC patterns.



Supported national governance structures, including the AMR Coordination Committees and Technical Working Groups trained on data interpretation and evidence-based decision-making.



Participated in the review of SOPs, guidelines, surveillance plans, protocols and guidance and updated other national AMR policy documents.



Two academic papers were published on mapping and gap analysis on AMR surveillance systems, and multidrug-resistant urinary tract infections among patients in Tanzania.



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