



The
Fleming Fund



ZAMBIA



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

Zambia was one of the first countries to have a National Action Plan (NAP) and adopted the five strategic objectives from the WHO Global Action Plan into the national plan which runs from 2017-2027. Since its establishment, the Fleming Fund has supported the development of the NAP's costing, monitoring and evaluation framework. The Fleming Fund has also supported the implementation of different pillars of the NAP along with other development partners.

The Zambia 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



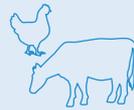
Supporting laboratories to operate at the core level, and an expansion to two new human health (HH) sites and environmental health site.



Developing and piloting the antimicrobial use (AMU) surveillance strategy for HH.



Development of an environmental sector surveillance plan, protocol, Standard Operating Procedures and guidelines.



Establishing sustainable passive surveillance for animal health (AH), with active surveillance carried out in poultry, beef and dairy sectors.



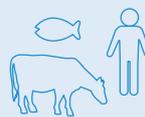
Surveillance sites to collect AMR data on infections from priority patient groups to support clinical management and prescription audits at the site level.



Development of a One Health dashboard at Zambia National Public Health Institute.



Data sharing between antimicrobial stewardship (AMS) committees at surveillance sites, with the AH sector, farmers, veterinary practitioners, and extension workers.



Consistent reporting of AMR data to the Global Antimicrobial Resistance and Use Surveillance System (GLASS) and antimicrobial consumption (AMC) data to the World Organisation for Animal Health (WOAH).



Further development of the AMR Coordinating Committee (AMRCC), interministerial committee and Technical Working Groups.



Analysis of quantity and costing for microbiology reagents, consumables and equipment maintenance for public procurement.

Phase 2



Country Grant

Grantee: Centre for Infectious Disease Research in Zambia

Sub-grantees: University of Zambia School of Veterinary Medicine, PATH

Value: £2,800,800

Duration: Jan 2024 - Dec 2025

Fellowships

No. of Fellows: 10

Host Institute: University of Edinburgh

Total value: £2,618,011 (across multiple countries, including Zambia)

Total duration: Nov 2019 - Feb 2023

Regional Grants

(Across multiple countries, including Zambia)

International Livestock Research Institute

Antimicrobial Resistance and One Health (AMROH ESA)

Value: £1,150,000

Duration: Feb 2024 - Dec 2025

African Society of Laboratory Medicine

External Quality Assurance in Africa (EQuAFRICA)

Value: £2,458,558

Duration: Oct 2023 - Dec 2025

African Society of Laboratory Medicine

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

Value: £2,200,050

Duration: May 2023 - Dec 2025

International Vaccine Institute

Regional Antimicrobial Resistance Data Analysis for Advocacy, Response and policy (RADAAAR)

Value: £1,999,956

Duration: Dec 2023 - Dec 2025

African Society of Laboratory Medicine

Mapping Antimicrobial Resistance and Antimicrobial Use Partnership (MAAP)

Value: £2,997,523

Duration: Dec 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

Fondation Merieux

Technical Assistance for Clinical Engagement (TACE Africa)

Value: £1,822,408

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

Strategic Alignment Grants

(Across multiple countries, including Zambia)

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: Centre for Infectious Disease Research in Zambia

Sub-grantees: University of Zambia School of Veterinary Medicine, PATH

Value: £ 3,750,679

Duration: Jul 2019 - Dec 2023

Fellowships

Number of Fellows: 8

Host Institution: American Society for Microbiology and International Livestock Research Institute

Value: £560,000

Duration: Nov 2019 - Feb 2023

Regional Grants

(Across multiple countries, including Zambia)

International Vaccine Institute

Regional Antimicrobial Resistance Data Analysis for Advocacy, Response and Policy (RADAAR)

Value: £2,715,217

Duration: Sep 2019 - Nov 2023

African Society for Laboratory Medicine

External Quality Assessment of Laboratory Data Africa (EquAfrica)

Value: £4,091,587

Duration: Oct 2019 - Sep 2023

African Society for Laboratory Medicine

Mapping Antimicrobial Resistance and Antimicrobial Use Partnership (MAAP)

Value: £3,159,259

Duration: Nov 2018 - Nov 2023

Technical University of Denmark

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

Value: £6,633,221

Duration: May 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

Strategic Alignment Grants

(Across multiple countries, including Zambia)

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





Phase 1 – Key Achievements

14

14 surveillance sites (9 HH, 5 AH) supported with renovations, procurement of equipment, reagents and consumables, and capacity building of laboratory staff and governance structures.



Tertiary hospitals, such as Ndola Teaching Hospital and Livingstone General Hospital, are now contributing to the purchasing of reagents and consumables using their budgets.



Developed SOPs, protocols and procedures related to isolation, archiving, and transportation of AMR-related strains.



44,912 culture samples were collected from 14 hospitals and laboratories, and data collected from 28 targeted pharmacies.



Supported the development of national laboratory quality standards and policies.



Established and strengthened Quality Management Systems in AH and HH National Reference Laboratories and strengthened pathogen identification and Antimicrobial Susceptibility Testing.



4 laboratories in Zambia enrolled in External Quality Assessment cycles.



Increased data quality and quantity at all sites with HH surveillance sites reporting data internationally to GLASS and AH AMC data reported to WOHAI.

170

170 staff at surveillance sites, government departments, and committees trained in AMR data management, analysis, sharing and policy use, basic and advanced microbiology, biosafety and biosecurity, sampling and transport.



Provided training to laboratory research scientists and technicians on data collection mobile apps; and to farmers on ESBL enzyme theory, quality control of laboratory media and disks, disease prevention and identification, and reducing AMU.



6 Professional Fellows and 2 Policy Fellows completed training in whole genome sequencing and data management for responsible research. Contributed to the establishment of a Centre of Excellence in Antimicrobial Stewardship Training for health workers in Zambia.



Provided technical support to AMRCC on draft national AMS policy and supported establishment of national AMR task force.



Contributed to the policy adoption guiding the registration of feed additives and nutritional supplements compounded with antimicrobial medicines.



Revised national clinical/treatment guidelines and prescription protocols at different sites using AMR data generated from surveillance sites.



Revised national medicines list and updated medicines catalogue of Zambia Medicines Supply Agency.



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