



The
Fleming Fund



GHANA



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

In 2011, the Ministry of Health constituted the National AMR Platform, including the Ministries and Departments of Health, Agriculture, Fisheries and Environment, UN agencies (WHO, OIE and FAO), civil society organisations, academic and research institutions. This platform drives a One Health approach in responding to the growing AMR crisis in Ghana.

In 2016, the National Policy on Antimicrobial Use and Resistance was developed and approved by the Ministry of Food and Agriculture, the Ministry of Fisheries and Aquaculture, Ministry of Environment, Science, Technology and Innovation, and the Ministry of Health.

Ghana's first AMR National Action Plan (NAP) had as a key objective, the establishment of a government-led system for collecting, collating, analysing, reporting, and disseminating AMR and AMU data on national and international platforms for the Global Antimicrobial Surveillance System (GLASS).

The Ghana 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



Conduct active surveillance in poultry, cattle, and tilapia and analyse data.



Conduct integrated surveillance and analyse data.



Produce annual national human health (HH) and animal health (AH) antibiogram reports.



Submit AMR data annually to international platforms.



Develop cost-effective software tools to enhance the collection, collation, and analysis of AMR surveillance data.



Mainstreaming of gender, supporting disaggregated data, training, advocacy, and developing a Community of Practice.



Develop a policy advocacy guide to promote AMR economic and socio-behavioural dimensions.



Improve the use of diagnostic services and build capacity to leverage data (AMR/ U/C and burden) in clinical practice (HH).



Develop protocols, tools, and resources focusing on infection prevention, AMS, and diagnostics.



Strengthen and expand capacity for WGS and bioinformatics through supporting three regional sequencing centres, including the Noguchi Memorial Institute in Ghana, which will process bacterial isolates from across Africa.

Phase 2



Country Grant

Grantee: The Aurum Institute
Value: £2,533,789
Duration: Jan 2024 - Dec 2025

Fellowships

No. of Fellows: 10
Host Institute: London School of Hygiene and Tropical Medicine
Total value: £ 1,304,883 (Across multiple countries, including Ghana)
Total duration: Feb 2024 - Dec 2025

Regional Grants

(Across multiple countries, including Ghana)

African Society for Laboratory Medicine
Technical Assistance for Data and Evidence Use Africa (TADE Africa)
Value: £1,800,005
Duration: Feb 2024 - Dec 2025

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

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

External Quality Assessment of Laboratory Data Asia (EQuAsia)
Value: £2,458,558
Duration: Oct 2023 - Dec 2025

Centre for Environment, Fisheries and Aquaculture Science
AMR and One Health West Africa (AMROH WA)
Value: £1,150,000
Duration: Feb 2024 - Dec 2025

Liverpool School of Tropical Medicine

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

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

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

Strategic Alignment Grants

(Across multiple countries, including Ghana)

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

Country Grant 1

Grantee: Office for Research, Innovation and Development, University of Ghana

Sub-grantees: Mangel Klicks

Value: £1,060,397

Duration: Dec 2018 - Sep 2020

Country Grant 2

Grantee: The Aurum Institute

Sub-grantees: Perfcon Construction Company Limited

Value: £993,293

Duration: Dec 2020 - Oct 2021

Country Grant 3

Grantee: The Aurum Institute

Sub-grantees: Perfcon Construction Company Limited

Value: £644,894

Duration: Apr 2023 - Mar 2024

Fellowships

Number of Fellows: 12

Host Institution: London School of Hygiene and Tropical Medicine, Technical University of Denmark, International Livestock Research Institute

Value: £717,039

Duration: Oct 2018 - Feb 2023

Regional Grants

(Across multiple countries, including Ghana)

African Society for Laboratory Medicine

Mapping Antimicrobial Resistance and Antimicrobial Use Partnership (MAAP)

Value: £7,054,881

Duration: Nov 2018 - Nov 2023

External Quality Assessment of Laboratory Data Africa

(EQuAfrica)

Value: £4,364,227

Duration: Oct 2019 - Sep 2023

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

Value: £3,924,546

Duration: Oct 2019 - Apr 2023

Technical University of Denmark

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

Value: £6,743,701

Duration: May 2019 - Sep 2023

Ending Pandemics

Common Protocols to Support AMR Surveillance (PARSE)

Value: £2,194,068

Duration: Sep 2019 - Jan 2022

International Procurement Agency

Grant Barriers to Logistics

Value: £52,000

Duration: Apr 2020 - Dec 2020

Strategic Alignment Grants

(Across multiple countries, including Ghana)

Brigham and Women's Hospital

WHONET: Management and Analysis of Microbiology Laboratory Data

Value: £889,044

Duration: Apr 2022 - Feb 2024

Commonwealth Pharmacists Association

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

Value: £1,152,946

Duration: Dec 2021 - Feb 2024



Phase 1 – Key Achievements

11

11 surveillance sites and reference laboratories renovated. HH and AH AMR National Reference Laboratories established.



A multicentric Point Prevalence Survey (PPS) was carried out in all seven HH surveillance sites, and findings were published in 2021.



Standard Operating Procedures (SOPs) developed in line with the Clinical and Laboratory Standards Institute/EUCAST at national and regional veterinary laboratories.



Supported the development of national AMR laboratory quality standards and policies.

9

Nine laboratories participated in the External Quality Assurance (EQA) programme across three cycles.



Development of a national and regional (West Africa) whole genome sequencing centre.



Developed and piloted a framework for sampling birds from open commercial markets for population-based poultry surveillance.



Ghana submitted its first report to GLASS in 2021. The AH AMU survey also provided data for analysis.



Whole genome sequencing (WGS) analysis of Extended-Spectrum Beta-Lactamase (ESBL)-producing *E. coli* from patients with urinary tract infections in Accra.



Conducted metagenomics analysis of sewage from varied locations.



Monitored AMR of foodborne pathogens in the Caeca of free-range local chicken in the Greater Accra region.



24,427 total culture results were collected from 16 facilities in Ghana and data collection was successfully conducted in 25 targeted pharmacies.



Reviewed and validated the Integrated AMR Surveillance Framework for One Health.



Government staff trained on biosafety and biosecurity, AST, Quality Management, sample isolate transportation, quality assurance and WHONET.

69

Staff at seven supported sites trained on automated blood culture systems, and user-level training sessions for 69 lab scientists across Ghana.



National guidelines were developed covering the AMR surveillance framework, priority pathogens for Ghana and SOPs on bacteriology.



The Fleming Fund

