



## 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 (RADAAR)  
**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

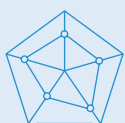
**Duration:** Dec 2021 - Feb 2024

# 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.



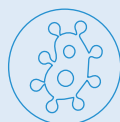
Whole genome sequencing (WGS) analysis of Extended-Spectrum Beta-Lactamase (ESBL)-producing *E. coli* from patients with urinary tract infections in Accra.



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**

