





INDONESIA

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 implementation of Indonesia's National Action Plan (NAP) 2020-2024 included five key strategies, aligned with the strategic objectives of the Global Action Plan and covering human, animal, agriculture, aquaculture, and environment sectors.

The Indonesia Country Grant in phase 2 aims to build on and maximise the impact of investments made to date, including supporting the multi-stakeholder revision of the NAP for AMR. This involves consolidating surveillance toward an integrated One Health system to inform data-driven decisions and policymaking.



Phase 2 Country Grant – Expected Results



One Health coordination embedded, together with budget planning to sustain monitoring and stewardship.



National AMR surveillance strategy and protocols reviewed and revised for human health (HH), animal health (AH) and aquaculture sectors.



Enhanced surveillance information used in policymaking and stewardship.



Extension and expansion of AMR, antimicrobial use (AMU), and antimicrobial consumption (AMC) surveillance capabilities: improved data quality, increased number of reporting sites and bacterial species.



Strengthened analytical capabilities at institutional and national levels, with surveillance reports used to inform practice and policy.



Integration of whole genome sequencing (WGS) in routine AMR human health surveillance and across sectors and incorporation of this data into national surveillance data.



Data contribution by private sector laboratories to the national surveillance system.



Development of economic case for AMR surveillance.

Phase 2



Country Grant

Grantee: DAI Global **Value:** £5,849,981

Duration: Mar 2024 - Dec 2025

Fellowships

No. of Fellows: 10

Host Institute: Erasmus University **Total value:** £654,506 (across multiple

countries, including Indonesia)

Total duration: Nov 2023 - Dec 2025

Regional Grants

(Across multiple countries, including Indonesia)

International Vaccine Institute

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

Value: £199,956

Duration: Dec 2023 - Dec 2025

International Vaccine Institute

Technical Assistance for Clinical Engagement

Asia (TACE Asia)

Value: £1822.436

Duration: Feb 2024 - Dec 2025

International Vaccine Institute

Capturing Data on Antimicrobial Resistance Patterns and Trends in Use in Regions of Asia

(CAPTURA)

Value: £3,186,597

Duration: Oct 2023 - Dec 2025

Technical University of Denmark

External Quality Assessment of Laboratory

Data Asia (EQuAsia) **Value:** £2,497,995

Duration: Nov 2023 - Dec 2025

University of Melbourne

AMR and One Health South East Asia (AMROH

SEA)

Value: £1,374,992

Duration: Jan 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

Technical Assistance for Data and Evidence

Use Asia (TADEU Asia)

Value: £1.687.091

Duration: Dec 2023 - Dec 2025

Strategic Alignment Grants

(Across multiple countries, including Indonesia)

Brigham and Women's Hospital

WHONET: Management and Analysis of

Microbiology Laboratory Data

Value: £453,328

Duration: Mar 2024 - Dec 2025

Foundation for Innovative New Diagnostics

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

Value: £1,769,837

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: DAI Global Value: £8,633,707

Duration: Dec 2019 - Feb 2024

Fellowships

Number of Fellows: 7

Host Institution: Erasmus University

Total value: £880,000

Total duration: Jan 2020 - Jan 2024

Regional Grants

(Across multiple countries, including Indonesia)

International Vaccine Institute

Collection and Analysis of Historical AMR Data

for Policymaking (CAPTURA)

Value: £2,043,671

Duration: Jan 2019 - Sep 2023

Technical University of Denmark

External Quality Assessment of Laboratory Data

Asia (EQuAsia)
Value: £4.247,345

Duration: Jan 2020 - Oct 2023

International Vaccine Institute

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

Value: £2,715,217

Duration: Sep 2019 - Nov 2023

Strategic Alignment Grants

(Across multiple countries, including Indonesia)

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



25

Supported the strengthening of 25 laboratories in AMR surveillance.



Four National Reference Laboratories (HH, AH, and aquaculture) are equipped to perform Antimicrobial Susceptibility Testing and provide External Quality Assurance (EQA) services to surveillance sites.

13

Carried out Point Prevalence Surveys in 13 hospitals (>2500 patients) to understand antibiotic use.



Supported reporting of HH data to the Global Antimicrobial Resistance and Use Surveillance System.



Developed plan and protocol for AMR surveillance in AH and aquaculture. Conducted active surveillance in animal and aquaculture sectors and supported clinical surveillance in layer farms.



Conducted nationwide AMU survey in AH and aquaculture sectors covering 1,080 commercial broiler farms across four provinces and 360 aquaculture systems.



Conducted a One Health Tricycle study with 800 E. coli isolates sequenced from the poultry sector, and 160 other bacterial isolates from aquaculture samples.



The Centre for Health Laboratory and Centre for Quality Testing and Certification of Animal Products Reference Laboratory participated in the Proficiency Testing trials for EQA training activities.

20

20 AMR surveillance training courses designed and delivered across sectors to more than 2,000 leaders and technical experts.

300

Trained 300 local government veterinary officers, providing AMU and AMR materials including guidance on developing AMU surveys in broiler farms, and coaching junior colleagues on AMR.



Strengthened genomics capabilities, aligning with priorities of the Indonesian Ministry of Health (MoH) to strengthen Next Generation Sequencing and bioinformatic capabilities.

144

Regional Grant, CAPTURA, mapped AMR and AMU data availability and capacity across 144 laboratories and pharmacies in collaboration with the Indonesian MoH.



Government staff trained in AMR data management using the WHONET platform.







