Who we are

The Department of Health and Social Care (DHSC)’s Fleming Fund is a UK aid programme supporting up to 25 countries across Africa and Asia to tackle antimicrobial resistance (AMR), a leading public health threat across the world. The Fleming Fund invests in strengthening data surveillance systems through a portfolio of country grants, regional grants, and fellowships managed by Mott MacDonald, and global projects managed by DHSC partners.

The Fleming Fund focuses on low- and middle-income countries (LMICs) because they bear the heaviest consequences of the spread of drug-resistant infections. LMICs are supported to generate, share, and use robust and quality-assured data to support AMR policies and interventions.

Adopting a One Health approach across human health, animal health, and the environment sectors, the programme supports AMR data collection and analysis to support AMR policies and interventions and improve global public health.

Country context

The second Vietnam AMR National Action Plan (NAP), titled ‘National Strategy for Drug Resistance Combat 2021–2030, vision 2035’, was developed by the Ministry of Health (MOH), the Ministry of Agriculture and Rural Development (MARD) alongside other relevant ministries and submitted to the Deputy Prime Minister for approval in 2022.

The MARD also approved a ‘National Action Plan on AMR Control in Agriculture 2020-2025’ in August 2021, specifically addressing the use of antimicrobials in livestock and aquaculture. The government is currently funding most of the medical treatment and hospital costs related to AMR.

More information about Vietnam and its work on AMR can be found on the Fleming Fund website at: flemingfund.org/countries/vietnam.
### Achievements

| **Established National Cross-sectoral Steering Committee (CSSC) and Technical Working Groups (TWG) to share AMR data from HH and AH.** |
| **Terms of Reference for National Reference Laboratories (NRLs) and national surveillance plan approved by Ministry of Health.** |
| **Surveillance sites with improved laboratory capacity and IT infrastructure, linking clinical and laboratory data, and sharing AMR data with the Vietnam Ministry of Health.** |
| **Renovation of National Centre for Veterinary Hygiene Inspection 1 (NCVHI1), with Vitek MS and Vitek2Compact platforms and staff technician training. The systems enable rapid results on bacteriological strains, allowing clinicians to make informed decisions on patient treatments.** |
| **AH surveillance sites with improved laboratory capacity and IT infrastructure.** |
| **Two rounds of national active AMR surveillance in poultry and pigs completed, with results shared with Department of Animal Health. Planning for third round active surveillance also successfully conducted.** |
| **All three AH laboratories participated in international EQAS (External Quality Assessment Scheme).** |
| **Supported Vietnam Government to establish and build capacity for three NRLs – including Agriculture Subcommittee of CSSC, Agriculture AMR TWG for three AH animal surveillance sites – in line with GLASS registration conditions.** |

**NRLs:** NCVHI1, NCVHI2, and RAHO4 (Regional Animal Health Office) perform bacterial identification and AST (Antimicrobial Susceptibility Testing), with biosafety and biosecurity, biorepository, and data collection systems.
The Partnership Framework endorsed by One Health partners and donors — the first-time AMR officially recognised as top priority in Vietnam.

**Country Grant (continued)**

**Management Agent:** Mott MacDonald  
**Grantee:** FHI 360  
**Sub-Grantees:** NIHE, NIVR, PATH and OUCRU

Strengthening One Health approaches to information sharing in conjunction with AMR and AMU surveillance system in HH and AH sectors.

**Achievements**

- Institutionalisation of One Health Partnership for 2021-2025, resulting in enhanced sharing of AMR knowledge between research institutions and Vietnamese government.
- The Partnership Framework endorsed by One Health partners and donors — the first-time AMR officially recognised as top priority in Vietnam.
- Supported the Medical Services Administration launch of Pilot Sample Referral Programme — enabling surveillance sites to send microbiological samples to NRLs for AMR testing.
- Critical laboratory equipment installed at 3 upgraded AH laboratories including four blood culture systems. Three Vitek 2 MALDI TOF systems to five HH laboratories and AH laboratory. User training provided for all procured lab equipment.
- First AMU electronic reporting portal in Vietnam developed by Department of Animal Health in 2021-2022 applied nationwide.
- Focusing on data collection to inform regulation on manufacture antimicrobial production, import/export, and registration of veterinary medicines. Allowing decentralisation of data reporting, and data visualisation reports.
- Providing training on biosafety and biosecurity for central laboratories, and basic microbiology training for general microbiology and STD (sexually transmitted diseases) laboratories.
- System training workshops for veterinary drug manufacturers and importers took place in Hanoi and Ho Chi Minh City.
Fellowship Scheme

Management Agent: Mott MacDonald
Host Institution: Erasmus MC

Professional Cohort I: AMR Advisory in HH and AH, AMR Surveillance in HH and AH,

Achievements


Provided training sessions on AMR surveillance data cleaning and development, process data analysis, and method to develop AMR Surveillance Reports for microbiology staff in Vietnam AMR Surveillance Network.

Discussion and strengthening the collaboration with FAO Vietnam at UN quartier.

Discussion with National Institute of Hygiene and Epidemiology (NIHE), sub-grantee on the challenge of project implementation.

National Centre for Veterinary Hygiene Inspection, Hanoi, Vietnam.

Centre for Appraisal and Testing of Livestock Production (CALP).
Regional Grants

Management Agent: Mott MacDonald

CAPTURA
Gathering Historical AMR Data, IVI
Value: £2,712,824
Duration: Jan 2019 – Feb 2023
Supporting the collection and analysis of historical AMR data across key Fleming Fund countries to provide early information for policymaking.

Achievements

13 laboratories assessed in Vietnam and data submitted to MOH for own use and reference.

Technical AMU assistance provided in coordination with FF Country Grant.
Shared insights and experiences of capacity-building activities in collaboration with MOH, as part of country coordination meetings for improvement in future stakeholder engagement.

59 participants for WHONET training across four sessions.
Technical assistance provided for development of national AMR portal and WHONET training videos, through coordination of country grant.

EQASIA
External Quality Assurance (EQA) – Asia, DTU
Value: £4,247,345
Duration: Jan 2020 – Dec 2022
Supporting development of EQA practices in laboratories around Asia to ensure confidence in laboratory testing results.

Achievements

4 sites
(Bach Mai Hospital, Cho Ray Hospital, National Hospital for Tropical Diseases, Clinical Laboratory Hospital (NHTD), and Institute Pasteur Ho Chi Min) enrolled in EQASIA programme and capacity-building training activities. Institute Pasteur also participated in Proficiency Testing trials.

Building capacity in AST through EQAs to NRLs and Centres of Excellence - for each participating Fleming Fund country, including Vietnam.

*(across multiple countries, including Vietnam)

RAADAR
Policy, Practice & Advocacy, IVI
Value: £2,715,217
Duration: Sep 2019 – Apr 2023
Supporting data sharing for global AMR planning and advocacy, providing policymakers with evidence for robust, data-based recommendations.

Achievements

4 regional analyses conducted - focusing on planning, policy, and advocacy to improve AMR surveillance data sharing, including Fleming Fund priority countries, to identify data sharing bottlenecks.

Delivered both regional data and policy workshops to review existing material and visualisation approaches - developing plans to improve data sharing and analysis.
Strategic Alignment Grants

Management Agent: Mott MacDonald

Achievements

**FIND**

*Value:* £2,586,226*
*Duration:* Apr 2022 – Dec 2023

Enhancing common approaches to laboratory QMS, bacteriology laboratory network design, collation and analysis of AMR surveillance data, and clinical engagement strategies.

Using digital tools to reduce time taken to clean AMR data received from surveillance sites, leading to more efficient HH and AH data analysis, and national-level reporting.

New opportunities for cross-sectoral AMR data use and interventions based on the collation of AH and HH AMR data in single repository.

**Commonwealth Pharmacists Association**

*Value:* £1,152,947*
*Duration:* Dec 2021 - Dec 2023

Assisting with AMU surveillance and using data to improve prescribing practices.

CPA networks established in Fleming Fund-supported countries to provide HH and AH guidelines for uploading data sharing permission documents.

Identified clinical sites for PPS training aligning with sustainable model to ensure capacity in-country to undertake and support future AMR studies.

**WHONET**

*Value:* £889,045*
*Duration:* Apr 2022 – Dec 2023

Providing training and technical support to use free WHONET desktop application for managing and analysing microbiology laboratory data, with focus on AMR surveillance.

Running centralised training (both on-site and remotely) and identifying gaps for specialist training in Fleming Fund-supported countries.

Developing training materials and providing ongoing technical support to software users.

Supporting development of modules, including online data entry and integration platform compatible with DHIS-2 software, and providing scientific guidance for breakpoints (aiding pathogen AST) interpretation and report generation for AMR analysis.

*CPA networks established in Fleming Fund-supported countries to provide HH and AH guidelines for uploading data sharing permission documents.*

*Identified clinical sites for PPS training aligning with sustainable model to ensure capacity in-country to undertake and support future AMR studies.*

*(across multiple countries, including Vietnam)*

The Fleming Fund supports a range of additional projects delivered at national, regional, and global levels to support the generation, sharing, and use of high-quality AMR data. These all align closely with the country and regional grants and fellowships portfolio and support further achievement of the Fleming Fund objectives. A full list of global grants is available on the Fleming Fund website.

To contact the Management Agent, Mott MacDonald, email flemingfundSEA@mottmac.com