



NEPAL

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

Nepal's national AMR landscape is well-developed. It was one of the earliest countries to formulate a National Action Plan (NAP) on AMR and a situational analysis of antibiotic use and resistance was conducted in 2015. A One Health governance structure for AMR containment was made functional as per the NAP and approved and budgeted by an AMR Technical Working Committee in 2022 as part of the revised NAP (2018-2022). The Ministry of Finance's review of the NAP identified domestic funding, integrated AMR into budgets, and prioritised One Health AMR in Nepal's future health activities. The latest version of the NAP (2024-2028) was agreed upon by the Ministry of Finance and approved by the Nepalese cabinet.

The Nepal Country Grant in phase 2 aims to build on and maximise the impact of investments made to date by supporting the multi-stakeholder NAP for AMR, consolidating surveillance toward an integrated One Health system to produce data-driven decisions and policymaking and continuing to decentralise the AMR response and planning to provincial levels as per federal policy.



Phase 2 Country Grant – Expected Results



Support the development of AMR and AMC surveillance strategies and protocols for environment and aquaculture, and AMR surveillance roadmap for human health (HH) Provincial Public Health Laboratories.



Strengthen the capacity of federal and subnational stakeholders to review, update, and use sector-specific AMR surveillance strategies.



Policy Brief for AMR containment, based on surveillance data to promote the rational use of antibiotics for animal health (AH).



Support all surveillance sites to share AMR data with National Reference Laboratories, and selected private sector hospitals, to contribute AMR/AMU data to the national surveillance system.



Support 24 sites to achieve core standards as per the London School of Hygiene & Tropical Medicine roadmap.



Develop and pilot passive surveillance of packaged animal food products.



Establish whole genome sequencing to obtain data from priority isolates.

Phase 2

Country Grant

Grantee: FHI 360 **Value:** £2,699,999 **Duration:** Jan 2024 - Dec 2025

Fellowships

No. of Fellows: 10 Host Institute: The Peter Doherty Institute for Infection and Immunity Value: £3,272,442 (across multiple countries, including Nepal) Duration: Nov 2023 - Dec 2025

Regional Grants

(Across multiple countries, including Nepal)

International Vaccine Institute

Regional Antimicrobial Resistance Data Analysis for Advocacy, Response and Policy (RADAAR) Value: £1,999,956 Duration: Dec 2023 - Dec 2025

International Vaccine Institute

Technical Assistance for Clinical Engagement Asia (TACE Asia) Value: £1,822,436 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

Massey University

AMR and One Health South Asia (AMROH SA) Value: £1,145,833 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 in Policymaking Asia (TADEU Asia) Value: £1,687,091 Duration: Dec 2023 - Dec 2025

Strategic Alignment Grants

(Across multiple countries, including Nepal)

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: FHI 360 **Value:** Country Grant 1 – £1,411,488 Country Grant 2 – £2,747,738 **Duration:** Country Grant 1, Aug 2018 - Dec 2020, Country Grant 2, Jan 2021 - Dec 2023

Fellowships

Number of Fellows: 12 Host Institution: The Peter Doherty Institute for Infection and Immunity Value: £720,000 (across multiple countries, including Nepal) Total duration: Feb 2019 - Jul 2023



Regional Grants

(Across multiple countries, including Nepal)

International Vaccine Institute

Capturing Data on Antimicrobial Resistance Patterns and Trends in Use in Regions of Asia (CAPTURA) Value: £2,240,878 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 Nepal)

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

Supported 23 laboratories, including 15 HH, seven AH, and one food testing.

12 laboratories (7 HH and 5 AH), including two national AMR reference laboratories, were refurbished, and nine automated equipment units were installed to improve the efficiency of bacterial identification and Antimicrobial Susceptibility Testing (AST).



National Reference Laboratories were enrolled in international External Quality Assessments (EQAs) and provided National EQAs to surveillance sites for AST. Nepal's National Public Health Laboratory and Central Veterinary Laboratory also participated in EQA capacity-building activities.



Human resource capacity was enhanced in microbiology, AMR surveillance protocols, data analysis, biosafety and security.



26 surveillance sites began reporting AMR data to the WHO Global Antimicrobial Resistance and Use Surveillance System.



Advocacy efforts resulted in the Nepal Medical Council mandating an Antimicrobial Stewardship Programme and Infection Prevention and Control (IPC) competencies for medical interns.



One Health Committee for AMR was established with cross-sectoral input.



The Department of Drug Administration used AMR and AMU data to issue a public notice on the prohibition of import and distribution of antibiotic colistin for use in livestock, poultry, and aquaculture.



The first AMR and AMU surveillance was carried out in poultry farms and in Nepal's food sector on products of animal origin.



The food laboratory at the Department of Food Technology and Quality Control developed protocols to establish passive AMR surveillance and included bacterial isolation and AST in routine QC processes.



The environmental sector was engaged in AMR containment efforts, conducting assessments to identify data gaps. Protocols were developed to collect environmental samples and to establish an AMR unit at the Department of Environment laboratory.



National IPC guidelines were developed and endorsed by the Ministry of Health and Population.



The National Antibiotic Prescription Guidelines were revised by the Ministry of Health and Population, based on AMU data from Point Prevalence Survey results.



91 AMR/AMU/AMC data sources in Nepal were identified through the Regional Grant, CAPTURA, and 34 facilities provided data for analysis.









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