Key achievements of the Fleming Fund, 2018-2025

Stan Fenwick and Etienne Chevanne on behalf of the
Mott MacDonald Management Agent team

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Overview of the Fleming Fund achievements

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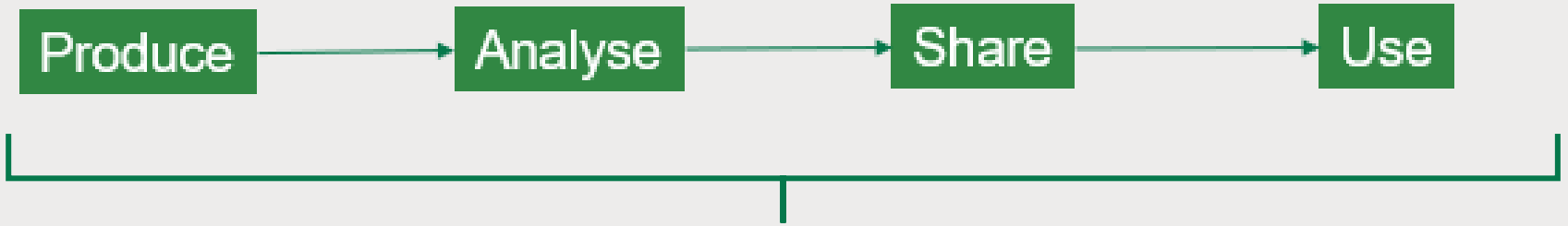
What were our initial goals?

AMR AMU AMC OH Sectors	Robust Quality assured Specific e.g. Antibiogram	Local National International	Practice Guidelines Policy



Building national surveillance systems to provide evidence for policy makers

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Country Investment Strategies were based on NAPs and country context

Country Grants

- Continuous improvement and support for systems
- Generating local data & evidence
- Supplies and commodities

Fellowships

Phase 1 – 2 cohorts

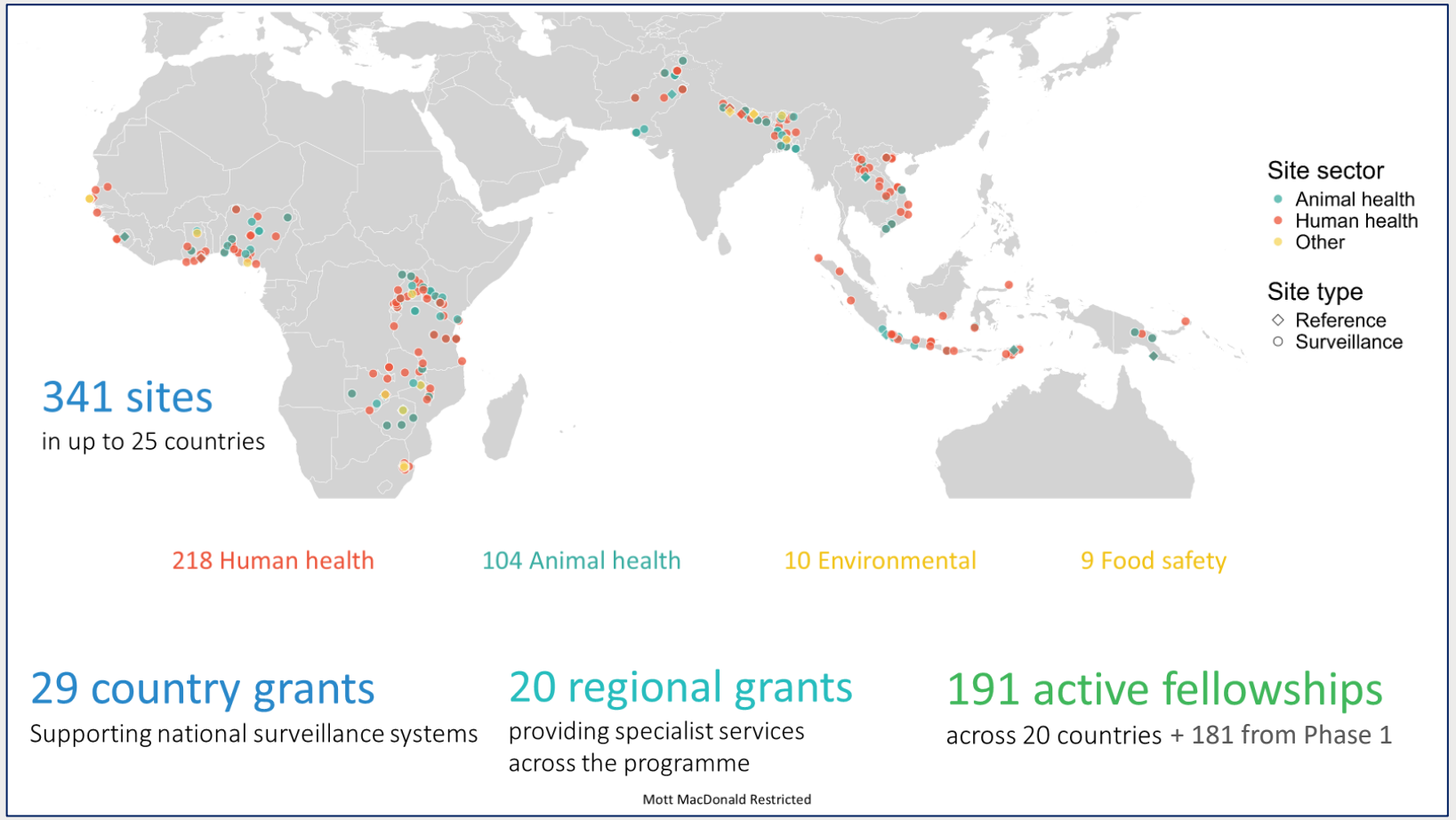
Phase 2 – 1 combined cohort

Alumni

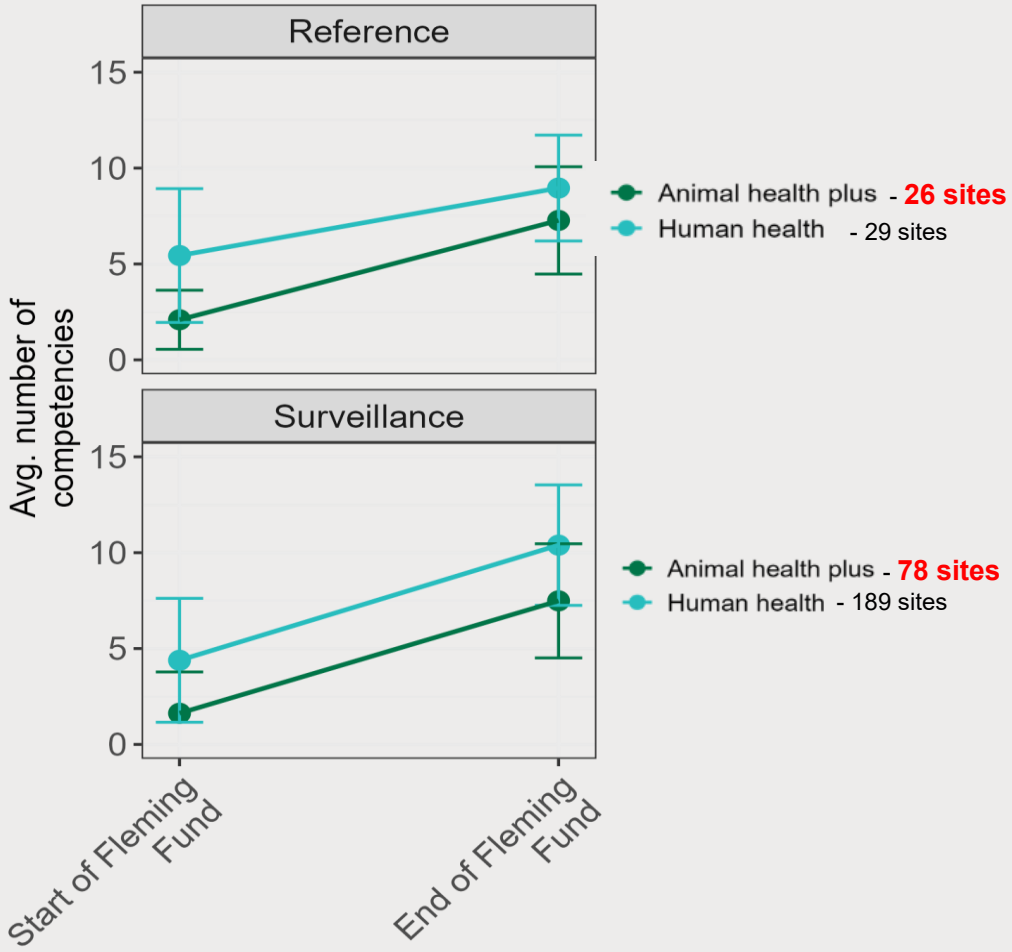
Regional & Strategic Alignment Grants

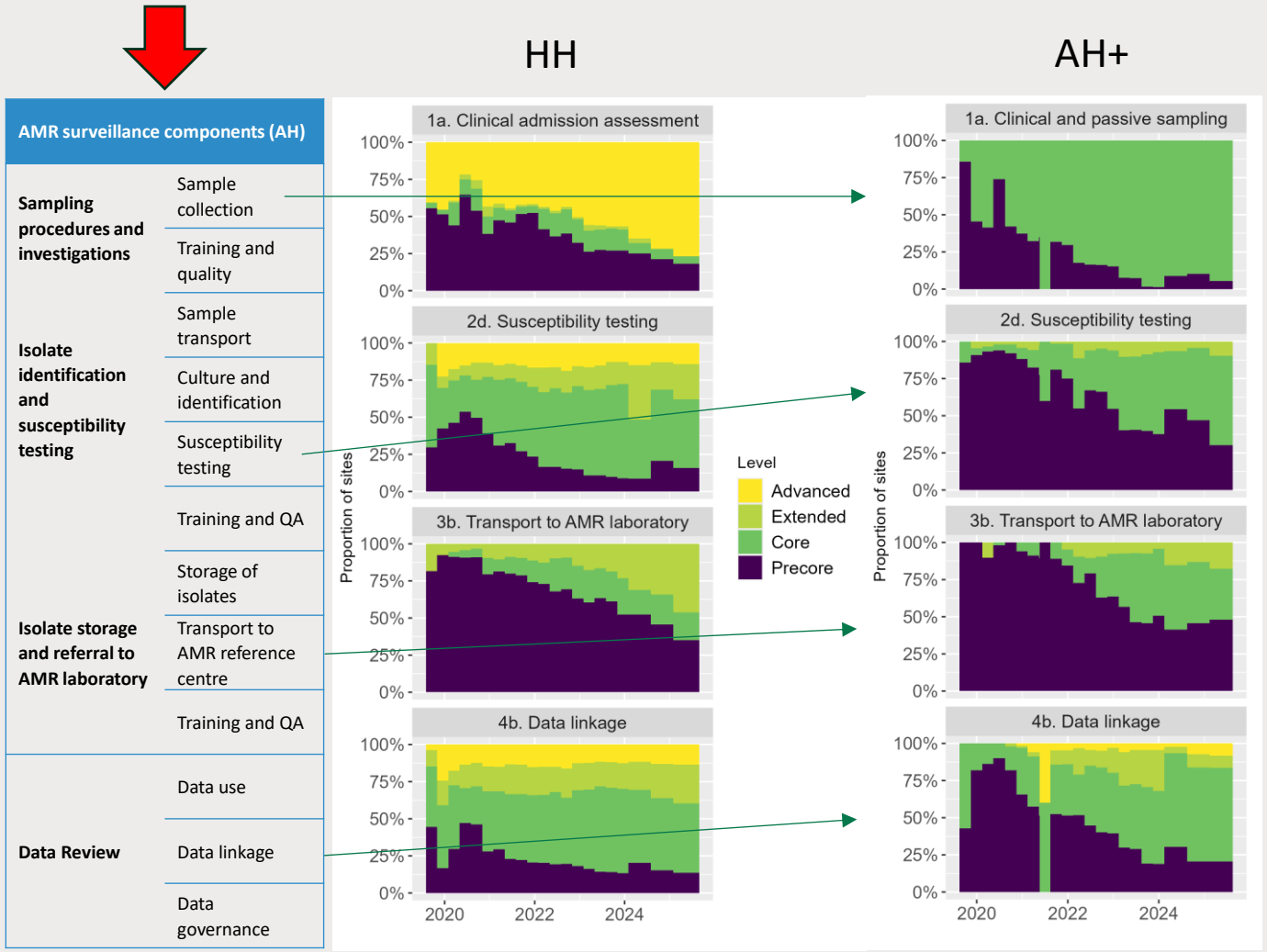
- 20 technical grants
- Selective support
- Working in multiple countries

Focus on strengthening laboratory capacity to generate data



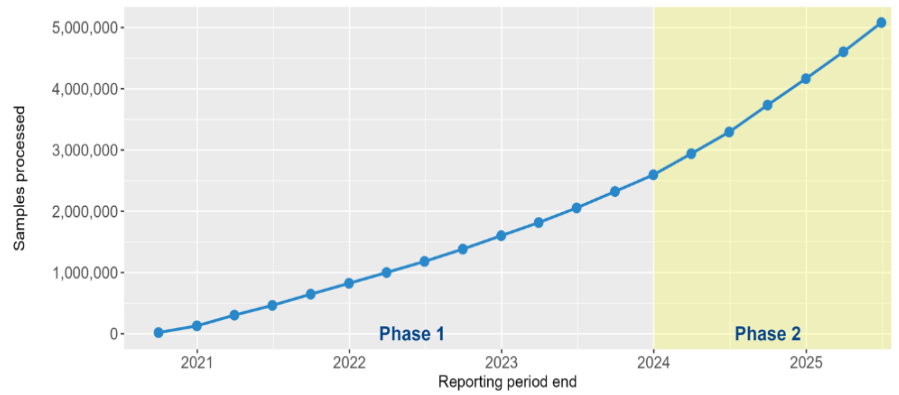
Improving surveillance capacity





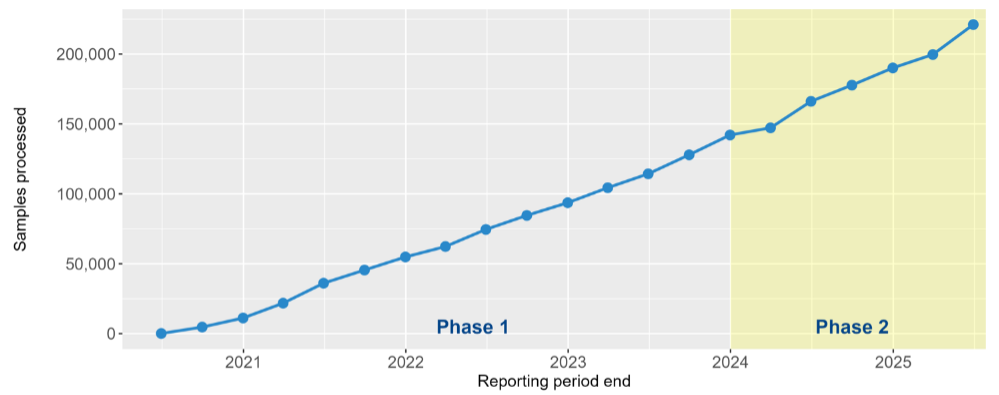
(AH+ = AH, Environment and Food laboratories)

Improved volume and quality of AMR data



5.1 million human health samples
processed since inception

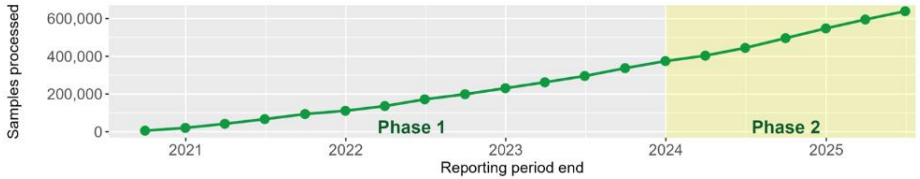
Phase 1: 2.59 million
Phase 2: 2.49 million so far



221,000 animal health samples
processed since inception

Phase 1: 142,000
Phase 2: 79,000 so far

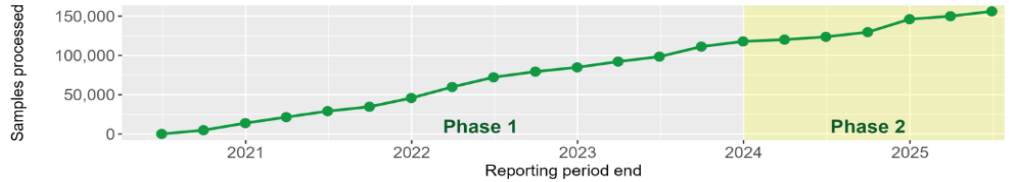
29 human health reference sites
providing sample validation



639,000 human health samples
validated since inception

Phase 1: 374,000
Phase 2: 265,000 so far

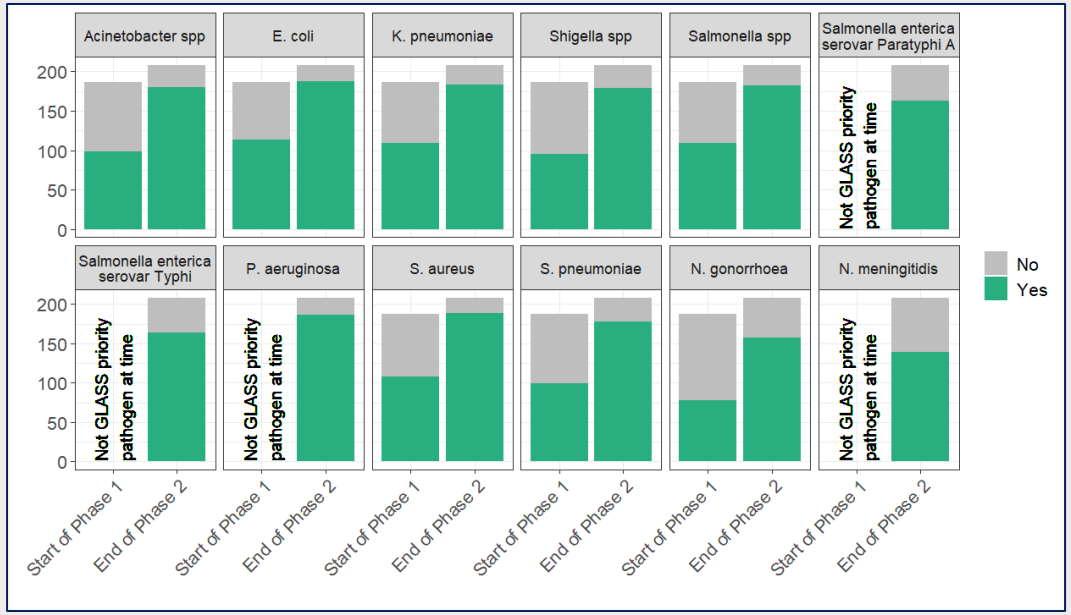
26 animal health reference sites
providing sample validation



156,000 animal health samples
validated since inception

Phase 1: 118,000
Phase 2: 38,000 so far

Improved capabilities



- Increase in number of WHO priority pathogens that can be identified
- Improved drug/bug combination repertoire
- Improving and showing the value of bacteriological diagnostic capabilities
- Supporting AMS and IPC initiatives

Improving analysis and sharing of data

Data sharing

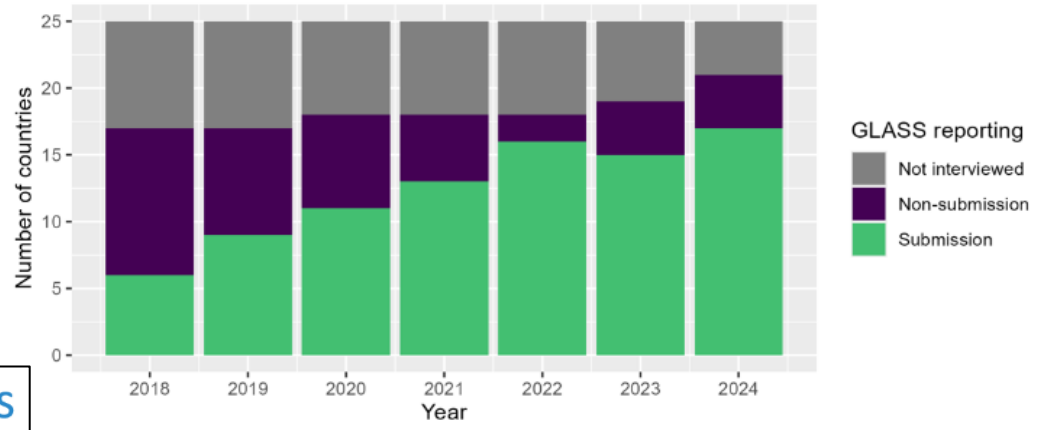
Countries submitting to GLASS

15/19 at end of phase 1

17/21 at beginning of phase 2

169/189 human health surveillance sites

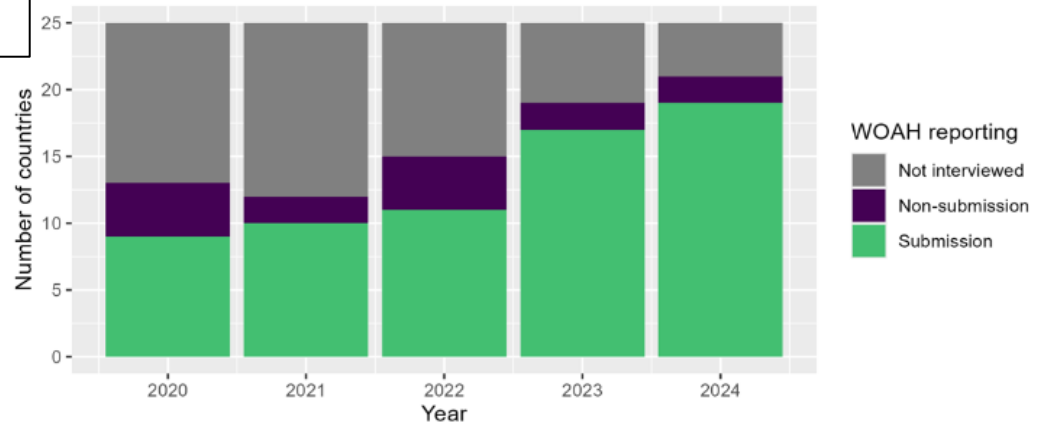
reporting sharing data with international stakeholders in Phase 2 so far



Countries submitting to WOAH

17/19 at end of phase 1

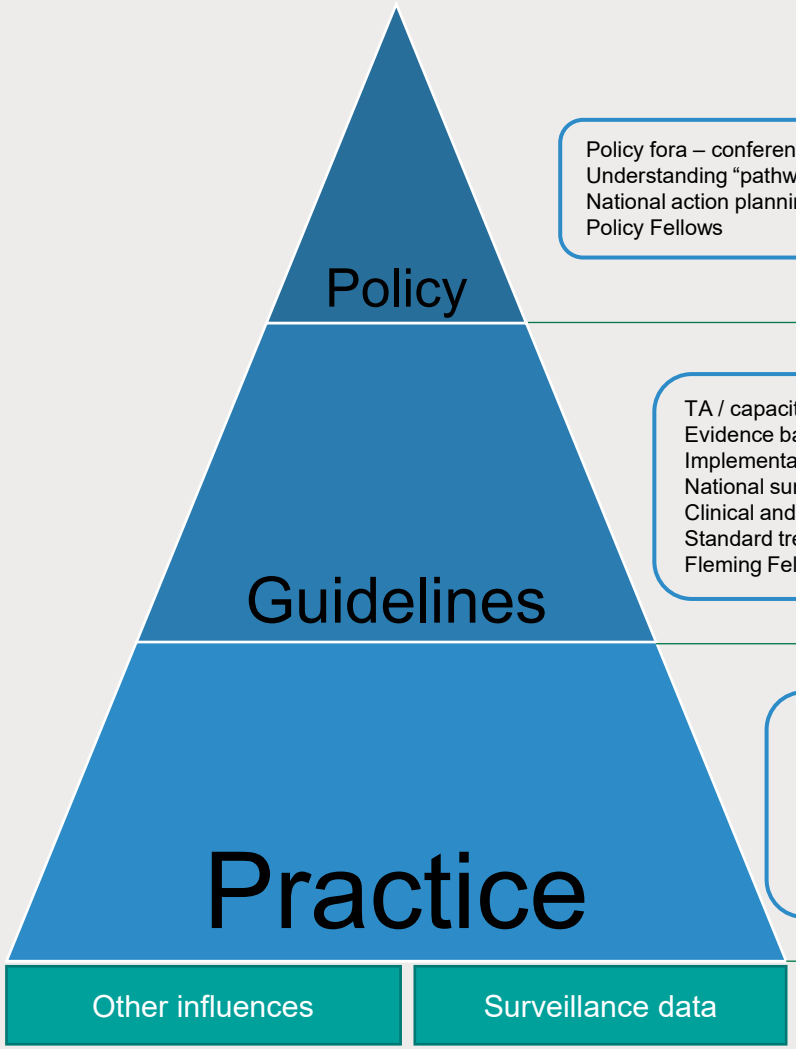
19/21 at beginning of phase 2



Data collected via country interview.

The number of countries interviewed varies by year due to different start dates.

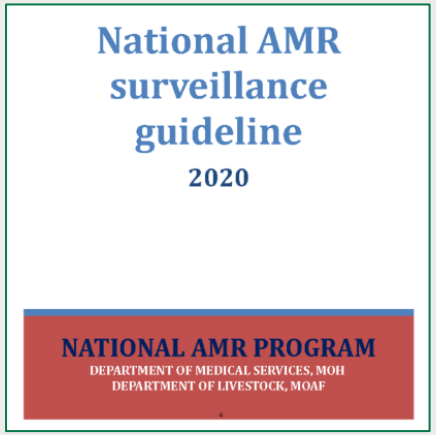
Improved data use



Policy fora – conferences; high level meetings / learning sessions
Understanding “pathways” to policy change (PEA)
National action planning and revisions
Policy Fellows

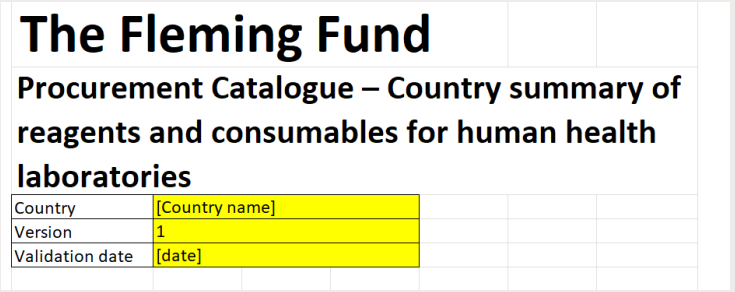
TA / capacity building for guideline development
Evidence based on local data
Implementation plan / planning for impact / costing
National surveillance guidelines, laboratory guidelines,
Clinical and practice guidelines
Standard treatment guidelines and essential medicines lists for animals
Fleming Fellows

Practitioner engagement: - human and animal health
Meetings at the clinical – laboratory interface
Data used in stewardship approaches
Data used to influence IPC practices and bio-safety on-farms
Facility level learning
Communities of practice
Fleming Fellows



Other outputs

- Supply chain strengthening and procurement catalogues
- Assessment tools
  - Laboratory assessment tools and guidelines
  - Surveillance system assessment tools
  - Data and evidence planning tools
- Political economy analyses
- Global learning – Open University modules
- Clinical services
  - Diagnostics
  - Stewardship
  - IPC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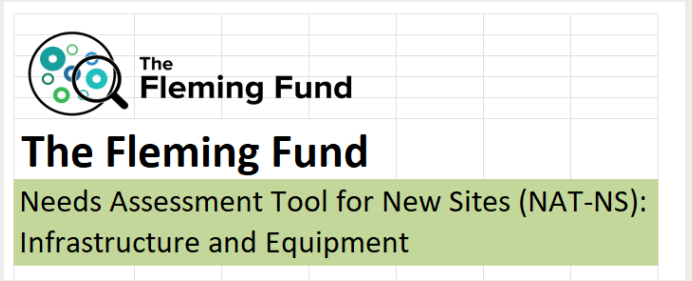
Procurement Catalogue – Country summary of reagents and consumables for human health laboratories

Country	[Country name]
Version	1
Validation date	[date]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Needs Assessment Tool for New Sites (NAT-NS): Infrastructure and Equipment

Other outputs

Economic analyses

➢to build the investment case for AMR

- Supporting Burden of Disease data collection and analysis
- Supporting Costing Exercises of the following (and communication to stakeholders)
  - NAPs – along with other partners including WHO
  - Subnational AMR surveillance systems
  - Operational Plan and Performance Framework for AMR Surveillance
  - Procurement investments

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Animal health and the Fleming Fund in Asia

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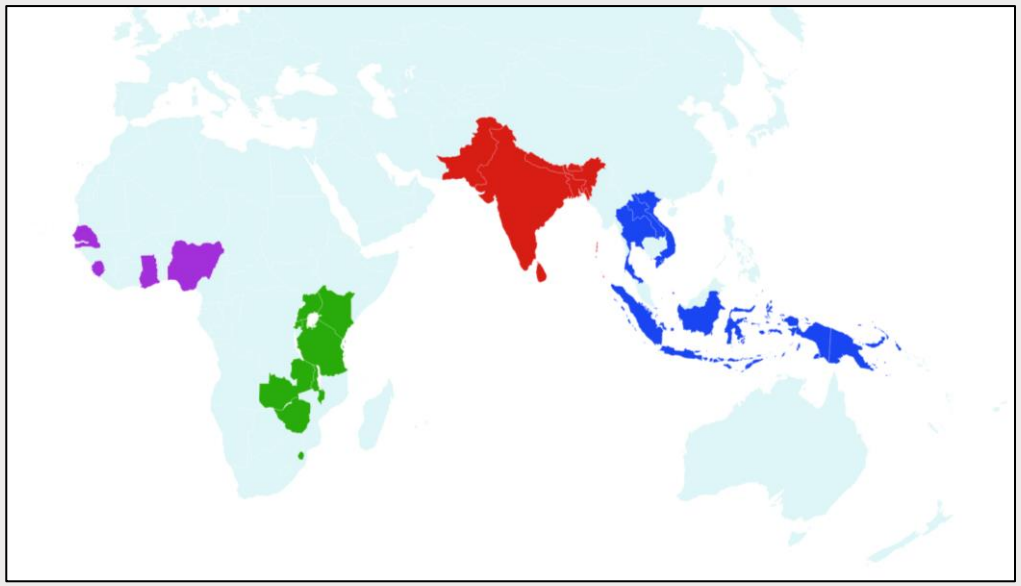
The Fleming Fund in South Asia and Southeast Asia



(includes 5 ASEAN member states – Lao PDR, Vietnam, Thailand, Indonesia and Timor-Leste)

Apr-2016 to Mar-2026

~£55 million committed in SA/SEA regions from 2018-2026) for human and animal surveillance

AMR surveillance in healthy food-producing animals (terrestrial and aquatic)

Pilot AMR testing in food samples and the environment

Surveillance of antimicrobial use in agrifood systems & monitoring of antimicrobial residues in food (limited)

Source: The Lancet One Health Commission

AMR surveillance in healthy food animals (Jan 2024-2025)

				
Bangladesh				
Bhutan				
Indonesia				*Initiatives stopped due to government shift in priority*
Laos				
Nepal				
Pakistan				
Papua New Guinea				
Timor Leste				
Vietnam				

AMU/C surveillance in the AH sector (Jan 2024-2025)

Of note - PNG is developing a framework to link AMR and AMC/U data across human and animal health systems. This is to guide stakeholders in establishing data-sharing pathways, harmonisation processes, and joint analyses that will allow policymakers to better understand cross-sectoral drivers of resistance and take coordinated action using a One Health approach.

	Sales/Import/Manufacturing data	Farm-based/AH center-based survey
Bangladesh		
Bhutan		
Indonesia		
Laos		
Nepal		
Pakistan		
Papua New Guinea		
Timor Leste		
Vietnam		

Strategic shifts – animal health, OH, environment

- Implementation of these strategic shifts in Phase 2 was a coordinated effort between the Country Grants and AMROH, a new Regional Grant providing technical assistance (TA) for AH, OH, the environment and practitioner engagement.

- There are 4 AMROH grants, one for each region, all work closely to share information, strategies, protocols and expertise.

    - SEA - University of Melbourne Asia Pacific Centre for Animal Health

    - SA – Massey University School of Veterinary Science

Phase 2 strategic shifts – animal health, OH, environment

- Animal Health – to increase visibility, capacity and use of AH labs, including passive surveillance; expand capabilities of AH labs to include foods of animal origin and environmental samples; increase active surveillance efforts; broaden AMR surveillance to include other animal species, in particular aquaculture (fish, crustaceans); expand AMU surveillance activities in the AH sector.

- One Health – to expand AMR governance to include the environment sector; develop protocols and strategies for integrated multisectoral surveillance, including the use of Tricycle; support management of data from integrated surveillance – analysis, sharing, usage.

- Environment – to expand surveillance for AMR to include the environment, in particular wastewater from farms, abattoirs, hospitals etc.; work with environment labs if available to expand their services from chemical residues to bacteriology; if no environmental labs to link AH and Env sectors for surveillance.

The AMROH grants were highly successful in –

(i) engaging the environment sector (surveillance protocols, lab capacity building, training)

(ii) supporting development of protocols for additional animal species surveillance, including aquaculture, and food

(iii) training for data analysis, bioinformatics and WGS

(iv) assisting development of integrated surveillance protocols and implementation of Tricycle in selected countries

(v) supporting antimicrobial stewardship (standard treatment guidelines for vets and paravets, essential veterinary medicine lists, AMS strategy development, training)

(vi) strengthening lab capacity for antibiotic residue testing

Fleming Fund's support for food safety in ASEAN

- **Strengthening AMR Surveillance in Livestock and Aquaculture**

  To improve early detection of resistant strains that may enter the food chain. Surveillance efforts target key foodborne pathogens such as pathogenic *E. coli*, *Salmonella* spp., *Campylobacter* spp., *Enterococcus* spp., *Vibrio* spp., and *Aeromonas* spp. Preliminary findings indicate concerning trends in AMR among these targeted bacteria.

- **Pilot AMR testing (ID, AST) in food samples only in a few countries**

- **Strengthening AMU/AMC Surveillance in Livestock and Aquaculture**

  To inform antimicrobial use practices (AMS), guide AMU regulations, and support the development of national food safety standards.

- **Drug Residue Monitoring only in a few countries on request from national authorities (Indonesia, Timor-Leste)**

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Thank you

It has been impossible to reflect all the work that has happened in such a short time!

UKaid from the British people

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