



Department
of Health &
Social Care

From Thought to Action: Tackling Antimicrobial Resistance through One Health

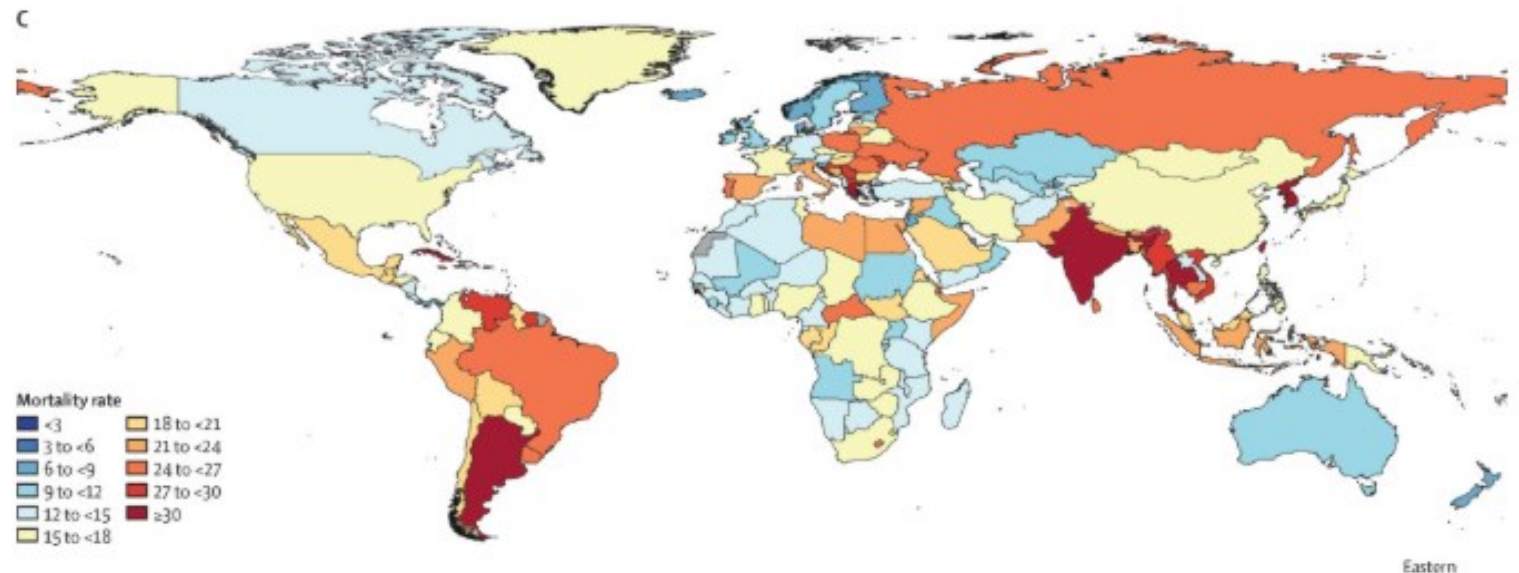
Dame Sally Davies, UK Government Special Envoy on AMR

06/11/25

The Global AMR Crisis

- 2021; **1.14 million** global deaths & further **4.7 million** associated.
- By 2050; **39 million** deaths and **169 million** associated.
- Cost to the world's GDP up to **US\$ 1.7tn** by 2050.

Death rate per 100 000 attributable to AMR, all ages, 2050



AMR in the Environment – Sewage + Pharmaceutical Effluent



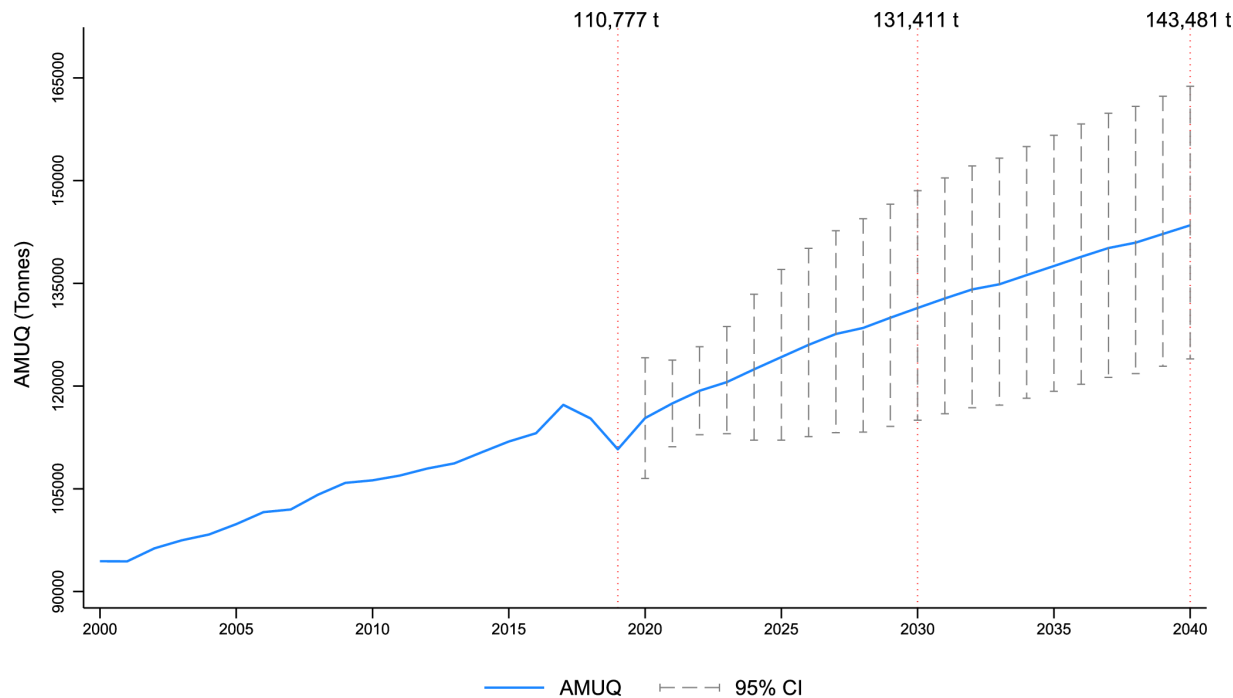
Pharmaceutical effluent on surface *Chinna Vagu River*



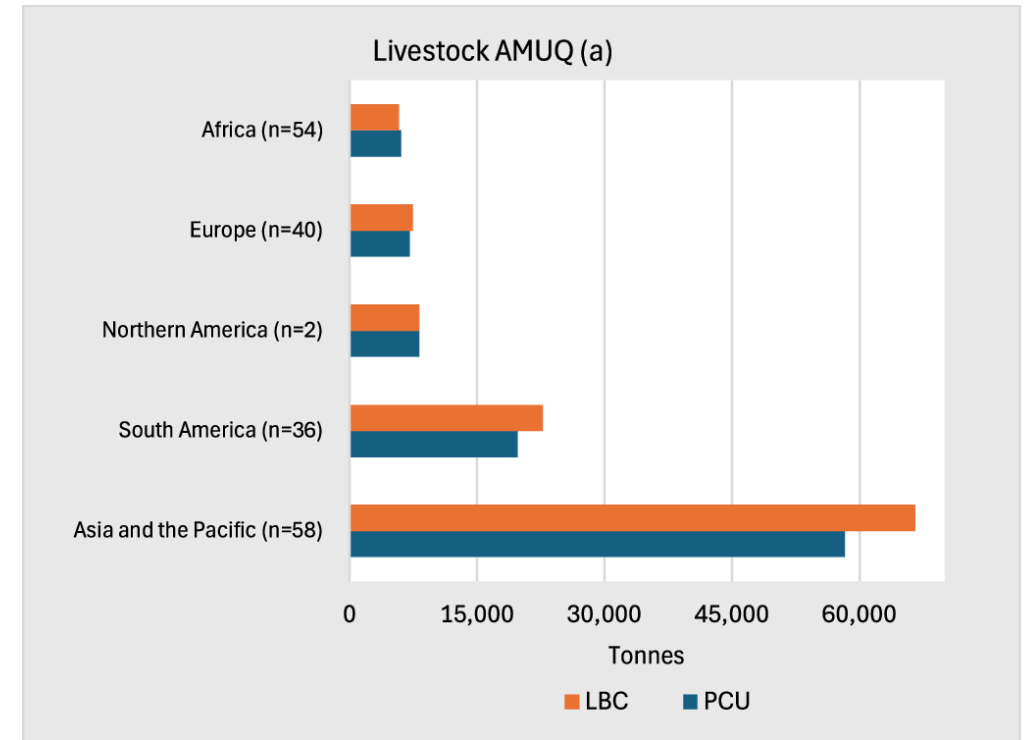
Sewage outfalls from the walls of labs into the *Nanpan River*



Antimicrobial Usage in Agrifood Food System



Global livestock antimicrobial usage quantities (AMUQ, in tonnes) projections



Regional livestock antimicrobial usage quantities (AMUQ, in tonnes) for 2019 (*Acosta, A., Tirkaso, W., Nicolli, F. et al., 2025*)

Tackling AMR Together: Scaling Proven One Health Solutions

Salmon vaccination in Norway & Scotland

Vaccination programmes have dramatically reduced antibiotic use in aquaculture, curbing AMR risk.

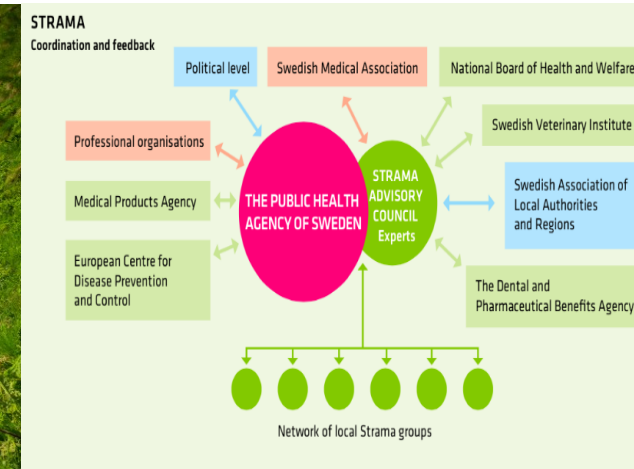
Proactive Stewardship in Denmark:

Responsible antibiotic use in agriculture, supported by surveillance and training, sets a benchmark for best practice

Voluntary Certifications such as the BSI Kitemark ensure pharmaceutical manufacturing meets strict standards, minimising environmental contamination and preventing the spread of AMR through manufacturing effluent.

STRAMA:

Coordinated knowledge sharing and implementation networks in Sweden drive effective AMR action in the healthcare system securing effective treatment of bacterial infections today & in the future.



Thank you