

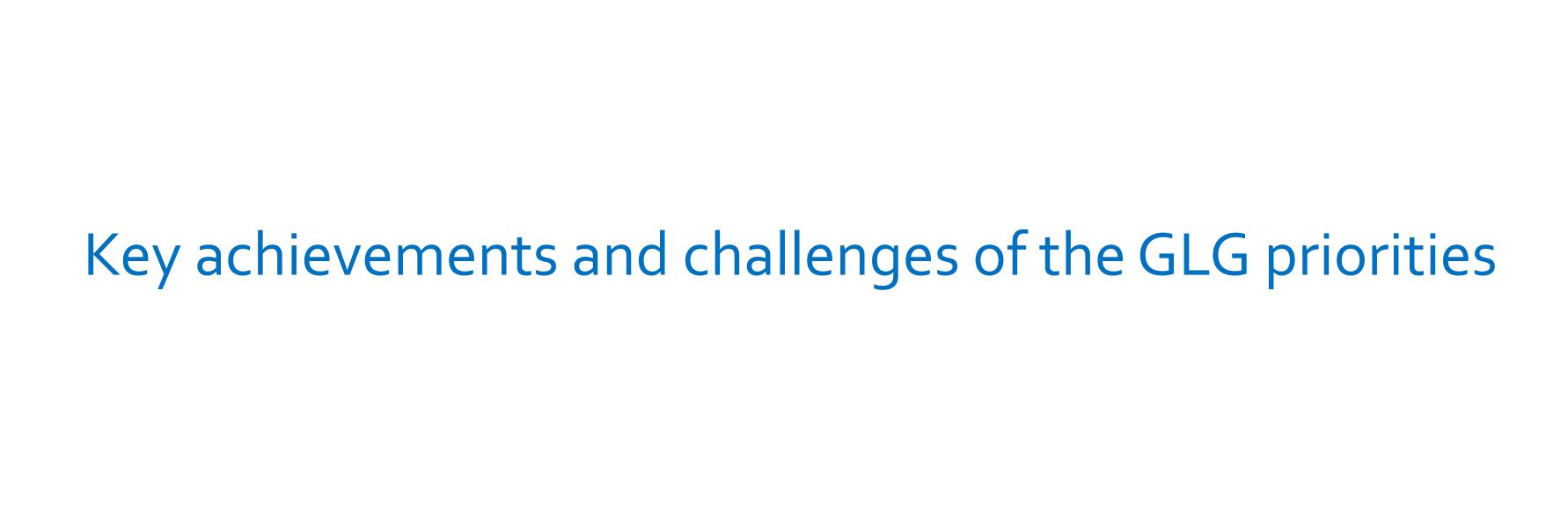
## Implementing the GLG action plan and priorities

Update from the GLG Secretariat

Haileyesus Getahun, MD, MPH, PhD
Director Quadripartite Joint Secretariat on AMR
WHO

## **Outline of presentation**

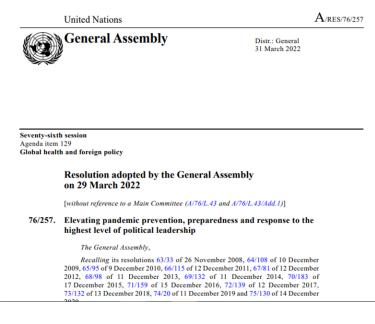
Key achievements and challenges of the six priorities Building the case for AMR investment and financing Opportunities Conclusion



## Key Priority 1: Sustained political action

Long term KPI: Development of an international instrument that positions AMR as a major global challenge and monitors its impacts

## Achievements



High-Level

Meeting on AMR

**UNGA 2024** 

secured









Why antimicrobial resistance must be a substantive element of the international instrument on pandemic prevention, preparedness and response

Position Statement by the Global Leaders Gro

#### About the Global Leaders Group on **Antimicrobial Resistance**

comprised of world leaders and experts from across sectors ance (AMR) based on the One Health approach. It civil society and the private sector to advise on and advocate or political action for the mitigation of drug-resistant tions through responsible and sustainable access to use of antimicrobials. The GLG is co-chaired by Their Excellencies Sheikh Hasina, Prime Minister of Bangladesh, and Mia Amor Mottley, Prime Minister of Barbados, and is jointly nited Nations (FAO), the World Organisation for Anima

AMR occurs when bacteria, viruses, fungi and parasites human health, AMR poses threats to the health of terrestrial and aquatic animals, plants and environmental ecosystems. as well as to food safety and food security. Its potential to

prepare for and respond to pandemics have co-benefits for the response to AMR (See figure below). Addressing AMR and

#### **AMR** in INB for Pandemic Accord



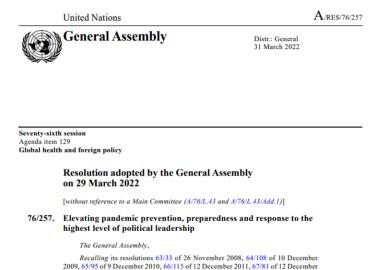
#### Heads of Gov engaged

- CHOGM 2022
- **UNGA 2022**

Specific commitments from G7 & G20 emerging







## Key Priority 1: Sustained political action

Challenges

Long term KPI: Development of an international instrument that positions AMR as a major global challenge and monitors its impacts

- Translating political buy-in into concrete action.
- Ensuring AMR is substantially included in the Pandemic Accord
- Translating global momentum into national commitment
- Ensuring AMR consistently high on the global health and development agenda

## Key Priority 2: Transforming systems

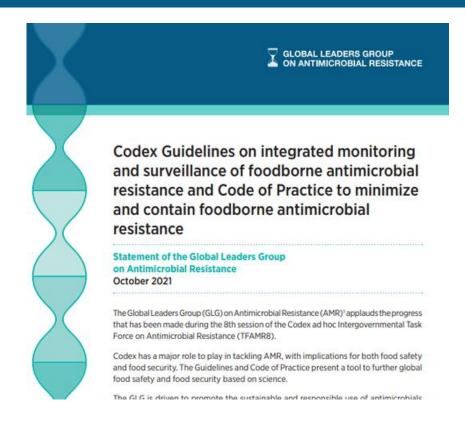
Long term KPI: Number of countries in which the use of medically important antimicrobials for growth promotion is eliminated.

World leaders and experts call for significant reduction in the use of antimicrobial drugs in global food systems

24 August 2021 | Departmental news | Geneva, Nairobi, Paris, Rome | Reading time: 8 min (2035 words)

The Global Leaders Group on Antimicrobial Resistance- today called upon all countries to significantly reduce the levels of antimicrobial drugs used in global food systems. This includes stopping the use of medically important antimicrobial drugs to promote growth in healthy animals and using antimicrobial drugs more responsibly overall.

The call comes ahead of the UN Food Systems Summit which takes place in New York on 23 September 2021 where countries will discuss ways to transform global food systems.



Global consensus on the reduction of AMU in agri-food systems in the making

Catalyzed the successful conclusion of 5y Codex negotiations

A POCKET GUIDE FOR MINISTERS ACROSS SECTORS

This guide has been developed by the Global Leaders Group on Antimicrobial Resistance.¹

While this guide is directed to Ministers mentioned in this document, its utility can be expanded to other relevant Ministers and relevant authorities based on country-specific arrangements.

1 The Global Leaders Group on Antimicrobial Resistance consists of world leaders and experts working together to accelerate political action on antimicrobial resistance. The Group is co-chaired by Their Excellencies Sheikh Hasina, Prime Minister of Bangladesh and Mia Amor Mottley, Prime Minister of Barbados. Secretariat support is provided by the Quadripartite Joint Secretariat (QJS) on Antimicrobial Resistance, a joint effort by the Food and Agriculture Organization of the United Nations (FAO), the United Nations Environment Programme (UNEP), the World Health Organization (WHO), and the World Organisation for Animal Health (WOAH).

3<sup>rd</sup> Ministerial
Conference with high
number of Ministers of
Health (28) and
Agriculture (14) and
AMR targets





Robust animal health systems and animal welfare

## Key Priority 2: Transforming systems

Long term KPI: Number of countries in which the use of medically important antimicrobials for growth promotion is eliminated.

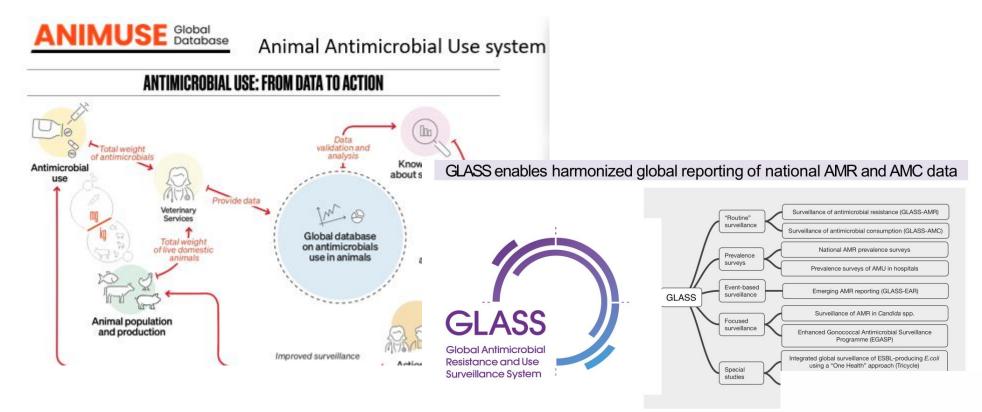
## Challenges

- Prevention is neglected no WASH, bio-security and access to vaccines;
- Lack of alternatives to antimicrobials to curb use and resistance development
- · Private sector is a key player, but effective public private partnerships needed
- Implementation of the updated CODEX Code of Practice and surveillance guidance

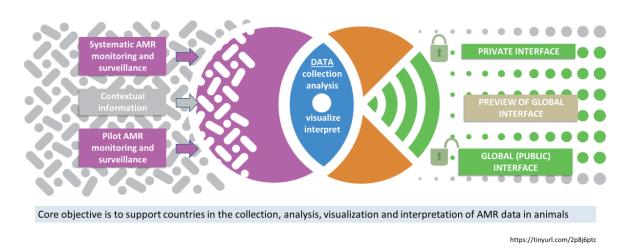
## Key Priority 3: Surveillance

Long term KPI1: Number of countries with integrated surveillance platforms for AMU/AMR

Long term KPI2: Number of countries with national targets on AMU in agri-food systems



InFARM- The International FAO Antimicrobial Resistance Monitoring data platform





## Achievements

The Quadripartite
Organizations established the
Technical Group on Integrated
Surveillance on Antimicrobial
use and resistance

26 January 2023 | Departmental news | Reading time: 2 min (470 words)

The Quadripartite organizations, made up of the Food and Agriculture Organization of the United Nations (FAO), United Nations Environment Programme (UNEP), World Health Organization (WHO), and the World Organization for Animal Health (WOAH), have established the Quadripartite Technical Group on Integrated Surveillance on antimicrobial use and resistance.

The Technical Group will advise the Quadripartite Organizations and the Global Leaders Group on Antimicrobial Resistance (AMR) on needs, scope and form of integrated surveillance to support capacity building of countries on surveillance of antimicrobial use (AMU) and resistance.

"Countries have different priorities and approaches to how antimicrobials are used and monitored and how AMR surveillance should be conducted in the agrifood systems. The mandate of the Technical Group to

GLG task force and QPT technical group on integrated surveillance established and information note published



## Key Priority 3: Surveillance

Long term KPI1: Number of countries with integrated surveillance platforms for AMU/AMR Long term KPI2: Number of countries with national targets on AMU in agri-food systems

## Challenges

No standard definition, indicators and systems equitable across sectors

Lack of capacity, skilled staff to operationalize the surveillance systems

Challenges for effective sectorspecific and integrated surveillance Lack of investments and no public private partnerships.
Turf protection

Technical challenges (e.g. AST breakpoints across sectors)

Inadequate lab and diagnostic infrastructure capacity

## Key Priority 4: Financing

Long term KPI:. At least 50% of all countries have funded and implemented national action plans on AMR (Baseline: 14% of all countries based on TrACCS 2019-20 data)

## Achievements



Key and specific asks for G7 and G20



Engagement
with major
financing
mechanisms on
opportunities to
support the
AMR response

What is the cost of inaction and action for AMR including return of investment

QPT commencedAMR economicswork across sectors

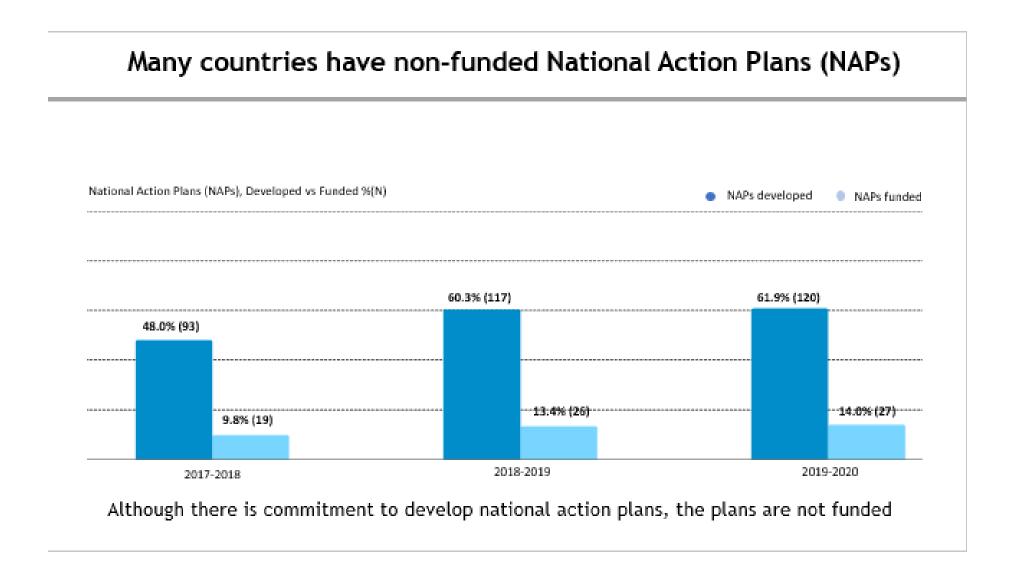
Tool box to countries to develop their national investment cases

In time for the UNGA 2024 outcome negotiations

## Key Priority 4: Financing

Long term KPI:. At least 50% of all countries have funded and implemented national action plans on AMR (Baseline: 14% of all countries based on TrACCS 2019-20 data)

## Challenges



Only 10-20% countries with NAPs made provision for funding



Funding is recognized as the greatest challenge by a survey among implementers of NAPs from countries

## Key Priority 5: Research & Development

Long term KPI: Number of countries with government commitment to specific push and/or pull incentives for development of new antimicrobials, vaccines, diagnostics, waste management tools, and/or safe and effective alternatives to antimicrobials.

### Achievements

### **Push mechanisms**

Basic research and preclinical











**Registration & Market** 

**Subscription model** 

Market-entry reward and monetary prizes

Ongoing revenue incentives

**Exclusivity extension** 

Accelerated approval and priority review voucher

Antibiotic resistance

+ Add to myFT

## UK launches world-first 'subscription' model for antibiotic supply

Fixed fee aims to incentivise pharma groups to develop new drugs and curb overprescription

Under the deal being struck by the NHS with Pfizer of the and Shionogi US of Japan, the drug companies will be paid a fixed fee of £10mn a year.



The pilot study shows that the reimbursement model is appropriate and effective to ensure the availability of certain antibiotics. Through it, Sweden gained access to several new medicines and also earlier than other comparable European countries.

## Key Priority 5: Research & Development

Long term KPI: Number of countries with government commitment to specific push and/or pull incentives for development of new antimicrobials, vaccines, diagnostics, waste management tools, and/or safe and effective alternatives to antimicrobials.

#### A multitude of pull incentives

There are also some other mechanism at national level under discussion such as in Japan



2012 GAIN ACT: Market exclusivity
2018 REVAMP Act – TEV not implem.
Leg. proposal Reimbursement model
PASTEUR: Subscription model



Reimbursement model



**TEV** – not implemented yet



2019 Pilot: subscription model and reimbursement model



Pilot: market entry rewards and reimbursement model



Reimbursement model

# R&D investments in the non-human health sector are very weak

## Challenges

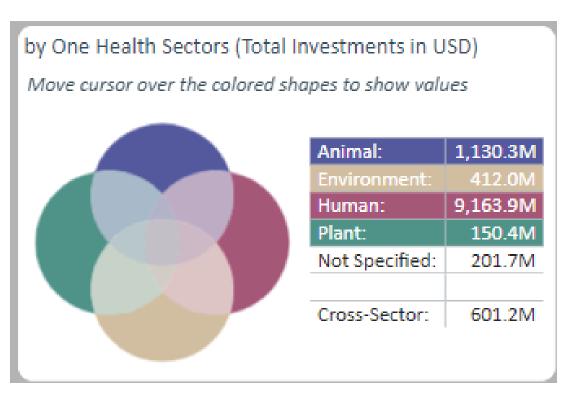
THE POST'S VIEW

Opinion | Congress should not wait around for the end of the antibiotic era



By the Editorial Board

A call for Congress to explore two approaches for new antibiotic development: The Pasteur Act tabled since 2020 and the creation of a new non-profit entity.



### Key Priority 6: Environment

Long term KPI: Environmental AMR containment efforts are included in national action plans on AMR in all countries.

#### World leaders and experts call for action to protect the environment from antimicrobial pollution

2 March 2022 | Departmental news | Geneva, Nairobi, Paris, Rome | Reading time: 9 min (2352 words)

The Global Leaders Group on Antimicrobial Resistance today called on all countries to reduce the amount of antimicrobial waste entering the environment. This includes researching and implementing measures to safely dispose of antimicrobial waste from food, human health and animal health systems, and manufacturing facilities

The call comes ahead of the UN Environment Assembly which takes place in Nairobi and online from 28 February to 2 March 2022 where countries will discuss the world's most pressing environmental challenges.

The Global Leaders Group on Antimicrobial Resistance includes heads of state, government ministers, and leaders from private sector and civil society. The group was established in November 2020 to accelerate global political momentum. leadership and action on antimicrobial resistance (AMR) and is co-chaired by Their Excellencies Mia Amor Mottley, Prime Minister of Barbados, and Sheikh Hasina, Prime Minister of Bangladesh.

#### Antimicrobial drug waste is polluting the environment

The Global Leaders Group's call to action calls for all countries to improve measures for the management and disposal of antimicrobial-containing waste and runoff from manufacturing sites, farms, hospitals and other sources

Antimicrobials given to humans, animals and plants are entering the environment and water sources (including drinking water sources) via wastewater, waste, run-off and sewage and through this spreading drug-resistant organisms and antimicrobial resistance.

This could fuel a rise in the emergence and spread of 'superbugs' that are resistant to several types of antimicrobial drugs [1]. It could also harm organisms in the environment.

Reducing the amount of antimicrobial pollution entering the environment is crucial to conserving the effectiveness of antimicrobial medicines

#### ANTIMICROBIAL RESISTANCE AND THE CLIMATE CRISIS



GLOBAL LEADERS GROUP ON ANTIMICROBIAL RESISTANCE

#### KEY MESSAGES

- The climate crisis and antimicrobial resistance the ability of microbes to resist the drugs designed to inhibit or kill them are two of the greatest and most complex threats currently facing the world. Both have been exacerbated by, and can be
- food, plant and environment eco-systems in numerous
- suggests that changes occurring in the natural sent due to the climate crisis are increasing the spread ous disease, including drug-resistant infections.
- antimicrobial resistance. The increasingly severe impacts of the climate crisis, such as more frequent and severe extreme weather events, will likely result in an increased use of obial drugs in humans, animals and plants.
- As these two crises continue to grow, the impacts on economies, lives, and livelihoods are expected to be significant and devastating, particularly for low-and middle income countries and small Island developing states.
- More financing, political advocacy and coordinated global the converging threats of antimicrobial resistance and the
- The links between antimicrobial resistance and the climate risis have been neglected and require significantly more Attention, including in national action plans on antimicrob resistance. There is currently no global initiative focused

1. The climate crisis' is already affecting patterns of infectious disease and worsening existing health challennes, which may lead to an increase in the use of antimicrobial drugs and

Many diseases are climate-sensitive and changes in environmental conditions and temperatures may lead to an increase in the spread of many bacterial, viral, parasitic, fungal, and vector-borne diseases in humans, animals and plants. Increased prevalence of disease could result in an increase in the improper use of antimicrobial drugs, example, the climate crisis is a key driver of changes in read and distribution of h which can cause severe illness and death in humans and animals) in livestock, with large-scale outbreaks of elminths becoming increasingly common.2 The climate crisis is also affecting human and animal habitats and ranges, which may increase the risk of human exposure to some vector-borne diseases. In Europe, for example sand files (which can transmit the disease leishmaniasis are at present mainly found in the Mediterranean region but with the climate crisis sand fly species are expected to expand their range into central and northern Europe

In 2019, nearly half of the world's population was at risk of malaria.5 Climatic changes, such as more extreme weather events which bring increased rainfall, temperature and humidity may also increase the incidence of malaria in areas where it is already present and lead to it spreading into new areas." As drug resistance for some vectorborne diseases is increasing, climate crisis-associated diseases such as malaria may become harder to contain and treat because the antimicrobial medicines relied on for treatment are becoming less effective. Malaria parasites have already demonstrated resistance to

- The term 'climate crisis' refers to global warming and climate change. Climate change refers to changes that after the global atmosphere composition a indirectly attributed to furnan activity (swFCCC (1992), Available page). The effects of this include increases is global temperatures and is the frequency accesses existence event (IPCC (1993), Available page).

  From N et al. (2015). Climate-change and fixes of authorization in North America: Predictions from Ecological North Photology of Vector and Reservate Registros (Popular Calaboration Available page).

  Roch, L et al. (2017). "Noteling the climatic authority of Neithernanias in North America: Predictions from Ecological North Photology of Vector and Reservate Registros (North America: Predictions from Ecological North Photology of Vector and Reservate Registros (North America: Predictions from Ecological North Photology of Vector and Reservate Registros (North America: Predictions from Ecological North Photology of Vector and Reservate Registros (North America: Production Photology (North Photology North Photology North Photology North Photology North Photology North Photology (North Photology North Photology North Photology North Photology North Photology North Photology (North Photology North P

## Achievements



#### **Bracing for Superbugs:**

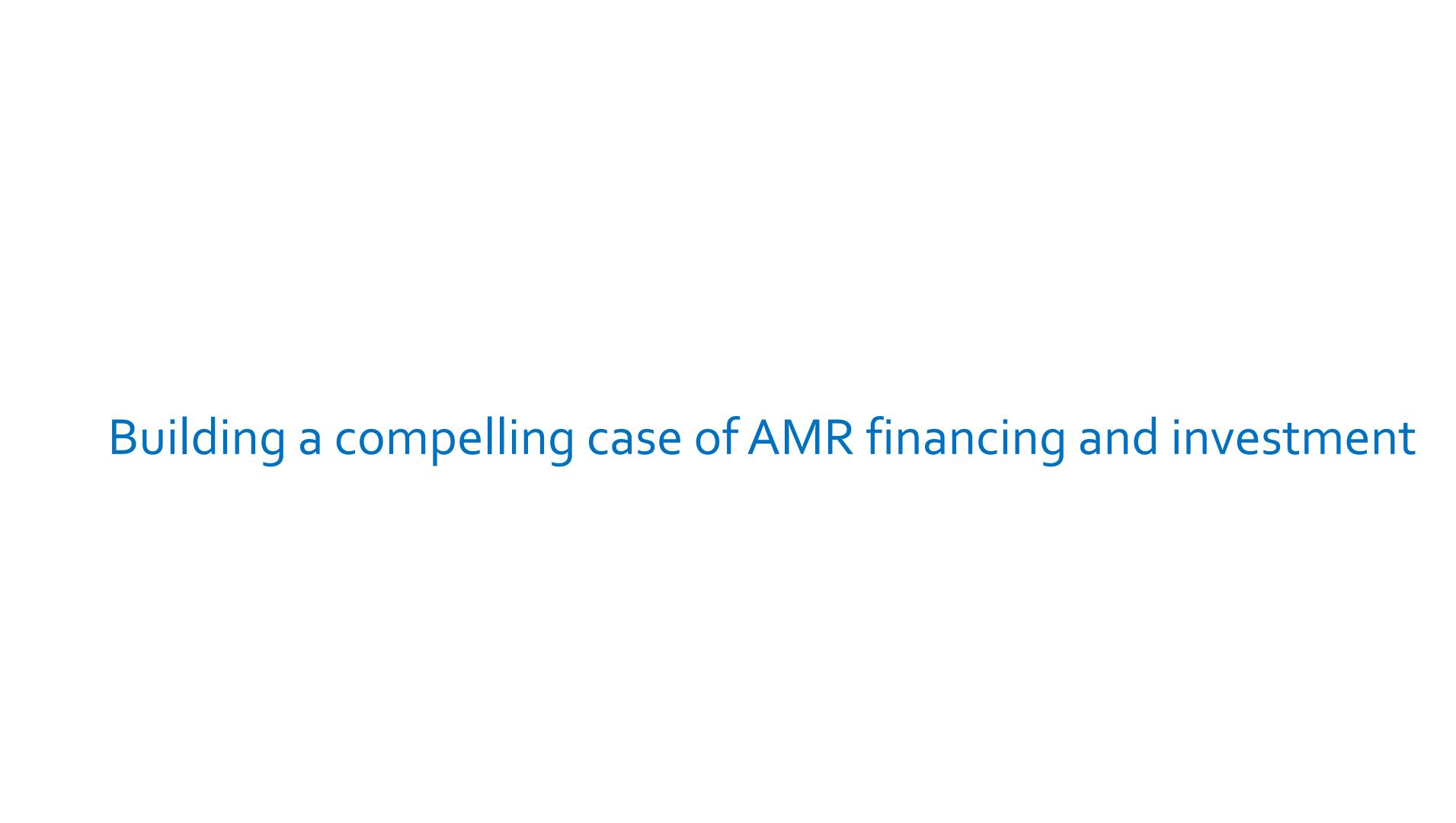
Strengthening environmental action in the One Health response to antimicrobial resistance

## Key Priority 6: Environment

Long term KPI: Environmental AMR containment efforts are included in national action plans on AMR in all countries.

## Challenges

- Global Action Plan of 2015 is still active and used as template for NAPs
- Lack of coordinated, robust, prioritized and financed research agenda
- Mainstreaming AMR into environmental-related aspects and vice versa.
- Limited understanding of the actions to be further implemented.



## Development funding is critical to address global health challenges

#### Examples of development funding









- Established in 2003 by President Gorge Bush
- Invested nearly 100B for HIV/AIDS treatment, prevention and research
- Saved 21 million lives and works in 50 countries

- G8 committed for ATM in 2000
- Kofi Anan championed it
- Established in 2002
- Disbursed 50B USD to 155 countries and saved 44M lives
- Now mobilizes 4B USD every year (92% from governments)

#### Examples of development funding



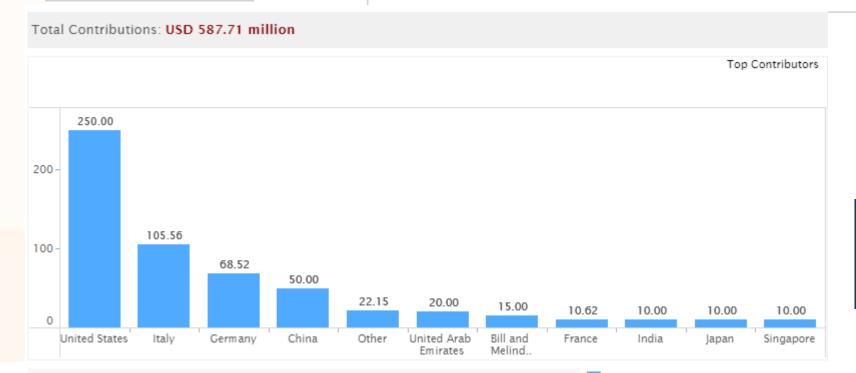


Global < Environment Facility



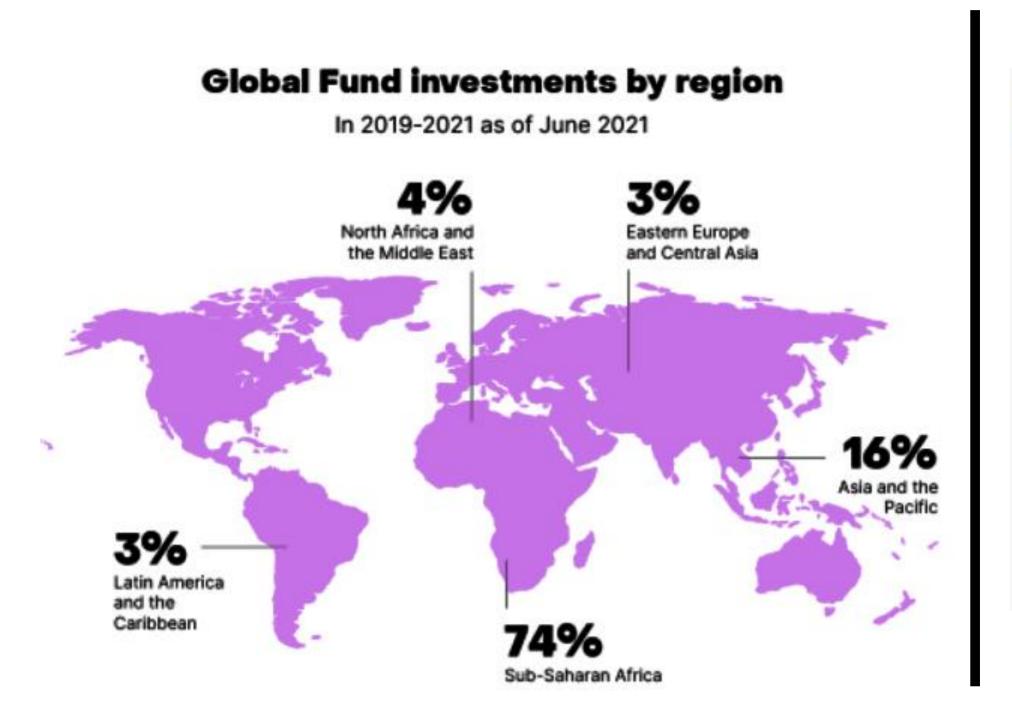
- Financing facility to catalyse domestic government resources, IDA and IBRD funds
- Focus on reproductive, maternal, newborn, child, and adolescent health
- Established in 2015 and support 36 countries
- Serves as a financial mechanism for developing countries to implement several environmental conventions.
- Established in 1992 and has 184 member countries

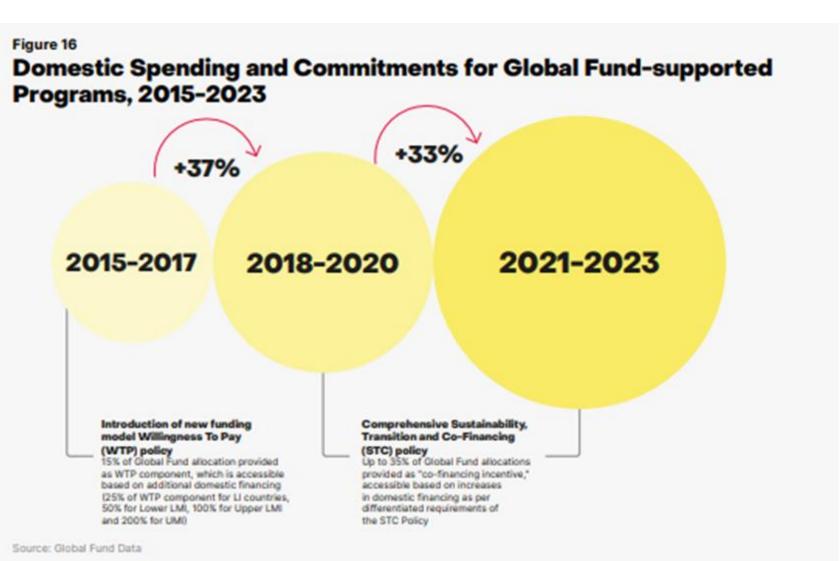






## Development funding enhances domestic spending by countries

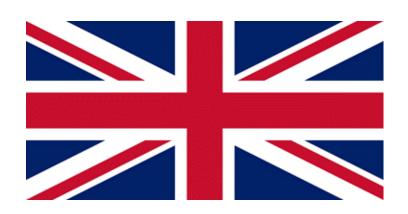




## The Fleming Fund – the only AMR dedicated development fund

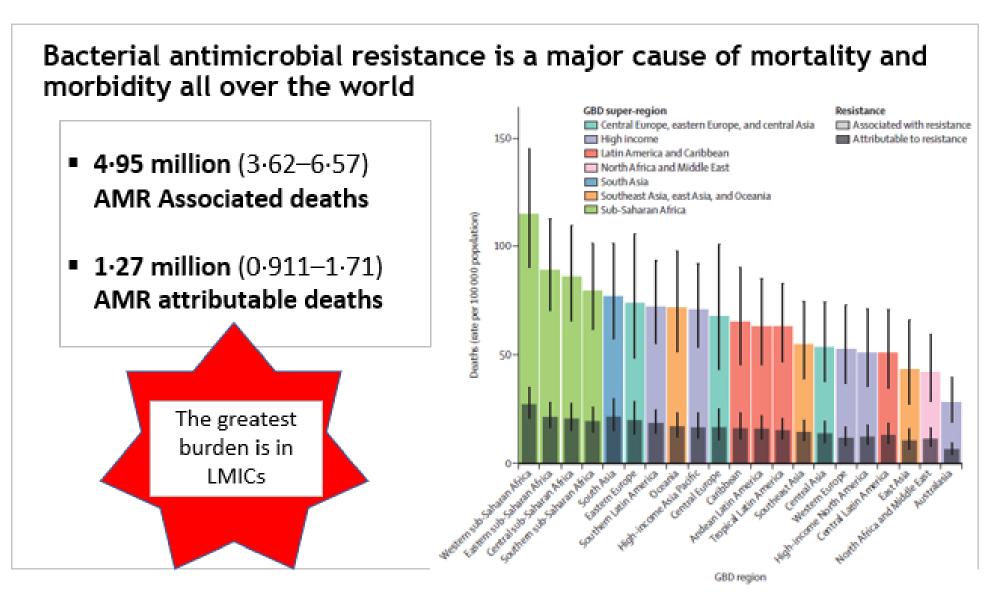


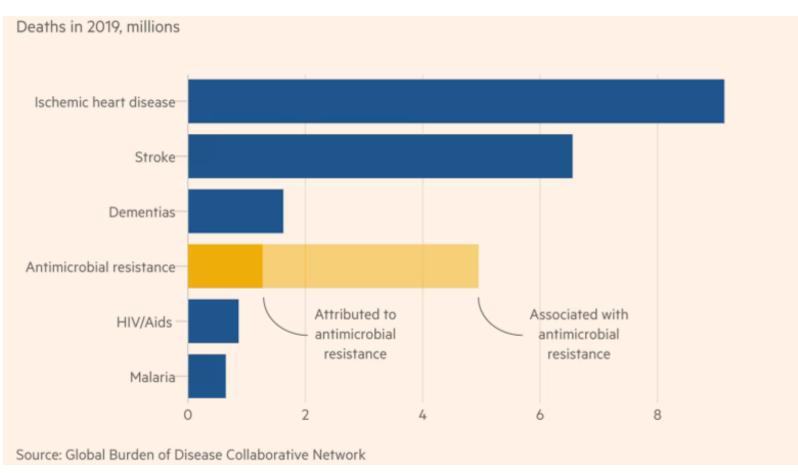
- The Fleming Fund is £265 million UK aid programme supporting up to 25 countries across Africa and Asia.
- The Fleming Fund drove LMICs to collect and share globally high-quality surveillance data on AMR





## There are good reasons for a development funding for AMR





## Building the case for financing the AMR response

**Goal:** Determine the cost and benefits of AMR response across different sectors to inform global, regional and country prioritization and resources mobilization

### **Expected Outcomes**

An Estimate of AMR economic impact across sectors (cost of inaction)

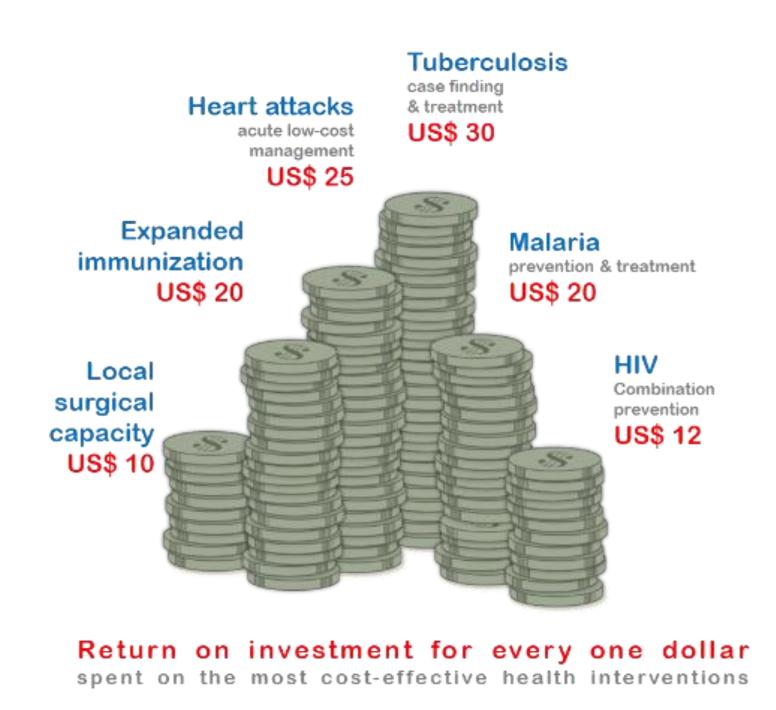
A package of AMR priority interventions across sectors

An estimate of the costs
(cost of action) and
return on investment of
AMR actions across
sectors

A toolbox for developing
a Country investment
case to support
multisectoral NAP
implementation

### Return of investment for AMR interventions to build compelling case is in the making

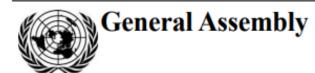




## Opportunities

# All roads to UNGA 2024 HLM on AMR for specific commitments including financing mechanism for AMR

United Nations A/RES/76/257



Distr.: General 31 March 2022

Seventy-sixth session Agenda item 129 Global health and foreign policy

Resolution adopted by the General Assembly on 29 March 2022

[without reference to a Main Committee (A/76/L.43 and A/76/L.43/Add.1)]

76/257. Elevating pandemic prevention, preparedness and response to the highest level of political leadership

The General Assembly,

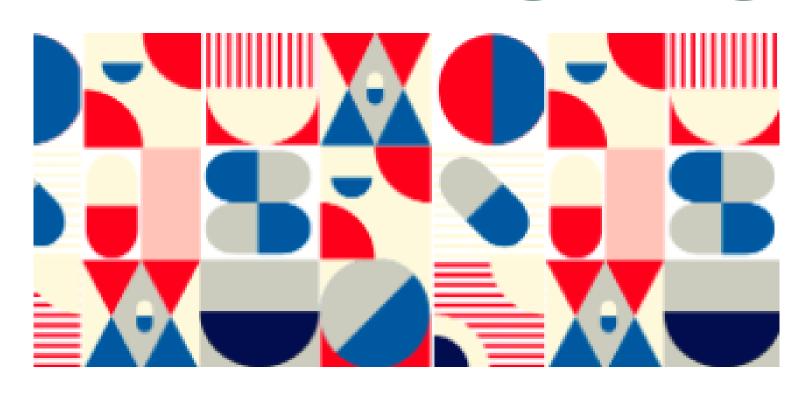
Recalling its resolutions 63/33 of 26 November 2008, 64/108 of 10 December 2009, 65/95 of 9 December 2010, 66/115 of 12 December 2011, 67/81 of 12 December 2012, 68/98 of 11 December 2013, 69/132 of 11 December 2014, 70/183 of 17 December 2015, 71/159 of 15 December 2016, 72/139 of 12 December 2017, 73/132 of 13 December 2018, 74/20 of 11 December 2019 and 75/130 of 14 December 2020

17. Recognizes the threat posed by antimicrobial resistance, inter alia, to pandemic prevention, preparedness and response, welcomes in this regard the High -level Interactive Dialogue on Antimicrobial Resistance, held in 2021, decides to hold a high-level meeting in 2024 on antimicrobial resistance, and requests the President of the General Assembly to appoint two co-facilitators to present options and modalities for the conduct of such a meeting, including potential deliverables, in collaboration with World the **Agriculture** Organization, the and Food Organization of the United Nations, the World Organization for Animal Health and the United Nations Environment Programme, and with the support of the One Health Global Leaders Group on Antimicrobial Resistance;

Implications for the upcoming GLG Report (cost of inaction and specific commitments)

## The Partnership Platform for AMR is launched and is being constituted

AMR Multi-Stakeholder Partnership Platform - Creating a movement for change through engaging multiple actors and voices



18/08/2021

The Tripartite organizations (FAO, OIE, WHO) invite partners to join public discussion on the establishment of the AMR Multi-Stakeholder Partnership Platform

#### Why a new Platform?

Antimicrobials (including antibiotics, antivirals, antifungals and antiparasitics) play a crucial role in the health of humans,

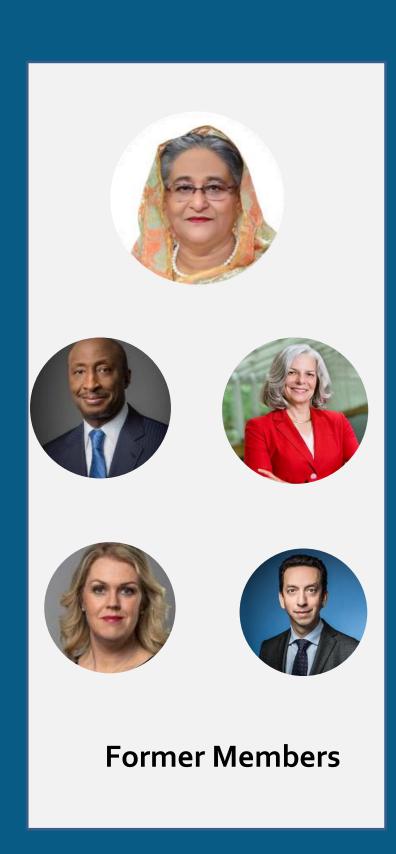
animals, plants and the environment, as well as in food safety and food security. However, antimicrobial resistance (AMR) is an ever-increasing global threat, driven by overuse and misuse of antimicrobials in the human, animal, and plant sectors. Drug-resistant diseases result in an estimated 700,000 human deaths globally per year and could cause 10 million deaths annually by 2050. If no action is taken, AMR could force up to 24 million people into extreme poverty by 2030<sup>[1]</sup>. Good hygiene, biosecurity measures, and strong environmental controls are effective counter-mechanisms that must be implemented at scale across all sectors.

Goal: Bring together civil society, government and private sector for a shared vision

### Conclusions

- The GLG action plan and its KPIs as well as the focused approach facilitated major achievements;
- Lack of funding and a financing instrument for implementation of NAPs is a major bottleneck for progress;
- The UNGA HLM 2024 opportunity should be used for transformational commitments and GLG should play a catalytic role.

## Thank you for all who supported the work of the GLG



- Chair and Vice-Chair
- GLG Members
- Principals of the Quadripartite
- GLG Technical Team and Advisors
- Senior management of the Quadripartite
- GLG Secretariat Staff
- QJS Liaison officers from Quadripartite
- Quadripartite Technical Core Team on Surveillance and Economics

## **Session 1: Discussion points**

- The updated rolling action plan for finalisation
- Suggestions on how to consistently ensure the inclusion of AMR in the Pandemic Accord as member states engage in negotiations
- Feedback on the proposal of the Secretariat to revise the timing of the GLG report so that it will include the cost of inaction as well as specific commitments for consideration by member states in time for the negotiations on political declaration