

FINANCING TO ADDRESS ANTIMICROBIAL RESISTANCE



Information note of the Global Leaders Group on Antimicrobial Resistance.
July 2021.



KEY MESSAGES

- 1** There is inadequate financial support currently available for the sustainable implementation of national action plans on antimicrobial resistance, particularly in low- and middle-income countries (LMICs). Increased investment is urgently needed to support countries to deliver on national action plans.
- 2** There is a strong economic case for investing in containment of antimicrobial resistance but robust estimates of the costs and benefits of implementing national action plans on antimicrobial resistance are needed to galvanize investment. The response to antimicrobial resistance also needs to be integrated into national pandemic preparedness and response plans.
- 3** Ongoing investment by governments, global/regional/national/bilateral/multilateral financing and development institutions and banks and private investors to build and bolster human health, animal health, food, plant and environmental eco-systems is crucial to tackling antimicrobial resistance and achieving sustainable development, with particular emphasis on infection prevention and control.
- 4** More financial support and incentives are needed for increased, effective and affordable innovations across all sectors and stakeholders (including the private sector) to secure a sustainable pipeline for new antimicrobials (particularly antibiotics), vaccines, diagnostics, waste management tools and safe and effective alternatives to antimicrobials, and to ensure equitable access to them.
- 5** The 2021 Call to Action on Antimicrobial Resistance commits signatories to work towards sufficient and sustainable funding for antimicrobial resistance-specific and antimicrobial resistance-sensitive actions across One Health, including as part of Covid-19 recovery plans and achieving universal health coverage, the Tripartite organizations and UNEP, and other relevant UN and multilateral organizations, including the Multi-Partner Trust Fund (MPTF) on AMR, as well as integration of antimicrobial resistance into the UN Financing for Development agenda.

1. The World Bank has made strikingly clear the economic case for investing in containment of antimicrobial resistance.

Investing in containment of antimicrobial resistance is considered to be a high-yield development investment with estimated returns far outweighing the costs. Without investment, the economic impacts of antimicrobial resistance are expected to lead to a rise in extreme poverty and a significant annual reduction in global GDP. In a high-impact antimicrobial resistance scenario, World Bank estimates suggest that the world stands to lose 3.8 percent of its annual GDP by 2050.¹

2. Robust estimates of the costs of implementing national action plans on antimicrobial resistance are needed to galvanize investment.

Existing estimates of the costs of antimicrobial resistance containment measures and national action plan implementation have been provided by the O'Neill Review on Antimicrobial Resistance in 2016 and the World Bank in 2017. These estimates range from US \$4-9 billion annually,^{2,3} but experts have suggested that these figures may considerably underestimate the true cost of responding to antimicrobial resistance in a One Health context. By comparison, in 2020 there was an estimated need of US \$26 billion and US \$15 billion to respond to HIV and TB respectively, of which almost US \$20 billion (in 2019 for HIV) and nearly US \$7 billion (in 2020 for TB) was available.^{4,5} More robust cost and benefit estimates are needed to galvanize investment in the response to antimicrobial resistance.

3. Antimicrobial resistance is currently not a financing priority for many LMICs.

For many countries, the benefits of containing antimicrobial resistance may not be perceived as immediate or tangible compared to other development priorities. COVID-19 fiscal constraints may also lead to a reduction in the financing of antimicrobial resistance programmes across sectors in coming years.⁶ Incorporating antimicrobial resistance

1 World Bank (2017). 'Drug-Resistant Infections: A Threat to Our Economic Future.' Available [here](#). (Pgs. xx, xviii and 22)

2 World Bank (2017). 'Drug-Resistant Infections: A Threat to Our Economic Future.' Available [here](#). (Pg. xx)

3 The Review on Antimicrobial Resistance (2016). 'Tackling drug-resistant infection globally: Final report and recommendations'. Available [here](#). (Pg. 7)

4 UNAIDS (2021). 'End Inequalities. End AIDS. Global AIDS Strategy 2021-2026'. Available [here](#). (Pg. 88)

5 WHO (2020). 'Global Tuberculosis Report 2020'. Available [here](#). (Pg. 129)

6 Wellcome (2020). 'The Global Response to AMR: Momentum, success, and critical gaps'. Available [here](#). (Pgs. 15 and 52)

containment into development programmes and pandemic preparedness and response plans and allocating catalytic funding to support cross-sectoral collaboration and incorporate antimicrobial resistance programmes into national budgets and development projects can help address this.

4. Additional financial support is urgently needed to build and strengthen national human health, animal health, food, plant and environmental eco-systems.

Robust human health, animal health, food, plant and environmental eco-systems are key to the mitigation of antimicrobial resistance. A scale-up of investment in infection prevention and control interventions across all sectors is urgently needed at global, regional and national levels and will benefit societies, systems and economies. Priority areas of investment include water, sanitation and hygiene, vaccination programmes, medicines management tools and waste management tools. Other priority areas of investment include surveillance and monitoring of antimicrobial use and resistance, behaviour change interventions, and support for prioritizing resource allocation.

5. Significantly more financial support is needed to enable countries to implement sustainable national action plans on antimicrobial resistance.

In 2020 only one in five countries responding to the Tripartite AMR Country Self-assessment Survey reported having funding sources identified for national action plans on antimicrobial resistance.⁷ The Multi-Partner Trust Fund (MPTF) on AMR is a joint effort by the Tripartite that can support countries to implement sustainable national action plans on antimicrobial resistance, but as of June 2021 only US \$14 million has been committed to the fund from the governments of the Netherlands, UK and Sweden.⁸ More donor country support for the MPTF is needed so that the Tripartite is able support countries in implementing national action plans on antimicrobial resistance. As recommended by the Inter-agency Coordination Group on Antimicrobial Resistance in 2019, governments; global, regional, national, bilateral and multilateral financing and development institutions and banks; and private investors also need to systematically assess risks and impacts related to antimicrobial resistance (i.e. apply an antimicrobial resistance and One Health “lens”) when making investments.

6. There are inconsistencies in the available data on the financing of antimicrobial resistance R&D that make it challenging to get an overall picture of the state of investments.

Currently there is no single source reporting on total antimicrobial resistance R&D funding across public and private sectors and there are inconsistencies between existing data sets. Some sources state that the private sector is the dominant funder of antimicrobial resistance-relevant R&D, whilst others show that public sources remain the biggest investor. According to the AMR

Industry Alliance, in 2018, 56 Alliance members alone invested over US \$1.6 billion in antimicrobial resistance-relevant product development.⁹ However, data from the Global AMR R&D hub (which reports information on R&D investments but does not report on solely private investment) show that in 2020 there was investment of US \$1.5 billion in antimicrobial resistance R&D, and in 2018 investment of US \$1.8 billion from private-non-profit, government, public-private partnerships and other public sources.^{10,11} There is however wide acknowledgement that the innovation required to address antimicrobial resistance cannot be sustained by public and foundation financing alone, and that the overall level of investment in antimicrobial resistance R&D is insufficient to deliver the innovation needed.

7. An investment injection is needed for antimicrobial resistance-relevant R&D across the human health, animal health, food, plant and environmental sectors.

According to the Global AMR R&D hub as of June 2021, US \$143 million had been invested in R&D on antimicrobial resistance and animal health for 2021. By comparison, R&D investment on antimicrobial resistance and human health was more than US \$750 million.¹² Levels of R&D investment are much lower for antimicrobial resistance related to plants and the environment¹³ and initial work is needed to investigate priority areas for additional investment in these areas to reduce this financing gap. Additionally, although human health R&D has more overall funding than other sectors, further investment is still needed, especially for late-stage development.¹⁴

8. The current antimicrobial marketplace disincentivizes innovation and marketplace reform is urgently needed.

Private sector investment in the R&D pipeline for new antimicrobials (particularly antibiotics), is decreasing and financial and other market incentives are urgently needed to attract sustainable, long-term research investments. Three quarters of the companies surveyed for the AMR Industry Alliance 2020 report stated that they are likely to increase investments in antimicrobial resistance if the commercial environment improves and the economic challenges of the antimicrobial market are addressed through the implementation of an incentives package.¹⁵ The need to address the market challenges of antimicrobial innovation is widely acknowledged, including by G7 and G20 countries.^{16,17}



7 27 countries out of 136 countries (Global Database for the Tripartite Antimicrobial Resistance Country Self-assessment Survey. [online]. Available [here](#). [Accessed 15 June 2021].)

8 UNDP. 'Antimicrobial Resistance Multi-Partner Trust Fund'. [website]. available [here](#). (accessed 8 June 2021)

9 SustainAbility (2020). 'AMR Industry Alliance 2020 Progress Report'. Available [here](#). (Pg. 13)

10 Global AMR R&D Hub. [website]. Available [here](#). (As of 8 June 2021)

11 Company-led early stage discovery research in particular is highly dependent upon public and philanthropic sources of funding. (See: Access to Medicine Foundation (2021). 'Biotech is saving the world from superbugs. Can they also save themselves?'. Available [here](#).)

12 Global AMR R&D Hub. [website]. Available [here](#). (As of 8 June 2021)

13 According to the Global AMR R&D hub, as of 8 June 2021 US \$14.7 million has been invested in R&D focused on antimicrobial resistance and plants and US \$49.8 million in R&D focused on antimicrobial resistance and the environment for 2021.

14 Wellcome (2020). 'The Global Response to AMR: Momentum, success, and critical gaps'. Available [here](#). (Pgs. v and 7)

15 SustainAbility (2020). 'AMR Industry Alliance 2020 Progress Report'. Available [here](#). (Pgs. 7, 13 and 46)

16 G7 Health Ministers' Declaration, Oxford 4 June 2021. Available [here](#).

17 G20 Health Ministers' Declaration, November 19 2020. Available [here](#).