



Information Note

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by

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Invest now: strategic financing for pandemic preparedness and AMR through One Health approach

The world is persistently confronted with risks to global health and economic stability: emerging infectious diseases and the rapidly rising crisis of antimicrobial resistance (AMR). Such crises demand a bold shift toward integrated, forward-looking strategies. The One Health approach, linking human, animal, and environmental health is not just conceptually sound but operationally essential to ensure every country can quickly respond and contain emerging risks, while also investing more in preventing at source so that small outbreaks are not spreading and amplified to larger public health emergencies. Each country's ability to act is everyone's concern and requires sustainable investment, starting with domestic commitments and tapping into international sources through grant (including the Pandemic Fund and targeted Multi Partner Trust Funds such as the AMR MPTF, among others) and concessional loan channels through Multilateral Development Banks, especially for LMICs who cannot bear the cost of Global Health security alone.

The G20 Joint Finance-Health Task Force (JFHTF) has underlined that pandemic preparedness and AMR are top-tier global health priorities, and this requires catalytic strategic, coordinated, and sustained financing to safeguard future generations and global economic resilience.

1. Cost of complacency

The COVID-19 pandemic served as a stark and costly global wake-up call. The direct economic caused an estimated \$7.4 trillion in 2020 alone.¹ The world is reeling from uneven economic recovery across economies. The pandemic has exposed the fragile interdependence between health and economic systems.



Between 2020 and 2021, COVID pandemic caused 14.83 million excess deaths globally, 2.74 times more than the 5.42 million reported deaths due to COVID-19, affecting most to people living in vulnerable situation.² Countries³ with poor performance in managing pandemic had higher excess mortality.⁴

Both economic and health impacts disproportionately affected the emerging economies.⁵ who remain vulnerable to future risks, with global data suggesting a potential pandemic emerges every 5-6 years.

Simultaneously, the silent pandemic of AMR continues to accelerate. A recent study forecasts a dramatic increase in deaths directly attributable to bacterial AMR, a 67.5% increase in annual deaths, rising from 1.14 million in 2021 to an estimated 1.91 million in 2050. When including deaths associated with AMR, the death toll is expected to increase by 74.5%, from 4.71 to 8.22 million deaths during the same period.⁶ Projections show over 39 million deaths directly attributable to bacterial antimicrobial resistance over 2025-2050, underscoring that urgent action is required.

These interconnected crises expose the fundamental weakness of siloed approaches to local and global health security. Given the rising use of antimicrobials in meat production, combined with growing encroachment of livestock into wildlife areas and the pressure of climate change, disease emergence is becoming ever more complex to contain. A One Health approach promoting multi-sectoral collaboration and governance across human, animal, environmental health is not a theoretical proposition but essential for effective AMR and pandemic risk mitigation where coordination, communication and collaboration between sectors and multiple actors is required at all levels.

Global preparedness for pandemics and other disease outbreaks remains inadequate, and progress since COVID-19 remains fragile. The Global Preparedness Monitoring Board (GPMB) calls for *inter alia* national monitoring, increase in global and national financing through fostering political commitment and increased investment.⁷ WHO recognised AMR and pandemic-prone pathogens such as Ebola and influenza pandemic, Dengue as four out of ten global health risks hampering human health security.⁸



G20 Joint Finance-Health Task Force (JFHTF) in 2025 recognizes AMR as a critical global public health risk, linking One Health to pandemic financing and response readiness

The case remains clear, there is urgent need to further strengthen Pandemic Prevention, Preparedness and Response (PPPR) capacity and AMR responses through a One Health approach and strategic investment.

2. Resources needed to address PPPR and AMR

The case for investing in PPPR is clear as the frequency and impact of pandemic-prone pathogens are increasing. Modest investments in PPPR capacities can prevent and contain disease outbreaks, thereby drastically reducing the cost of response and the broader economic and social impacts of large-scale outbreaks or pandemic.

A Commission estimates annual \$4.5 billion would significantly make the world much safer. This figure includes expenditures for strengthening national public health systems, funding research and development and financing global coordination and contingency efforts. This equates to just 65 cents per person which could better protect everyone in the world from such risks. The Independent Panel and others estimated annual \$10–15 billion⁹ in additional international financing is required to address gaps in basic national preparedness in LMICs and to strengthen regional and global functions.

Both estimates (\$4.5 and 10-15 billion) are much lower than the \$7.4 trillion Economic loss due to Covid pandemic in 2020 alone---a strong argument for upstream investment in improved PPPR capacities.

PPPR capacity gaps are prevalent in countries with the least fiscal space. Three interconnected challenges include:

- Weak surveillance and early detection infrastructure: incomplete case based and event-based reporting from community to national level, lack of One Health surveillance of potential zoonosis; >70% of pathogens known to infect human are zoonotic and viral in nature.¹⁰ AMR surveillance is also lacking.



- Limited resources including personnel, digital infrastructure and funding, poor health protection to health workers such as personal protective equipment (PPE).
- Lack of sustainable financing and emergency logistics, with heavy reliance on fragmented external donor resources. This has for example resulted in inadequate stockpiles of critical supplies such as PPE, medicines, diagnostics

These capacities are clearly defined in the International Health Regulations (IHR), and here it is important to underline that domestic financing is the foundation underpinning national capabilities. Calls for increased domestic spending are not new, but past commitments have not translated into the requisite financing. Faced with a new reality and financing landscape, countries and regions must now move towards greater self-reliance, however for LMICs especially those already heavily indebted and with expanding development priorities, international sources have to be sustained for the global good.

The current funding landscape for AMR mirrors these challenges. In the TrACSS 2023 report, only 20 (11.3%) out of 177 responding countries reported allocation of funding to support AMR National Action Plan implementation.¹¹ Country investment is not commensurate with the national and global health risk from AMR. To address this, UN General Assembly High Level Meeting on AMR committed to advocate that at least 60% of countries having funded National Action Plan by 2030 and mobilize US\$100 million catalytic funding to support implementing national action plans.¹² Strengthening people-centred health systems will strengthen the ability to respond to AMR, better prepare for pandemic.¹³

3. Strategic Investments for a Resilient Future

To address these challenges, strategic, high-impact, and cost-effective interventions have to be prioritized that are both scalable and sustainable commencing at country level. These investments must be framed within a robust One Health governance and coordination mechanism to ensure multi-sectoral engagement and be based on a strong return on investment analysis and theory of change. Amidst a global resource constraint setting, priority strategic and high-impact investments on cost-effective, scalable, and sustainable intervention should balance health system strengthening with targeted interventions for surveillance, early detection,



and the ability to mount an effective response that mobilizes community engagement. Key interventions across both public and private sectors include:

- Strengthening integrated One Health disease surveillance infrastructure which support prevention at source and address spillover spread.¹⁴
- Strengthening national and regional laboratory capacity and networks of primary care and referral national labs for detection, alert and response as well as introducing affordable point of care tests. Laboratories are an integral part of surveillance infrastructure for human, animal, environment and plants health sectors.
- Health workforce training (public health officers, veterinarians, epidemiologists, lab technicians, environmental experts and scientists) and incentivising retention; with focus on e.g. antimicrobial stewardship, infection prevention and control, case management and emergency responses.
- Risk communication and community engagement using context-specific appropriate communication strategies and capacity to rebut mis- and dis-information and foster public trust and cooperation.
- Strengthening basic infrastructure and infection control, ensure adequate water, sanitation, and hygiene (WASH) in health facilities and communities, provide personal protective.
- equipment and hygiene supplies, enhancing biosecurity, vaccination, good production practice in agrifood systems.
- Better national action and investment planning – including emergency preparedness planning through development, updates and implementation of National Action Plan for Health Security, conducting simulation exercises and tabletop drills and standard operating procedure of coordination in time of public health emergencies. This includes prioritizing One Health and AMR National Action plans into bankable investment cases match-made with potential investment sources.
- To honour the commitment to UNGA high level meeting declaration on AMR, notably reduce AMR associated mortality by 10% by 2030 against the base line in 2019; countries need to invest on the following: strengthening well-resourced multi-sectoral action plan, effective and inclusive multi-sectoral, multi-stakeholder governance mechanism, ensure 70% of human antibiotic consumption belong to “Access” list while preserve use of the



Watch and Reserved List. There requires a \$100 million catalytic funding to support national action plans through AMR Multi-partner Trust Fund.

All these interventions can be supported through strong engagement with One Health partners, including the Quadripartite (FAO, UNEP, WHO and WOA) among others. All of which requires multi-sectoral governance and coordination. Interventions should be nationally owned and driven, prioritized according to country context, gaps and resource capacity and it is incumbent upon the G20, particularly the JFHTF, to transform high-level rhetoric statements into decisive and sustainable financial commitments in support. Strategic investment in PPPR and AMR through a One Health framework is not merely a public health imperative; it is the most prudent and cost-effective investment for a resilient and secure global future.

4. Informing Strategic Dialogue and Future Considerations

The urgency to invest in pandemic preparedness and antimicrobial resistance (AMR) through a One Health approach is clear. As countries and regions seek to strengthen their health security, strategic financing must be informed by practical realities and tailored to national contexts. Building on the technical priorities outlined in Section 3, this section highlights key strategic considerations that may inform future dialogue and planning, while not proposing binding commitments:

- Identify and address systemic barriers to operationalising One Health, including sectoral data-sharing limitations. For example, economic concerns in the animal health sector may hinder transparency, particularly regarding trade-sensitive information such as meat product safety.
- Leverage National Action Plans for Health Security (NAPHS) to prioritise solutions to address these barriers, ensuring that One Health strategies are embedded in national preparedness frameworks.
- Cost priority interventions using domestic financing mechanisms, ensuring alignment with national budget cycles and planning processes to enhance sustainability and ownership.



- Mobilise domestic and regional funding to support strategic, high-impact, and cost-effective interventions that are scalable, sustainable, and tailored to country-specific needs. This includes investments in surveillance, laboratory capacity, workforce development, and community engagement.
- Develop bankable investment cases for One Health and AMR strategies, matched with appropriate financing sources, including multilateral development banks and catalytic funds, to facilitate implementation and attract co-financing.
- Invest in early warning and surveillance systems that integrate human, animal, and environmental health data, enabling faster detection and containment of outbreaks and reducing long-term economic disruption.
- Strengthen regional laboratory networks and diagnostic capacity, including affordable point-of-care technologies, to ensure timely and equitable access to testing across sectors and geographies.
- Support health workforce development as a strategic investment, focusing on cross-sectoral training and retention to build a skilled and resilient workforce capable of responding to AMR and pandemic risks.
- Ensure foundational infrastructure for infection prevention, including WASH in health facilities and communities, and biosecurity in agrifood systems, as part of broader efforts to reduce disease transmission and protect frontline workers.



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