

Decoding the State of the World's Animal Health

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The World Organisation for Animal Health (WOAH) has released the inaugural edition of the *State of the World's Animal Health*. This key publication is on the analogy of the annual and biennial publications of the Food and Agriculture Organisation (FAO) which capture, in depth, the global resources and status of diverse subjects such as Food and Agriculture, Fisheries and Aquaculture, Food and Nutrition, Agriculture Commodities etc. These are classified as the flagship publications of the FAO that are rich in data and information and provide a global overview and perspective of critical issues, backed up with real life case studies. The WOAH has followed lead and taken a good initiative, even though a bit late, to capture and analyse the state of animal health in the world. The multiple animal diseases spread in our shared ecosystems have been extensively documented and an effort made to offer solutions, though they appear more didactic than tangible. However, the strong focus and advocacy on the power of vaccination in tackling the challenging threats of animal diseases and zoonoses deserves serious thought and appropriate interventions.

Infectious animal diseases pose an ongoing and continuing threat all across

the world like never before. There are multiple instances, in diverse parts of the world, of the spread of Avian Influenza beyond poultry. If this is not alarming enough, we are seeing the resurfacing of foot-and-mouth disease in Europe for the first time in decades. To further compound matters, new and emerging diseases continue to disrupt our environs in the fast changing world. To what could we attribute this disturbance? Climate change? Rapidly increasing global trade? Compromised bio-security? Whatever be the speculation, the fact is that the newly emerging and ever shifting pathogens, in fact by the day, are creating a mayhem. Today, diseases are spreading faster and hitting harder than ever before; therefore, we need eternal vigil and quick response, and this response has to be necessarily collaborative and institutional since the challenge is trans-boundary. No pathogen has ever been deterred by a political or a geographical border.

It would be a worthwhile and productive exercise to dissect and summarise the first edition of the State of World's Animal Health which is poised to be WOAH's flagship publication. To begin with, it acknowledges, strongly and outrightly, the criticality of One Health. "Animal health is inextricably linked to human health, the stability of ecosystems and the strength of economies. In a world facing increasingly complex global challenges – emerging infectious diseases, climate change, antimicrobial resistance and food insecurity – ensuring the health of animals is crucial", thus begins the foreword. It goes on to emphasise that "Animal diseases know no borders. Whether affecting livestock, wildlife or aquatic species, their impact can be devastating – threatening livelihoods, public health, food supply chains, international trade and biodiversity. Our ability to prevent, detect

and respond to these threats depends on robust surveillance, strong Veterinary Services, and the effective implementation of science-based policies." The publication attempts to reinforce the message that proactive investment in animal health is an investment in global health security "because animal health is our health. It's everyone's health."

The first and the strongest of the messages is that vaccines are among the most powerful and unmatched tools for preventing and controlling diseases. They minimise livestock losses, prevent the spread of zoonotic diseases and thus reduce the global need for antibiotics. In short, vaccines save lives. But alas! Not everyone can have unhindered access to them. Vaccination has been a game changer in the fight against and eradication of many debilitating diseases such as Rinderpest, FMD, PPR etc. Even though the WOAH vaccine banks have provided a lifeline for communities affected by animal disease outbreaks by offering high quality vaccines in compliance with WOAH International Standards at an affordable price, yet access to vaccines is grossly discriminatory around the world. There are ongoing challenges when it comes to research, production, distribution and uptake. Political uncertainty and lack of consistent funding add to this already complex picture. As highlighted by COVID-19, vaccination hesitancy is also a serious condition which can't be brushed aside; it must be addressed on multiple fronts, including societal awareness campaigns. Besides highlighting the critical importance of vaccines and calling for a multi-disciplinary One Health approach, the report does not offer a workable solution to the challenge of access, availability and affordability of vaccines.

Animal diseases are not only on the move, the pace of this movement is

olympian too; so, a matching swiftness is expected from us. Further, infectious animal diseases are migrating to previously unaffected areas, places that are often unprepared to deal with them. One of the underlying factors behind this trend is climate change. Rising temperatures and changing weather patterns are dramatically altering today's landscape, making it easier for pathogens and diseases to find new grounds in more favourable conditions. Most of them have zoonotic potential i.e., transit from animal to human; recognition of the critical interconnection between the two ecosystems should be the key to our policy and strategy to meet the situation. The arrival or re-emergence of diseases in new regions is a telling sign of an ever-changing world. It is a warning, too. Is our ability to respond keeping pace? Investing in stronger surveillance systems, quicker response capacities and cross-border collaboration to prevent frequent and unpredictable disease outbreaks should form one of the cores of policy.

Outbreaks of bird flu are more worrying than ever before. The world is grappling with a deadly wave of high pathogenic avian influenza (HPAI). Over the last 20 years, more than 633 million birds have been lost to the disease. However, birds are not the only species which has been affected. What is startling is that the virus has also been detected in mammals such as foxes, dolphins, bears

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and even domestic pets. According to this report, outbreaks in mammals more than doubled last year compared to 2023, jumping from 459 to 1,022. Whilst the risk



of human infection remains low, the more the mammalian species get affected, the higher the potential of it spilling over into humans.

Global antibiotic use in animals is dropping, so says the report. A very

the effectiveness of antimicrobials. The indirect, but serious, impacts of this phenomenon could be disquieting, ranging from higher food production costs on account of higher animal mortality, reduced productivity and compromised food security. The use of antimicrobials in animals has decreased by 5% between 2020 and 2022, and expanding livestock vaccination globally would further reduce the risk of antibiotic resistance. According to a 2024 report co-published by WOAH and the World Bank, if farmers worldwide reduce antibiotic use by 30% through improved hygiene, vaccination and biosecurity, the global GDP could gain up to US\$120 billion between 2025 and 2050. Innovative approaches such as encouraging probiotics and genetic improvement could contribute substantially. However, WOAH assesses that due to continued investment in research and the adoption of innovative technologies, vaccination is poised to become the most effective tool in the global fight against AMR.

If one were to summarise the report, the crux would be that investment in animal health means protection of everyone's health. So, it is important to strengthen the resilience of animal and public health systems. To reiterate, investment in animal health creates a resilient, sustainable and secure future for animals and humans alike.