



If no action is taken in addressing AMR, the global economic cost by 2050 will be US\$ 100 trillion, impacting low-middle countries the most, widening the inequity gap. (1)



Misuse of veterinarian medicine in animals leads to additional use of other medicines, accumulating in ground water, land, humans, and back into animals. However, as agricultural pathogens become more resistant, we will not be able to ensure food security for our exponentially growing population. Taxation of antibiotics can push farmers to seek alternatives to their current practices. (1, 2, 3)



By 2050, 300 million individuals will die of AMR. Today, it is estimated that more than 30,000 women giving birth and 200,000 newborns die each year because of severe infections that are resistant to available drugs. Moreover, AMR is a huge threat to cancer treatment as antibiotics may no longer be effective. In the EU alone annually, it is estimated that AMR costs €1.5 billion a year in health care costs and productivity losses. (1)



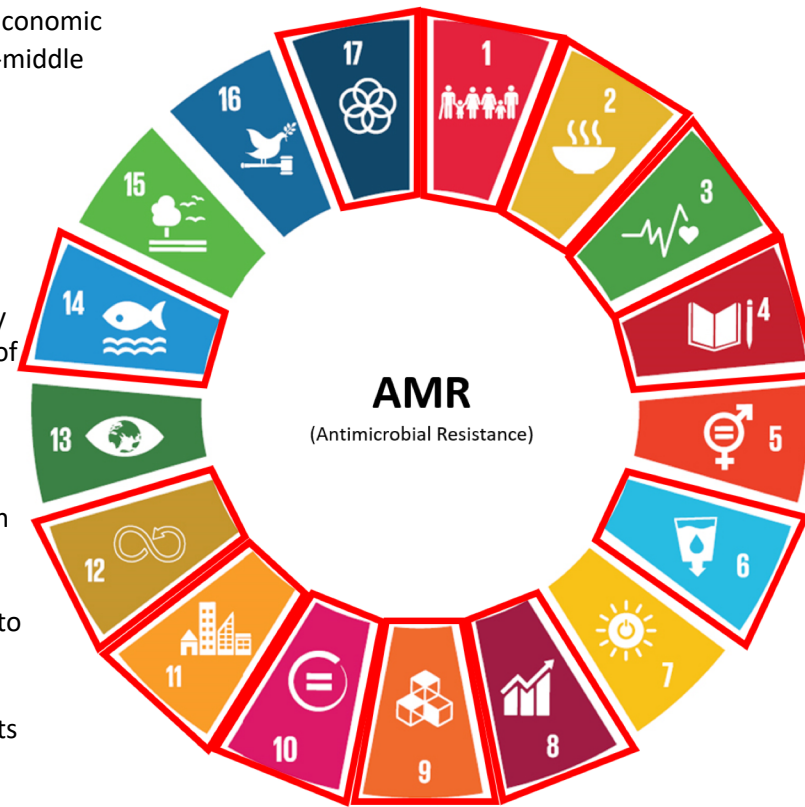
Unless AMR is introduced in all school curricula, particularly for health care professionals to promote sustainable development, the rapidly growing number of people dying of AMR will not be reduced. (4)



Pharmaceutical and microbial hazard waste can reach and contaminate groundwater, drinking-water, soils, food crops and sediments. These potentially have serious environmental effects, including toxicity to wildlife and the generation of antibiotic-resistant bacteria. (1, 5)



The cost of drug-resistant infections is estimated to cause a decrease in economic output of US\$ 1-3 trillion. (1)



Current authorization guidelines, such as those in the EU, tend to favour existing products, such as antibiotics or chemical pesticides. They at the same time create significant barriers for the development of alternatives in human health, meat production and agriculture. This obstructs SMEs to innovate and compete on a global market dominated by the antibiotic producing and distributing pharmaceutical industry. (6, 7, 8)



AMR affects all countries, but the burden is disproportionately higher in LMICs. Inadequate access to safe water and sanitation adds to the emergence and spread of drug resistance and is a key challenge for LMICs. Therefore, most of the direct and indirect impact of AMR will fall on LMICs if clinicians and veterinarians do not prescribe antibiotics when they are not needed. (9)



The cheap production of APIs (active pharmaceutical ingredients) particularly in China and India, contaminates local communities' natural resources. Importation of such APIs, in for instance the EU, robs the EU of drug independence and puts populations in emerging economies at serious risk. (10)



Global consumption of antimicrobials in food and animal production is estimated to rise by 70% by 2030. Instead of reduction, the use of antibiotics in agriculture is expected to rise by 67% according to the World Bank, due to the increasing demand for meat. (1, 11)



The overuse of antibiotics in fish farming results in the presence of many infectious drug-resistant pathogens. For instance, experiments on aquaculture found that farmed fish pathogens are resistant to up to 15 drugs. (12)



The EU Commission's Scientific Steering Committee in 1999 advised the immediate reduction in production and distribution of antibiotics, in order to prevent a future AMR catastrophe. No body heeded that advice, leading to then-WHO DG Margaret Chan to warn in 2012 about the rapidly dawning post-antibiotic era, which would disable curing of infections and disallow surgical operations. New partnerships are required to ensure the development and production of new antibiotics while securing limited use only. (13, 14, 15)