



# *One Health Perspective on* **Antimicrobial Resistance and Some Strategies for its Mitigation**

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## **ABOUT THE BOOK**

Antimicrobial Resistance (AMR) is a natural process by which microorganisms (bacteria, viruses, parasites, fungi and other pathogens) develop resistance to the drugs used to fight against them. The abuse and misuse of antibiotics and other antimicrobial drugs favours the development and spread of resistant micro organisms, and generates the need for alternative treatments effective against such pathogens.

AMR also concerns other non-bacterial diseases. Resistance of the malarial parasite to the antimalarial drugs chloroquine and sulfadoxine-pyrimethamine is widespread in most countries where malaria is endemic. Similarly, resistance is also an increasing concern in the treatment of HIV infection due to rapid increase in the availability of antiretroviral therapy in recent years.

Fighting resistant pathogens requires responsible action including: (1) strengthening the current systems for tracking and monitoring antimicrobial resistance; (2) ensuring access to quality-assured essential drugs and promoting only the rational use of antibiotics in both humans and animals; (3) improving the prevention and control of infections; (4) promoting research, innovation and development of new tools (antibiotics and vaccines etc).

The book includes 15 scientific and technical papers contributed by experts and professionals from 7 different countries namely: India, Indonesia, Mongolia, Nepal, Nigeria, South Africa and Sri Lanka highlighting one health perspective on antimicrobial resistance and put forward the best possible strategies for its mitigation in the NAM and other developing countries.