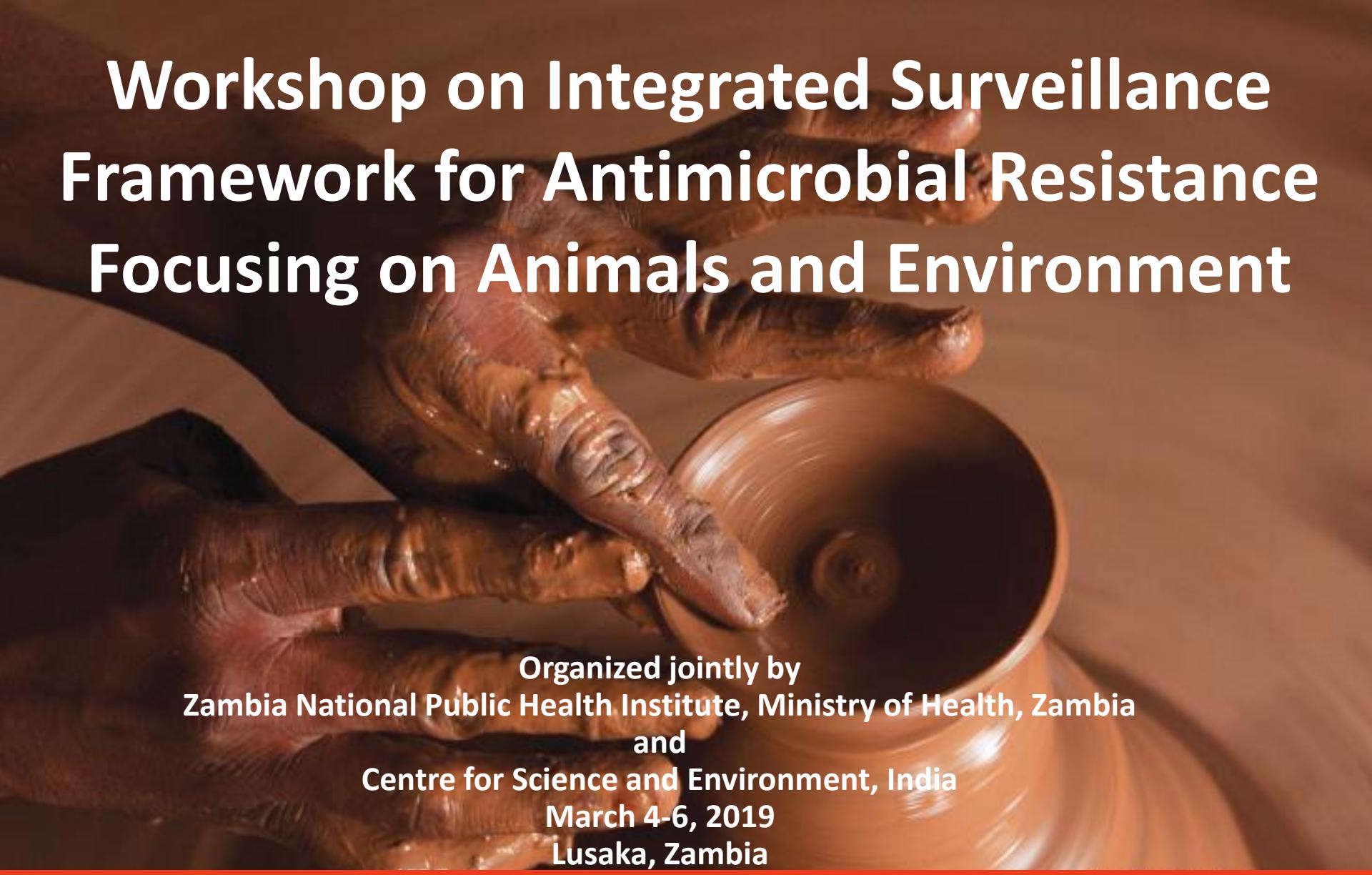


Workshop on Integrated Surveillance Framework for Antimicrobial Resistance Focusing on Animals and Environment



Organized jointly by
Zambia National Public Health Institute, Ministry of Health, Zambia
and
Centre for Science and Environment, India
March 4-6, 2019
Lusaka, Zambia

Setting the context

Chandra Bhushan, Deputy Director General, Centre for Science and Environment

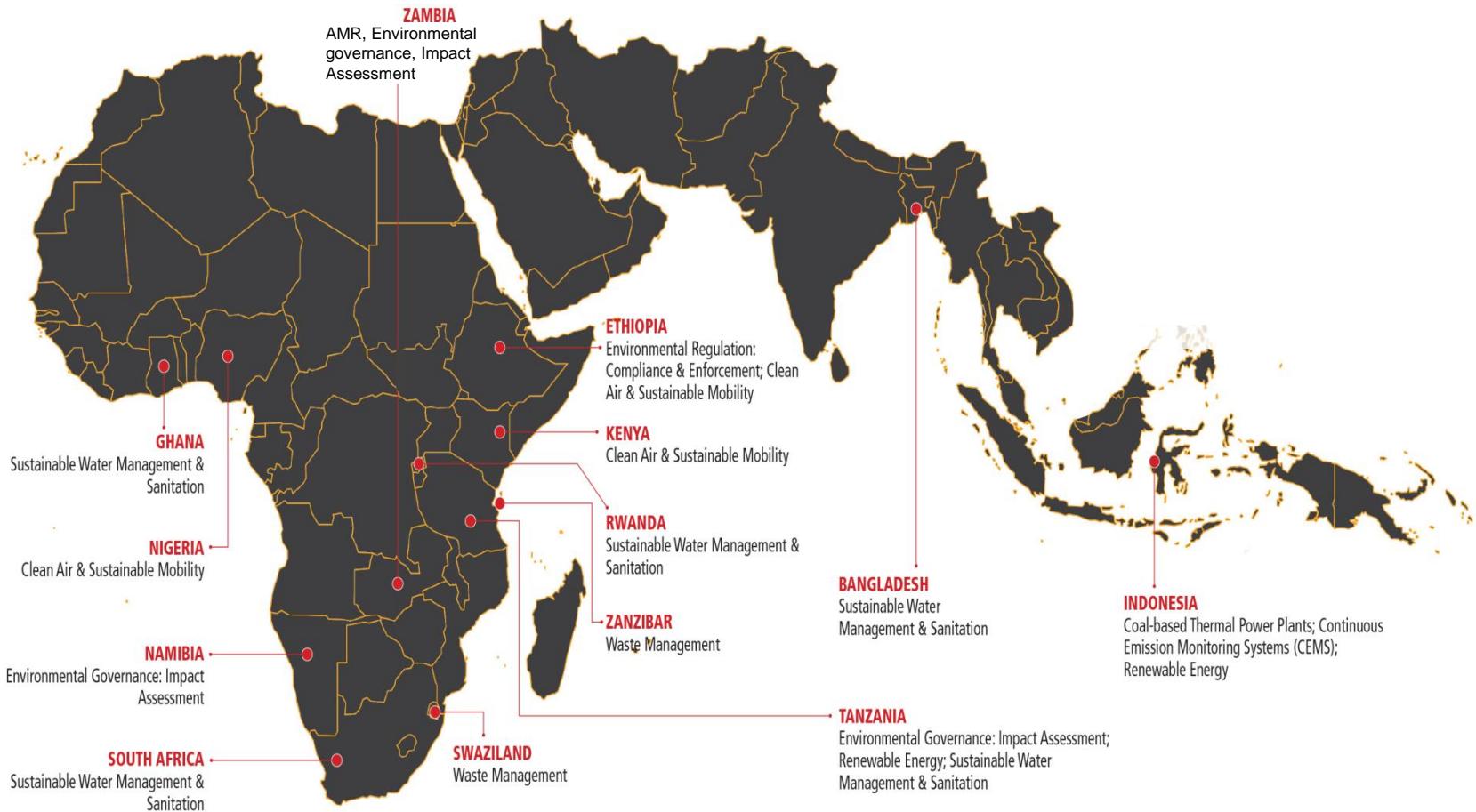


Centre for Science and Environment, New Delhi, India

- The Centre for Science and Environment (CSE) is a public interest **research and advocacy organisation** based in New Delhi. It researches into, lobbies for and communicates the urgency of development that is both sustainable and equitable
- CSE has helped shape policies and build public awareness to bring change for **over three decades**; is recognized for its role in **capacitating public institutions** and **regulatory agencies**
- CSE rated as one of the **top global environment policy think tanks**
 - As per the Global Go To Think Tank Index 2017 , CSE has been ranked **1st in India** and **16th globally** among environment policy think tanks
 - Named in the world's first comprehensive list of **leading food and water security research and advocacy organisations**

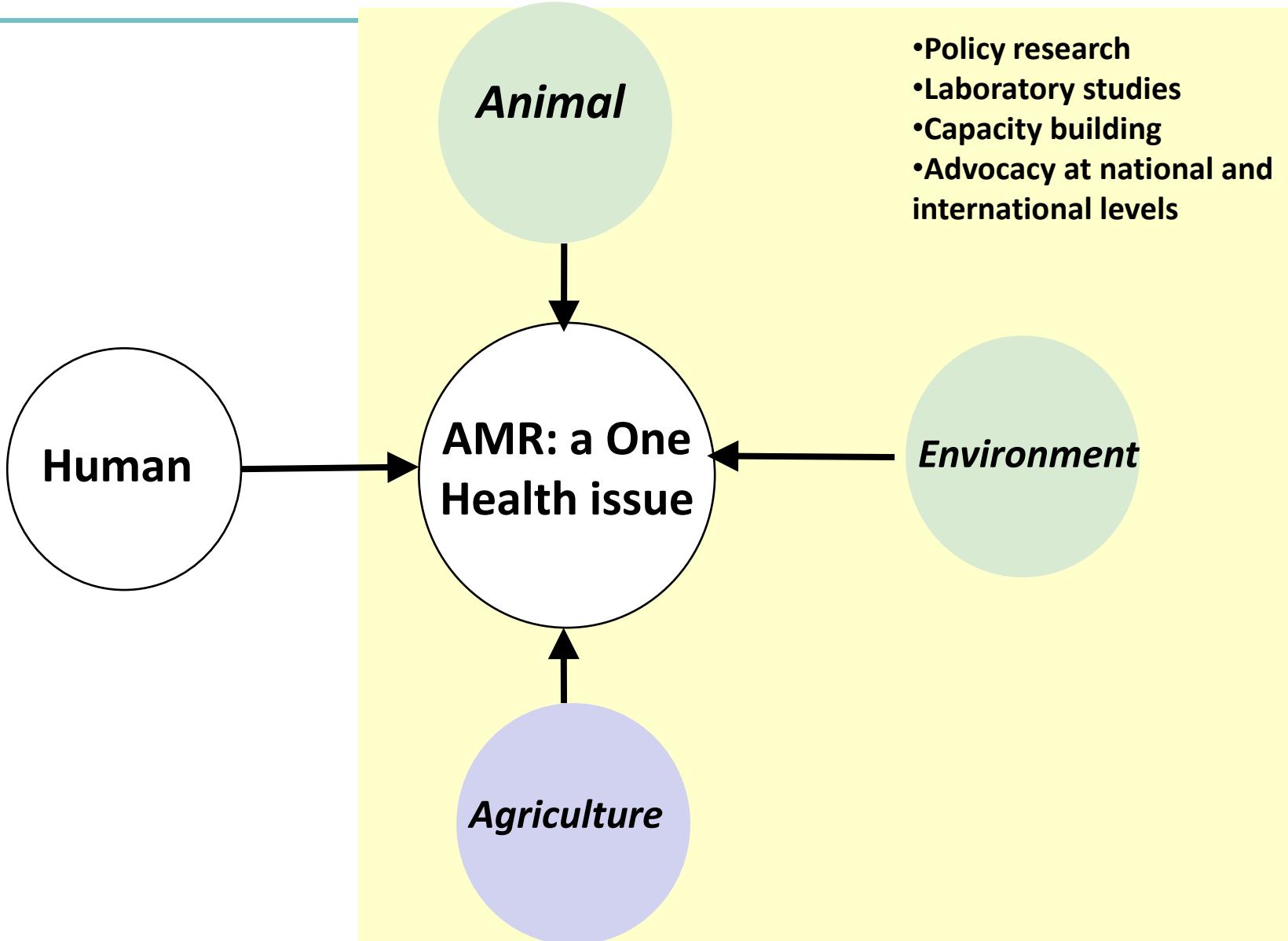
CSE plays an important role as a southern think tank that articulates the perspectives and policies of the global south

CSE's footprint in Africa and South-Asia



CSE programmes presently work in 13 countries in Africa and Asia

CSE's focus areas w.r.t Antimicrobial Resistance (AMR)





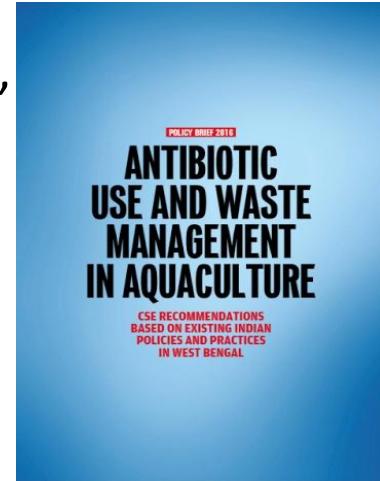
Why animals, agriculture and environment?

- Addressing human side of the AMR problem well understood; actions initiated
- Food animal sector, a key contributor to AMR emergence
 - Increasing production and consumption of animal protein
 - Much higher levels of antibiotic used in animals (for e.g., disease prevention and growth promotion)
 - Inadequate farm biosecurity and sanitation further aggravates this issue
- Spread of AMR linked to environment and agriculture as well
 - Untreated effluent discharge from antibiotic manufacturers
 - Traditional sewage treatment plants acting as a AMR hot-beds
 - Antibiotic use in crops, a route for antibiotic residues into environment
- Important to understand linkages between antibiotic use and AMR in humans with animals, agricultural and environmental aspects



CSE's work on AMR conducted by Food Safety programme

- **Laboratory study:** Antibiotic residues in honey, chicken meat
- Antibiotic use and waste management practices in aquaculture resistance
- **Laboratory study:** Antibiotic resistance in poultry environment
- National Action Plan (NAP) on AMR: need for greater focus on environmental spread
- Strategic and operational guidance on animal and environmental aspects of NAP-AMR for developing countries
- Integrated AMR surveillance framework for India



NATIONAL ACTION PLANS ON ANTIMICROBIAL RESISTANCE: NEED FOR GREATER FOCUS ON ENVIRONMENTAL SPREAD

Nation (WHO) and the World Organization for Animal Health (OIE) have developed a Global Action Plan (GAP) for the strategic objectives outlined in the GAP.

- Improve awareness and understanding of antimicrobial resistance through effective communication, education and training.
- Strengthen for knowledge and evidence base through surveillance and research.
- Promote best practices in the use of antibiotics through effective outcome, legislative and regulatory protection measures.
- Optimize the use of antimicrobial medicines in humans and animal health.
- Ensure access to effective care for sustainable treatment that takes account of the needs of different groups of patients, including new medicines, diagnostic tools, vaccines and other interventions.

Additionally in September 2016, the FAO released its "Global Strategy and Action Plan on抗微生物耐药性 (AMR) in food and agriculture" aimed at supporting the food and agricultural sectors in implementing GAP. The Plan identifies the need for a One Health approach, evidence, governance and practice. It requires WHO and FAO to support the member states in adapting the Global Action Plan on AMR.

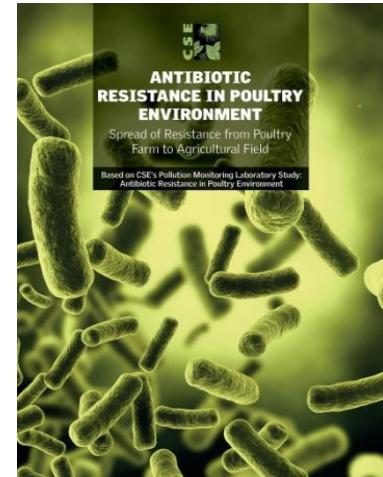
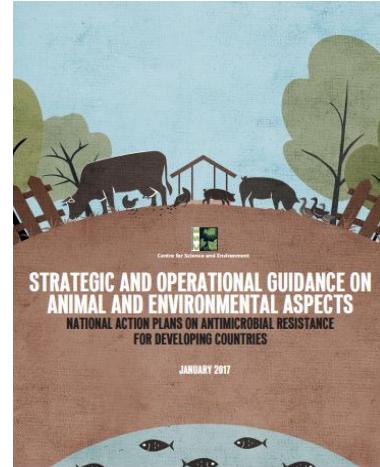
Global Action Plan on AMR

There has been an increase in the dissemination across the world to address the threat from many AMR. In 2015, WHO released its first Global Action Plan on AMR, the "Global Action Plan on Antimicrobial Resistance". The Plan (also known as GAP) set out concrete actions for all countries to take. It also underscored the need to limit emergence and spread of AMR through better antibiotic use in humans and the agriculture sector. GAP emphasizes the need for an effective One Health approach through closer interaction between the medical, veterinary and agricultural sectors.

Recognizing the variability in national resources, GAP also provides a range of options for implementation. Recognizing the variability in national resources, GAP also provides a range of options for implementation. By mid-2017, WHO is engaged in a review with the Food and Agriculture Organization of the United Nations (FAO) and the World Organization for Animal Health (OIE) to develop a Global Strategy and Action Plan on AMR.

1. <http://www.who.int/mediacentre/news-room/08-09-2016/global-action-plan-on-antimicrobial-resistance-released/en/>

2. http://www.who.int/gpsc/2015_05/WHO_General_Antimicrobial_Resistance_Action_Plan.pdf





CSE's national and global engagements on AMR

National

Indian NAP-AMR development

- Member of Core Working Group that developed NAP

Stakeholder in NAP-implementation

- Awareness and education
- Surveillance
- Optimized antibiotic use

Work with regulators (Centre and State)

- Food
- Feed
- Environment
- Drug

State Action Plan implementation

- Key implementation partner of Kerala's Action Plan

Global

UN-IACG

Engagement with inter-governmental organizations

- Contribute to

Engaging with stakeholders in other countries

- Hosting international

Global advocacy through Antibiotic Resistance Coalition

- Contribute to global

- Member of UN-



CSE's engagement with Ministry of Health Zambia

- **January, 2018**
 - CSE invites Ministry of Health, Zambia to participate in Africa-Asia Workshop on Implementation of NAP-AMR
- **March-May, 2018**
 - CSE offers to collaborate with Ministry of Health, Zambia to support the implementation of Zambia's Multi-sectoral NAP-AMR. Offer agreed upon
- **August, 2018**
 - ZNPHI-CSE co-organize Scoping Workshop in Zambia
- **October, 2018**
 - MoU between ZNPHI-CSE signed
- **March, 2019**
 - ZNPHI-CSE co-organize Workshop on Integrated Surveillance Framework for Antimicrobial Resistance



Scoping Workshop on Implementation of Zambia's Multi-sectoral NAP-AMR

- **Sharing of views** and **perspectives** from different Zambian stakeholders on AMR situation, across human health, animal, agriculture and environment sector
- **Scoping out gaps** and **challenges; priority areas** and **mitigation strategies** w.r.t. Zambia's NAP-AMR implementation

Participation from:

- Zambia National Public health Institute (Ministry of Health)
- Ministry of Fisheries and Livestock
- Zambia Environment Management Agency
- Zambia Medicines Regulatory Authority
- Food and Drug Control Laboratory
- Zambia Agriculture Research Institute
- Veterinary Association of Zambia, Pharmaceutical Association of Zambia
- University of Zambia, University Teaching Hospital
- WHO, FAO, CDC, OIE



Objectives of this workshop

- Understanding best practices and policies, guidance, systems and tools, that enable effective NAP implementation and surveillance
- Facilitating cross learning among nations on AMR
- Strengthening the integrated AMR surveillance framework for Zambia



Expected Outcomes

- **Re-prioritized** NAP-AMR based on current scenario, status of implementation, feasibility and resources
- **Identification of baseline data elements** essential for AMR surveillance
- **Strengthened** Integrated AMR Surveillance framework for Zambia



Plan for three days

- **Day 1**
 - Perspectives on AMR surveillance—policies, systems, tools
 - Understanding on country level AMR surveillance status, plans and preparedness (African countries, European countries, India)
- **Day 2**
 - Knowledge exchange and information sharing on relevant tools and guidance for AMR surveillance
 - **Working Group 1:** Prioritizing the Multi-sectoral NAP-AMR
 - **Working Group 2:** Baseline data generation for AMR surveillance
- **Day 3**
 - **Working Group 3:** Framework for integrated AMR surveillance



Thank you!

Chandra Bhushan

Deputy Director General

Centre for Science and Environment

41, Tughlakabad Institutional Area

New Delhi 110 062

Tel: +91-11- 4061 6000 (Extn:297)

Fax: +91-11- 2995 5124

www.cseindia.org

E-mail: chandra@cseindia.org

Website:www.chandrabhushan.net

Skype Id:csechandra