Setting the Context

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Pesticides and Organic
- Standards and surveillance of pesticide residues
- Pesticide approval and regulations
- Organic farming certification and promotion; organic food labelling
- Environmental remediation

Regulating bad food
- Junk food availability in schools and near-by
- Food labelling, claims and advertisements
- Standards for trans-fats, caffeinated drinks, potassium bromate
- Genetically Modified (GM) food labelling

Antibiotics and AMR
- National Action Plans on AMR – Animal, Agriculture & Environment
- Antibiotic use and waste management
- Standards and surveillance of antibiotic residues and resistant bacteria
- Food animal, pharma, healthcare, agriculture sectors
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<tr>
<th><strong>FOOD</strong></th>
<th><strong>ENVIRONMENT</strong></th>
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<tr>
<td><strong>2003:</strong> Pesticide residues in bottled water</td>
<td><strong>2001:</strong> Endosulphan poisoning</td>
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<td><strong>2003 &amp; 2006:</strong> Pesticides in soft drinks</td>
<td><strong>2005:</strong> Pesticides in the blood of Punjab cotton farmers</td>
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<td><strong>2009:</strong> Transfats in edible oil</td>
<td><strong>2009:</strong> Ground water contamination in and around UCIL, Bhopal</td>
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<td><strong>2010:</strong> Antibiotics in honey</td>
<td><strong>2012:</strong> Mercury poisoning in Sonbhadra, UP</td>
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<td><strong>2011:</strong> Caffeine in energy drinks</td>
<td><strong>2017:</strong> Antibiotic resistance in poultry environment</td>
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<td><strong>2012:</strong> Nutritional analysis of junk food</td>
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<td><strong>2014:</strong> Antibiotic residues in chicken meat</td>
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<td><strong>2016:</strong> Potassium bromate/iodate in bread</td>
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<td><strong>2018:</strong> Genetically Modified processed foods in India</td>
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Why National Conclave on Food?
India is facing growing burden of Non-Communicable Diseases (NCDs)

NCDs now contribute more to deaths than communicable, maternal, neonatal and nutritional diseases combined (from 39.9% in 1990 to 61.8% in 2016) (ICMR, 2016)

- Four NCDs (cardiovascular diseases, chronic respiratory disease, cancers and diabetes) are major contributors (~82% of all NCD deaths)
- NCDs typically present in individuals aged 55 years or older in many developed countries, but their onset occurs in India a decade earlier (≥45 years of age) (Lancet, 2018)
- Diabetes prevalence has risen by 29.7% and contribution of cardiovascular diseases to mortality has increased by 34.3% from 1990 to 2016 (Lancet, 2018)
- Disease pattern in rural India has shifted in the last 15 years: deaths due to communicable diseases (41%) were almost matched by those due to NCDs (40%) (The Special Survey of Deaths, GoI 2003)
- Behavioral and biological risk factors, with a predisposition to the development of NCDs are also food-related (Nethan S, 2017)
Rising Antimicrobial Resistance crisis

AMR not only impacts treatment outcomes of infectious diseases but also NCDs

- More antibiotics used for food production (animals & agriculture) than in humans
- Cases of infections such as drug-resistant TB have risen significantly from 37.7 to 46.1% in last two decades in India (1995-2015) (BioMed Central, 2017)
- Patients who acquire resistant bacterial infections are more likely to die (by almost 1.5 times) compared to patients with similar susceptible infections according to one of the largest studies done in a low and middle-income country to measure burden of antibiotic resistance done across 10 hospitals in India (Clinical Infectious Diseases, 2018)
How we intend to address this issue?

FARMS

Sustainable Food Production

- Pesticides management in India
- Addressing antibiotic misuse in food and antimicrobial resistance
- Making ‘Organic’ a mass-movement

PLATE

Regulating Bad Food

- Reducing/eliminating chemicals and additive in food
- Regulating food labelling and claims
- Regulating food advertisements in mass media and new-age media
- Limiting bad food in schools
Sustainable food production: Challenges (1)

Pesticides Management in India

• Pushing for a strong ‘Pesticide Management Bill’ which ensures need-based consumption and effective management across registration, sale and use of pesticides

• Eliminating Class I pesticides – considered extremely or highly hazardous due to acute toxicity – continue to be heavily used (e.g., monocrotophos, carbofurans)

Making ‘Organic’ a Mass Movement

• Present agriculture system not sustainable

• Need of the hour is agro-ecological farming, which needs to become a ‘mass movement’

• Existing efforts in this direction are small scale and not effective on ground
Addressing Antibiotic misuse in food and AMR

- Banning non-therapeutic use of antibiotics in food-animals, such as in growth promotion and disease prevention
- Critically important antibiotics for humans are being commonly used in animals
- Implementation of India’s National Action Plan is weak; so far only one Indian state has developed its own State Action Plan to ensure effective action on ground.
Regulating bad food: Challenges

Labelling
• Current food labelling laws are weak; does not even have salt as mandatory criteria
• The draft proposed is not notified for about a year now

Advertisements
• There is no framework to regulate advertisements of bad foods across broadcasting and new-age digital media

Limiting bad food in schools
• Junk food continues to be available in schools
• FSSAI regulation of school canteen policy still not mandatory for many years now
Expectations from this Conclave

• Discuss emerging trend and issues
• Identify new challenges in Food-Toxins area
• Identify gaps in knowledge, policy, regulations and implementation
• Push for change