

## PRESENTATION

**International conference on  
Food Safety Risk Analysis and  
Antimicrobial Resistance**

**Moscow, Russian  
Federation, 17- 18 12/2019**

## ПРЕЗЕНТАЦИЯ

Международная  
конференция по вопросам  
анализа риска  
безопасности пищевой  
продукции и устойчивости  
к противомикробным  
препаратам

Москва, Российская  
Федерация, 17 -18 12/2019



Food and Agriculture  
Organization of the  
United Nations

SUSTAINABLE  
DEVELOPMENT  
GOALS



## AMR in Food and Agriculture sector: Relevance, Priorities, Actions and Challenges

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17 December 2019, Moscow

Working for #ZeroHunger



## OUTLINE

- **Introduction:** AMR --- Global Threat
- **Relevance:** AMR in Food Safety/Security
- **Priorities:** The multi-sectoral approach of AMR
- **Actions:** Implementation of FAO Action Plan on AMR
- **Actions:** FAO & global collaboration
- **Challenges:** How to contain AMR ?

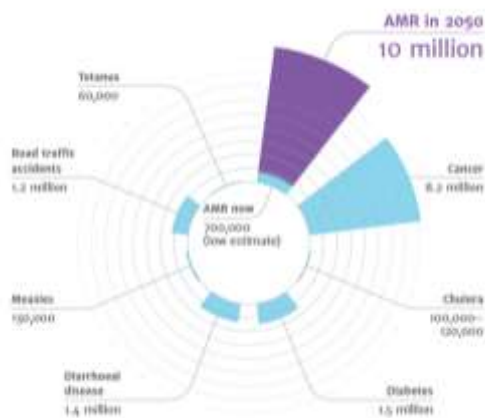
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## AMR in Food and Agriculture sector: relevance challenges, priorities and actions

### AMR --- Global threat

- Around **700.000 human deaths** each year related to antimicrobial resistance
- the burden of deaths from AMR could balloon to **10 million lives each year by 2050**



Source: UK's O'Neill Commission, 2016

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## Relevance: AMR in Food and Agriculture

### Global antibiotic use in farm animals

- 2010 – 63.000 tons
- 2030 – 200.000 tons



Source: Center for Disease Dynamics, Economics & Policy, CDDEP, 2017

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## Relevance: AMR in Food and Agriculture



From: ILSI/EFFORT

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### Priorities: The multi-sectoral approach of AMR

- ☐ **Humans** (men, women and children)...
- ☐ **Animals** (terrestrial and aquatic, domestic and wild, pets...)
- ☐ **Food** from animal or vegetable origin...
- ☐ **Crops** around the globe...
- ☐ **Water** (fresh water, sea water, groundwater...)
- ☐ **Waste** (from humans or animals, solid or liquid...)
- ☐ **Environment**...
- ☐ .....



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### AMR in Food and Agriculture sector: relevance challenges, priorities and actions

#### FAO Internal “One Health”

- Cross Cutting work among departments and decentralized Offices

#### ▪ Work coordination:

#### AMR Working Group

meeting on a weekly basis to deal with main and high level issues



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## Actions: FAO Action Plan on AMR



- Improve **awareness** and advocacy on AMR, antimicrobial use (AMU) and related threats
- Develop capacity for surveillance and monitoring of AMR and AMU in food and agriculture (**evidence**)
- Strengthen **governance** related to AMR and AMU in food and agriculture
- Promote **good practices** in food and agricultural systems and the prudent use of antimicrobials

FAO AMR Webpage: <http://www.fao.org/antimicrobial-resistance/en/>

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## AWARENESS

- **34 countries have nation-wide campaigns** targeted to animal health, plant health, food production, food safety and environment sectors; **77 countries implement** awareness-raising activities on a limited scale, **23 countries do not implement** any awareness-raising activities.
- **FAO contribution** to awareness raising on AMR and related threats by providing evidence and knowledge as global public goods.
- **Events:** awareness has been broadly raised by organizing/presenting at 9 key events/meetings/conferences in 2019, including World Antibiotic Awareness Week.
- **Education and Training:** Training materials have been developed; Facilitate *studium generale* on AMR at 6 veterinary medicine faculties in FAORAP; Technical and communication staff has been trained.

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## EVIDENCE

- **47 countries with national system to monitor AMR in food and plant origin.**
- **FAO contribution.** FAO supports the strengthening of laboratory capacities at the country level.
- **Tools:** FAO-ATLASS has been implemented in **28 countries over 100 labs** (2016-2019); 12 countries in 2019.
- **Technical support:** 5 harmonized **guidelines** for national and regional surveillance in development in Asia (RAP) and Eastern Europe (REU).



Implementation of FAO-ATLASS

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## GOVERNANCE

- NAPs on AMR are **operational in 78 out of the 117 countries** that have developed NAPs to date.
- **FAO Progressive Management Pathway tool (FAO-PMP-AMR):** to assist on the development and implementation of NAPs; applied in 7 countries (**Ghana, Belgium, Tajikistan, Kenya, Saint Kitts and Nevis, Kyrgyzstan, Tunisia**), 5 more countries are in planning; PMP was **launched during WAAW 2019**.
- **Legal Methodology:** *applied in 18 countries in Africa, Asia, Central Asia, to be rolled out in Latin America.*
- **Risk Analysis methodology:** to perform situation analysis on the risk of AMR; has been piloted in 4 countries.
- **FAOLEX:** AMR relevant legislation and policies within and across countries are being identified.

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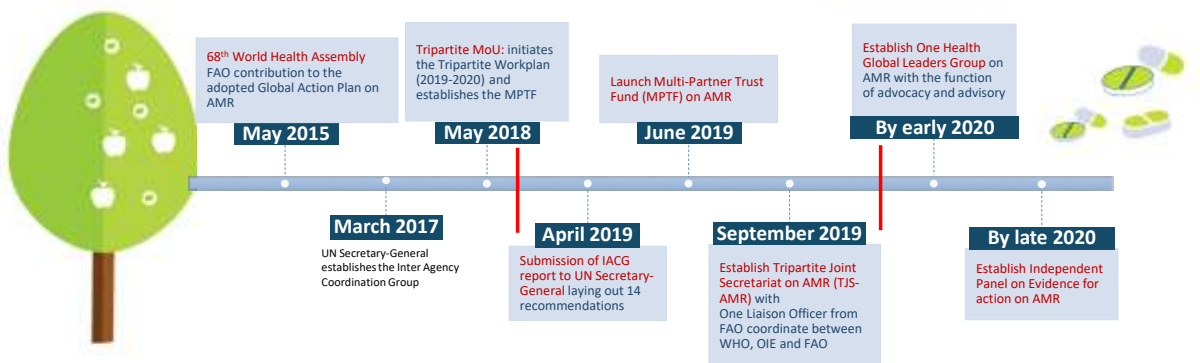
## GOOD PRACTICES

- **95 countries undertake activities** to improve good production practices; **12 countries do not undertake any systematic efforts** to improve good production practices;
- **Stakeholders assessment**: a Knowledge, Attitudes, Practices and Interventions Survey (KAP/KAP+) has been applied in **10 countries** in Asia and Africa.
- Innovative and multidisciplinary **projects** to tackle AMR (*e.g.*: Bangladesh AMR Response Alliance, BARA-Bangladesh).
- **Case Studies**: *Tackling antimicrobial use and resistance in pig production: Lessons learned in Denmark; Prudent and efficient use of antimicrobials in pigs and poultry.*
- **Various Guidelines on good practices**: **aquaculture** and biosecurity, **swine, poultry, animal nutrition...**
- **Cross-cutting collaboration**: *guidelines for proper use of antimicrobials in apiculture*
- **Farmer Field Schools** to combat AMR. Currently finalizing the **curriculum**.
- **Collaboration with variety of stakeholders**: World Farmers' organization, International Dairy Federation, International Feed Industry Federation and many others

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## Actions: FAO & global collaboration



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## AMR Global Initiatives

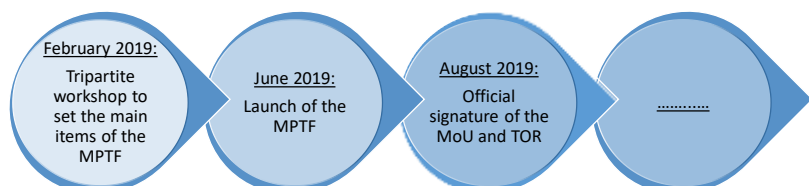
- Global Action Plan on AMR (GAP)
- GAP Monitor and Evaluation (M&E)
- Tripartite Workplan on AMR
- Report of the IACG to the UN Secretary General
- AMR Multi-Partner Trust Fund (AMR MPTF)
- FAO Action Plan



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## AMR Multi-Partner Trust Fund (AMR MPTF)



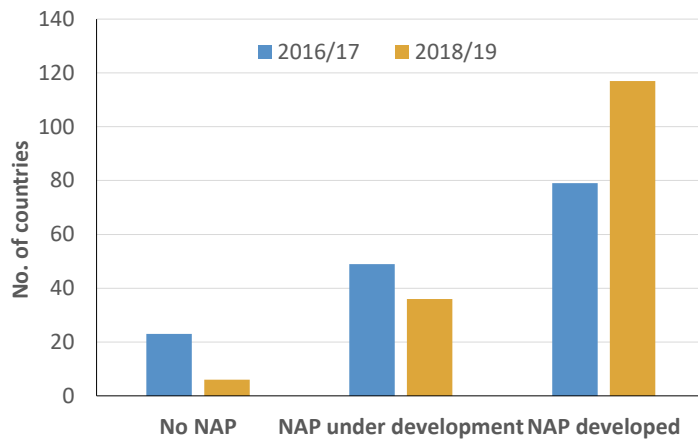
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### Global Progress

- Countries reported advances in development and implementation of National Action Plans (NAP) on AMR:
- **117 countries** with developed NAPs (2018/19) up from **79 countries** (2016/17)



From: Global Database for Antimicrobial Resistance Country Self Assessment

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### Challenges: How to contain AMR ?

- From Global Strategy to Country Action
- To reduce the use of antimicrobials in Food production
- To maintain the prudent use of antimicrobials in Food production
- To phase out the use of antimicrobials as growth promoters
- Real cooperation between Human health, agriculture and environment
- .....

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### Conclusion: We need:

- More cooperation among key stakeholders and Member States
- International solidarity to support LMICs particularly in good governance aspects including Veterinary Service legislation.
- More risk assessment and surveillance in countries
- More research and public-private partnerships approach
- Make sustained the Animal health and welfare; while ensuring Food security and food safety.
- Engage to the Global Action Plans
- The progress in Eastern Europe/Central Asia is a good example of collaborative action approach which need to be scaled-up.

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# Thank you

[www.fao.org/antimicrobial-resistance](http://www.fao.org/antimicrobial-resistance)

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