



Food and Agriculture  
Organization of the  
United Nations

## **Concept Note: Side Event on Antimicrobial Resistance (AMR) Ninth Session of the COFI SubCommittee on Aquaculture**

Red Room, 25 October 2017, 12:15-13:15

### **Purpose of the Side Event**

The purpose of this side event is to exchange and disseminate experiences and information about ongoing initiatives on antimicrobial resistance (AMR) and particularly antimicrobial usage and AMR in aquaculture, for the benefit of participants attending the Ninth Session of the COFI Sub-Committee on Aquaculture (COFI SCA 9<sup>th</sup> session) and other interested stakeholders. There will also be a brief presentation on a Concept Note: Progressive Aquaculture Biosecurity Management Framework. The conclusions of the side event will be briefly reported to the main SCA session during the agenda item on Any Other Business.

### **Context**

Antimicrobials are important tools to the overall implementation of effective biosecurity. However, they need to be used more carefully. This can be tackled through (1) effective policies, e.g. better regulations and enforcement; (2) improving the knowledge base (e.g. on areas such as disease diagnosis, surveillance, risk analysis and disease prevention, control and management); and (3) capacity building at all levels of the aquaculture production chain, e.g. improving extension that promotes responsible use of antimicrobials and implementing good aquaculture and biosecurity practices and effective diagnostics that prevent disease occurrence or outbreaks in the first place. All are critical as they can reduce the need for use of antimicrobials.

Countries need to have in place appropriate and well-conceived legislation and regulations concerning the prudent and responsible use of antimicrobials in aquaculture including, e.g. aspects for registration of antimicrobials, licencing of aquatic animal health professionals and others. Countries must also have trained manpower and infrastructure to enforce legislation and regulations. Public-private sector partnership should be promoted because dealing with diseases is a shared responsibility among all players involved in the aquaculture value chain.

### **Drivers of AMR in Aquaculture**

The Joint FAO/OIE/WHO Expert Meeting on Antimicrobial Use and Antimicrobial Resistance in Aquaculture identified that the two hazards to be considered are antimicrobial residues and development and spread of antimicrobial resistant bacteria<sup>1</sup>. While residues found in animal tissues may be directly related to the use of antimicrobials in the respective sector, the issue with AMR is more complicated in the case of aquaculture. This is because the aquatic environment receives effluents from hospitals, animal farms and agricultural fields. Hence, bacteria carrying AMR determinants that are selected in other sectors find their way into the aquatic environment and may eventually reach aquaculture systems. Further antimicrobial resistance genes (ARGs) respect neither phylogenetic nor geographical borders; hence ARG selected in one sector may impact another.

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<sup>1</sup> [ftp://ftp.fao.org/ag/agn/food/aquaculture\\_rep\\_13\\_16june2006.pdf](ftp://ftp.fao.org/ag/agn/food/aquaculture_rep_13_16june2006.pdf).

### **Plans of Action on Antimicrobial Resistance (AMR)**

The Global Plan of Action on AMR (with contributions from FAO and the OIE) was adopted during the 68<sup>th</sup> World Health Assembly in May 2015<sup>2</sup>. The World Assembly of the OIE delegates in May 2015 adopted the action plan and the 39<sup>th</sup> FAO Conference (June 2015), adopted Resolution 4/2015. A political declaration was made during a high-level meeting on AMR at the 71<sup>st</sup> UN General Assembly (UNGA, September 2016). The UNGA called upon the Tripartite (i.e. FAO as global leader for food and agriculture, the OIE as global leader for animal health and welfare and the WHO as global leader for human health) and other intergovernmental organizations to support the development and implementation of national action plans and AMR activities at the national, regional and global levels under the One Health platform.

### **FAO Action Plan on AMR 2016-2020<sup>3</sup>**

The FAO Action Plan on Antimicrobial Resistance 2016-2020 supports the implementation of Resolution 4/2015. It addresses four major Focus areas:

- **Awareness:** improve awareness on AMR and related threats
- **Evidence:** develop capacity for surveillance and monitoring of AMR and AMU (antimicrobial use) in food and agriculture
- **Governance:** strengthen governance related to AMU and AMR in food and agriculture
- **Best practices:** promote good practices in food and agricultural systems and the prudent use of antimicrobials

Enhanced efforts are now underway to support FAO members in the development and implementation of the food and agriculture components of the National Action Plans on AMR.

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<sup>2</sup> [http://apps.who.int/iris/bitstream/10665/193736/1/9789241509763\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/193736/1/9789241509763_eng.pdf?ua=1)

<sup>3</sup> <http://www.fao.org/3/a-i5996e.pdf>

### **The Side Event on Antimicrobial Resistance (AMR)**

**Programme.** The side event will take place on 25 October 2017 (Wednesday) from 12:15-13:15 for one hour and is open to all delegates participating in the COFI SCA 9<sup>th</sup> session, other stakeholders and will consist of opening/welcome remarks, followed by perspectives on AMR (Malaysia, Singapore and EU), presentations from FAO officers, question and answer, and summary and conclusions.

Moderator: Mr Malcolm Beveridge, Acting Chief, Aquaculture Branch (FIAA)

<b>Time</b>	<b>Topic</b>	<b>Presenter</b>
12:15-12:17 (2 min)	Opening/welcome remarks and purpose of the side event	Mr Manuel Barange Director, Fisheries and Aquaculture Policy and Resources Division (FIAX)
12:17-12:22 (5 min)	Perspectives on AMR (Malaysia)	Ms Moi Eim Yeo Director, Aquaculture Development Division, Department of Fisheries Malaysia
12:22-12:27 (5 min)	Perspectives on AMR (Singapore)	Mr Huan Sein Lim Director, Technology & Industry Development, Agri-Food & Veterinary Authority of Singapore
12:27-12:32 (5 min)	Perspectives on AMR (EU)	Ms Anna Zito Team Leader for EU Aquaculture Policy, Directorate-General for Maritime Affairs and Fisheries (DG MARE), European Commission in Brussels
12:32-12:37 (5 min)	One Health and FAO Action Plan on AMR (2016-2020)	Mr Juan Lubroth FAO Chief Veterinary Officer. Animal Health Service (AGAH)
12:37-12:42 (5 min)	Aquaculture, antimicrobials and AMR (highlights of the Session Background Document on AMR)	Ms Melba Reantaso Aquaculture Officer, Aquaculture Branch (FIAA)
12:42-12:47 (5 min)	Antibiotic residues as a driver of AMR in the context of aquaculture (tentative title)	Ms Esther Garrido-Gamaro Food Safety and Quality Officer, Products, Trade and Marketing Branch (FIAM)
12:47-12:52 (5 min)	Concept Note: Progressive Aquaculture Biosecurity Management Framework	Ms Melba Reantaso Aquaculture Officer, Aquaculture Branch (FIAA)
12:52-13:07 (15 min)	Question and Answer	All participants
13:07-13:15 (7 min)	Summary and conclusions	Mr Malcolm Beveridge Acting Chief, FIAA

Light snack will be provided after the Side Event.