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CODEX ALIMENTARIUS COMMISSION

Food and Agriculture Organization of the United Nations

World Health Organization

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

***AD HOC* CODEX INTERGOVERNMENTAL TASK FORCE ON ANTIMICROBIAL RESISTANCE**

Seventh Session

Pyeongchang, Republic of Korea, 9-13 December 2019

MATTERS ARISING FROM OTHER RELEVANT INTERNATIONAL ORGANIZATIONS

Information relevant to the work of the *Ad Hoc* Intergovernmental Task Force on Antimicrobial Resistance carried out by the Organization for Economic Cooperation and Development and the World Customs Organization is presented below.

I. ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (OECD)[1]

Introduction

1. With increasing global concern over the rise in antimicrobial resistance (AMR) and the potential risks to human health and animal health, consumers and agriculture have been encouraged to reduce their use of antibiotics (WHO, 2015). The high consumption of antibiotics is the single most important factor driving the emergence and spread of resistant pathogens. The OECD's work on AMR focuses on comparative economic analysis and policy recommendations and complements the technical work of the World Health Organization (WHO), Organization for Animal Health (OIE) and the Food and Agriculture Organization (FAO)-Codex. In essence, the OECD analyses are aimed at calculating the economic return on investment with a view to identifying the most effective and efficient policies to combat the rise in AMR in both the livestock and human sectors.

AMR work in the OECD

Agriculture

2. Evaluating the economic effects of antibiotics in food producing animals is complex, as antibiotics are used not only to treat sick animals, but also to prevent and control; disease, and to enhance animal growth. Moreover, the use, and in some cases, inappropriate use of antibiotics in animal agriculture, is often linked to the type of production system, with the highest usage recorded in production systems that have lower sanitary and management standards. In addition, the available evidence would suggest that there is increasing divergence in the use of antibiotics in food animal systems between high income OECD countries and large emerging economies with high livestock populations; with an overall fall in consumption in the former group, and a continued rise in the latter.

3. A further concern relates to the fact that only a limited number of countries have reliable information on antimicrobial usage in food animal production. These deficiencies extend to the lack of data by species (poultry, pigs, and cattle), stage of growth, type of production system, as well as by class of antibiotics used. Moreover, information on the transmission of resistance between animals and humans and vice versa, is weak, but improving. To-date there have been few studies on evaluating the economic benefits and costs of antimicrobials in modern animal production, and on cost effective alternatives to ensure high levels of animal health and welfare. There are major differences in countries institutional and regulatory frameworks that control the availability and use of antibiotics in animal production. For policymakers, the key concerns include the productivity impact on the production of animal products, animal health and wellbeing, as well as the potential longer-term effects on food security, food safety, prices and the spread of resistance from animals to humans and vice versa.

4. Recently published work on AMR in food producing animals focused on clarifying the links between the use of antimicrobials in production and the emergence of AMR, as well as the need to further improve data on the farm level economic impacts of antimicrobial use (AMU) in animal production. More specifically, this work has concentrated on:

[1] Dr. Michael Ryan, TAD, and Dr. Michelle Cecchini, ELS.

a) Evaluating the economic benefits and costs of AMU in food producing animals.

b) Synthesizing the state of knowledge on the transmission of AMR from animals to humans and from humans to animals.

c) Synthesizing the economic costs and benefits of AMU in livestock production in Brazil and in China.

5. While much of the work has focused on European countries where information and data are more robust and reliable, nevertheless, the work also involved collecting and analyzing information on the situation in Brazil and China. The four reports mentioned above are available on the OECD website under OECD Food, Agriculture and Fisheries Papers, nos. 132, 133, 134 and 135.

6. The current work stream (2019-20) on AMR in food producing animals has two main strands:

a) Assessing national action plans on AMR in animal production: what lessons can be drawn, and

b) Estimating the economic costs of alternative interventions to mitigate the rise in AMR at farm level.

Human Health

7. In November 2018, the OECD released a major publication on AMR, titled: "Stemming the Superbug Tide - Just A Few Dollars More" (https://oe.cd/amr-report). In this report, OECD used advanced techniques, including machine learning, ensemble modelling and a microsimulation model, to provide support for policy action in the human health sector. AMR rates are high and are projected to grow further, particularly for second- and third-line antibiotics, and if no effective action is taken this is forecasted to produce a significant health and economic burden in OECD and EU28 countries. This burden can be addressed by implementing effective public health initiatives. This report reviews policies currently in place in high-income countries and identifies a set of 'best buys' to tackle AMR that, if scaled up at the national level, would provide an affordable and cost-effective instrument in the fight against AMR.

8. OECD is now working on AMR in human health with the objective of expanding the scope of the analyses in a number of directions:

- Applying a 'one-health' framework by developing modules aiming to replicate the transmission dynamics of infections from animals/environment to humans.
- Increasing the number of resistant infections included in the model including, for example, Salmonellae (fluoroquinolone-resistant) and Neisseria gonorrhoea, (cephalosporin-resistant and fluoroquinolone-resistant). The current model includes 8 bacteria and a total of 17 antibiotic-bacterium pairs.
- Increasing the number of policies assessed (currently six) to include actions such as incentives to promote the appropriateness of prescriptions, prescriber education and vaccination policies.
- Evaluating the direct and indirect cost of AMR and the impact of policies on the labor market and the broader economy.
- Expending the geographical scope of the model to beyond OECD and EU28 countries to other regions, e.g. Group of 20 (G20) countries.

9. OECD produces evidence to inform global dialogue on potential strategies to ensure sustainable research and development (R&D). OECD has reviewed options to incentivize the various phases of the R&D pipeline, from basic research to market approval and commercialization. Together with WHO, FAO and OIE, OECD has produced the background paper conceptualizing a transnational incentive platform, based on downstream economic incentives and a delink age of R&D investments from sales revenues, which was instrumental in the launch of the G20 'AMR R&D Collaboration Hub'. OECD is now working to support the work of this hub.

Co-operation with other International Organizations

10. The work on AMR in OECD is aimed at complementing the ongoing technical and standards work in other International Organizations, including the Global Action Plan of the Tripartite Group (WHO / FAO / OIE), which calls for each country to develop its own plan to combat AMR, specific to its own needs and stage of economic development.

11. To ensure that all technical aspects of the AMR work in agriculture are in line with the standard setting and technical guidance of Codex, the OIE and WHO, the Directorate for Trade and Agriculture (TAD), established an informal expert steering group in 2017 to guide the work on AMR in TAD. This ESG meets twice a year to review ongoing work and provides additional inputs and insights to the work. In addition to the project leaders in TAD and the Directorate for Employment, Labour and Social Affairs (ELS), the ESG also includes academic experts in the analysis of AMU and AMR, national experts from government agencies, as well as the AMR experts from the OIE and the FAO.

12. Finally, we look forward to continuing close co-operation with Codex and the sharing of information of our studies on all aspects related to AMR in human health, animal health and food production.

II. WORLD CUSTOMS ORGANIZATION (WCO)

1. Overview of the WCO activities

13. The Intellectual Property Rights (IPR), Health and safety Program of WCO maintains its resolve to protect consumer health and safety and continues to combat counterfeiting and piracy through a variety of activities. WCO's main activity is to raise awareness about Customs work in this area; either towards other international organizations or by promoting capacity building activities for our member Administrations. The Capacity Building consists of two main factors; training through workshops and education and training through operational activities.

14. The focus of our work is on health and safety and thus medicines come high on our agenda, but WCO have so far not had any specific operation targeting antibiotics to curb AMR. This come partly because the issue is rather new and the knowledge of AMR within our members are limited, but also because the lack of focus from the health authorities. There is also an added challenge from the fact that in the area of veterinary medicine the there is little data, however the awareness of AMR has grown because of our cooperation with WHO and OIE.

15. For customs the approach would be to perform controls on legal imports and exports based on the request from the responsible national authority but also to try to curb illicit trade in antibiotics. It is in the latter where WCO will be able to give some information through our CEN- seizure database (CEN – European Committee for Standardization) and the Illicit Trade Report[2]. So, the efforts to curb AMR should be seen through the effort to stop all kinds of illicit trade in medicines and veterinary products, with an added focus on antibiotics.

2. Statistics on counterfeits and illegal import of antibiotics

16. From September 1st, 2018 to September 20, 2019, the CEN database provides 231 cases of anti-infective agent seizures.

Unit	Anti-infective Agents
Kg	7,076.30
ML	8,464.50
other	54.00
Pièces	130,737,864.00
sachets	640.00
Tablets	3,522.00
cases	**231**

3. Large-scale operations

17. The WCO organizes simultaneous enforcement activities with multiple Customs administrations. These operations are aimed at gauging the scale of global counterfeiting whilst providing participating Customs officers with hands-on experience. For the year 2020, we are planning an operation in the Balkans region and another in Latin America. They concern all IPR related products.

PANGEA

18. In partnership Interpol and Europol and other Health Authorities WCO also co-organizes the global operation PANGEA. Currently, the next operation is in full preparation and an organizational meeting will be held in October 2019 in Argentina.

[2] http://www.wcoomd.org/en/topics/enforcement-and-compliance/resources/publications.aspx

4. National/regional seminars

19. The WCO delivers extensive capacity building activities, mainly in the form of legislative training, document targeting training and product identification training, with private sector cooperation. But the organization also performs diagnostic missions. In the diagnostic missions WCO experts visit the country and assess the Customs administrations capabilities in the domain of fighting counterfeits. The evaluation includes both the legal base and practical and procedural arrangements and leads to a recommendation from WCO. Between September 2018 and September 2019, the WCO conducted several training seminars/workshops for officers from a number of WCO Member administrations. Likewise, to strengthen the pool of experts, an accreditation workshop was organized in the Asia-Pacific region in April 2019. Although the question of AMR does not yet always fall naturally into the curriculum of the workshops, we try to cover as many aspects of health and safety issues and AMR should be a part of that.

5. Counterfeit and Piracy Group (CAP) Meeting

20. The annual WCO Counterfeiting and Piracy (CAP) Group meeting provides a forum for Customs and related law enforcement agencies to exchange information, experiences and practices on combating counterfeiting and piracy.

21. At its 15th Meeting from 6 to 7 December 2018, Members discussed on the link between organized crime and counterfeiting to better understand the challenges of fighting the counterfeiters. Members and industry also present and discuss the challenges of e-commerce as relates to IPR enforcement. In terms of perspectives, issues related to the use of disruptive technologies such as blockchain and the environmentally sustainable destruction of counterfeit seizures were addressed.