Food and Agriculture Organization of the United Nations

FAO CALL FOR DATA AND INFORMATION ON

ALTERNATIVE AND ADVANCED FEED PRACTICES TO PROMOTE THE RESPONSIBLE USE OF ANTIMICROBIALS

(Deadline for submission: not later than 10 June 2023)

BACKGROUND

The availability and use of antimicrobial drugs in diseased animals is essential for animal health and welfare and for food security; and has implications for food safety and public health. However, the global increase of resistance of pathogenic microorganisms in humans and animals demands a restrictive and prudent use of all antimicrobial agents in agriculture and animal production.

Antimicrobial resistance (AMR) is an evolutionary process by which microbes adapt to their surrounding environment. It is exacerbated by antimicrobial use in both human healthcare and the agriculture sector, especially when use is inappropriate and abundant. Effectively addressing AMR requires the feed and livestock sectors to join others in their commitment to implement practices thar minimize the need for and use of antimicrobials in animals.

Antimicrobials have been used in animal feed for about 70 years, not only to treat diseases, but also to boost growth, improve feed utilization and reduce mortality; in other words, to obtain an improvement in productivity. Many of these substances used in agriculture are classified as medical important antimicrobials for human health by the World Health Organization (WHO) and as a result, concerns have arisen about the potential risk for the selection of resistant microbial populations and the transfer of resistant bacteria between animals and humans through the food chain. An overall reduction in the use of antimicrobials in animal production, especially limiting those used for non-therapeutical purposes, e.g .antimicrobial growth promoters (AGPs) is desired to mitigate these potential risks. The current understanding of the economic benefits of AGPs use under good husbandry practices, and the increasing insight into advanced feeding practices, enable the replacement of AGP use in livestock production, thereby further implementing the responsible and prudent use of antimicrobials.

For these reasons, the FAO Committee on Agriculture Sub-Committee on Livestock (the Sub-Committee) has requested FAO to collect scientific evidence on alternative feeding practices to replace the use of medically important AGPs, their effectiveness and safety, and to conduct an inventory of these alternative feeding practices. In addition, the Sub-Committee has requested FAO to share successful experiences and good practices, including traditional knowledge (e.g. the use of traditional remedies such as plant-based growth promoters), to support its Members to reduce the need for antimicrobials, and to collect data on the impact of measures to phase out or ban the use of medically important AGPs on livestock production, health and welfare. To respond to these requests FAO will organize an Expert Meeting that will take place at FAO Headquarters in Rome, Italy, in July 2023. The Experts will take into consideration the data and information provided as a response to an open call and the inputs provided by a stakeholder consultation.

To ensure that the expert meeting has at its disposal all available and relevant information, FAO invites all interested parties to provide any relevant information/data and particularly information that may not be readily available in the public domain.

OBJECTIVES

The call for data and information aim to:

- collect scientific evidence on alternative and advanced feeding practices to replace the use of medically important antimicrobials used as AGPs, while maintaining feed efficiency; and to reduce the overall need to use antimicrobials in farm animals, as well as their effectiveness and safety;
- conduct an inventory of these alternative and advanced feeding practices;
- gather successful experiences and good practices, including traditional knowledge (e.g. the use of traditional remedies and natural products enhancing feed efficiency and animal productivity) to reduce the need for antimicrobials in animal production; and
- collect information on measures to phase out or ban the use of medically important AGPs and their impact on animal health, welfare and productivity; and food safety.

SCOPE

The call address animal feed composition and feed practices, feed ingredients and feed additives for farm animal species used in all livestock systems including: specialized livestock production systems; integrated plant-animal production systems; and grazing systems and pastoralism.

For the scope of these calls the following is intended:

Feed (Feedingstuff): Any single or multiple materials, whether processed, semi-processed or raw, which is intended to be fed directly to terrestrial animal species in all livestock systems.

Feed Ingredient: A component part or constituent of any combination or mixture making up a feed, whether or not it has a nutritional value in the animal's diet. Ingredients may be of plant, animal or aquatic origin, or other organic or inorganic substances.

Feed Additive: Any intentionally added ingredient not normally consumed as feed by itself, whether or not it has nutritional value, which affects the characteristics of feed and its impact on production.

Data and information on the following subjects are therefore needed:

- animal nutrition, feed production and technology, feed ingredients, feed additives and feeding practices and precision feeding in farm animals;
- alternative and advanced feeding practices, feed ingredients and traditional knowledge (e.g. the use of traditional remedies and natural products enhancing feed efficiency and animal productivity) to reduce the use of antimicrobial use in animal production and/or to replace the use of medically important antimicrobials AGPs, while maintaining feed efficiency; their effectiveness and safety;
- strategies and measures to reduce the need for the use of antimicrobials in farm animals by means of the use of pre-, pro- and post-biotics and natural substances;
- measures to phase out or ban the use of medically important AGPs and their impact on livestock health, welfare and productivity; and food safety.
- design and validation of animal experiments and field trials related to advanced feeding strategies and the targeted use of novel feed additives;
- animal health and welfare and food safety risk assessment related to AGPs and advanced and alternative feeding practices.
- Any other relevant data.

Data should be accompanied to the extent possible with detailed information of the complete studies, in particular in relation to the methods of data collection and analysis. This data may be published or unpublished. Reference should be made to related published studies, where applicable.

Confidential and/or unpublished information: FAO recognizes that some information and relevant data may not be published or of a confidential nature. Unpublished or confidential studies that are shared will be safeguarded and only available to FAO and anonymized prior to confidential sharing with a small number of selected Experts upon agreement with the providers of the information. Specific issues relating to confidentiality should be discussed directly between the information and data owners and FAO. For these and other issues please contact FAO at the contacts provided below. **Please. submit data and relevant information (electronic copies) to FAO-Livestock-Network@fao.org . For questions, contact the FAO Officers noted below, including "Alternative feed practices" as the subject line of the e-mail.**

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