CODEX ALIMENTARIUS COMMISSION E

Food and Agriculture Organization of the United Nations

World Health Organization

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

***AD-HOC* INTERGOVERNMENTAL CODEX TASK FORCE ON ANIMAL FEEDING**

Seventh Session

Berne, Switzerland, 4-8 February 2013

REPORT ON ACTIVITIES OF FAO, WHO AND OTHER INTERNATIONAL INTERGOVERNMENTAL ORGANIZATIONS

REPORT ON ACTIVITIES OF FAO AND WHO

(prepared by FAO and WHO)

Recent FAO Activities

FAO (Animal Production and Health Division) continues to provide extensive information and capacity development on different issues regarding animal nutrition, feeds and feeding. All publications are available through its website [1]. The activity has been further developed with the production of Feedpedia[2], an on-line encyclopedia of animal feed, developed in collaboration with the French National Institute for Agricultural Research (INRA), the Centre for Agricultural Research for Development (CIRAD) and the French Animal Production Association (AFZ).

In recent years FAO has worked in strong collaboration with a wide range of stakeholders (including national competent authorities, private sector and civil society representatives) to develop the capacities of the sector players to ensure feed safety within the whole production and utilization chain. More specifically:

- in collaboration with the International Feed Industry Federation (IFIF), FAO has organized a series of annual International Feed Regulator Meeting (this year at their 6th edition); the meeting have the purpose to increase dialogue and collaboration between private and public sector to better face the challenges of the sector; next meeting is foreseen to take place in Sun City, South Africa, on 9 April 2013[3];
- in collaboration with IFIF, FAO has produced a Manual of Good Practices for the Feed Industry [4], which is has been translated in Chinese[5] and is in the process of being translated in French, Spanish, Arabic, Portuguese and Japanese. The Manual provides comprehensive information and practical guidelines to assist producers and all stakeholders along the production and distribution chain to comply with the regulatory framework, which have or will come into force in response to the Codex Alimentarius Code of Practice on Good Animal Feeding. The publication is intended to guide managers of feedmills and the feed industry as a whole; it is also be of value to officers engaged in feed inspection, with their supervisory roles in feed safety;
- in collaboration with IFIF and national feed industry associations, FAO has organized, since 2005 three Global Feed and Food Congresses (Brazil 2005 and 2007, Mexico 2010); a fourth edition of the Congress will take place in Sun City, South Africa, from 10 to 12 April 2013[6]; within the Congress, FAO and IFIF are also organizing a training session to better comply with the requirement of the Codex Code of Practice on Good Animal Feeding, based on the Manual above referred.

In 2012 FAO has released the following specific publications addressing animal feeding and nutrition:

- Impact of animal nutrition on animal welfare;

[1] http://www.fao.org/ag/againfo/resources/en/pubs_food.html and http://www.fao.org/ag/againfo/resources/en/pubs_aprod.html#3
[2] http://www.feedipedia.org/
[3] http://www.gffc2013.com/?page_id=654
[4] www.fao.org/docrep/012/i1379e/i1379e00.htm
[5] http://www.fao.org/docrep/017/i1379c/i1379c00.htm
[6] http://www.gffc2013.com/

- Conducting national feed assessments;
- Balanced feeding for improving livestock productivity - Increase in milk production and nutrient use efficiency and decrease in methane emission;
- Biofuel co-products as livestock feed – Opportunities and challenges;
- Crop residue based densified total mixed ration - A user-friendly approach to utilise food crop;
- Use of lesser-known plants and plant parts as animal feed resources in tropical regions; and
- Status of animal nutrition research and development activities in Tajikistan, Kyrgyzstan and Azerbaijan; all of them are available online[7].

With regards to the work on criteria for the global identification and notification of emergency situations affecting animal feed, FAO is currently considering existing FAO and WHO mechanism to verify if any of them could adequately serve the purpose, possibly with some modification.

FAO has recently also strengthened its communication and awareness raising activities relative to animal feeding, for instance through the launch of an Animal Feeding Twitter account[8] and a series of dedicated podcasts[9].

Recent WHO Activities

Antimicrobial resistance

WHO has been addressing the public health impact of the use of antimicrobials agents as feed additives, for therapeutic, prophylactic or growth promotion purposes, in a number of expert consultations during the past years. Some of these consultations were held jointly with FAO and OIE. The reports of these meetings are available online[10].

To support prioritization of risks associated with antimicrobial use as feed additives, WHO has developed a list of Critically important Antimicrobials (CIA) for Human Medicine. The WHO list of CIA has been established in 2005 and is updated every 2 years and the latest version (3rd Revision) has been published[11].

WHO also has been conducting capacity building activities for monitoring antimicrobial resistance, the containment of food-related antimicrobial resistance and antimicrobial usage with support from WHO Advisory Group on Integrated Surveillance of Antimicrobial Resistance (WHO-AGISAR). The meeting of WHO-AGISAR is held annually and the meeting report is available online[12].

In the last two years, FAO together with WHO and local institutions, pioneered whole food chain studies in Kenya and Cambodia to assess and quantify microbial contamination and AMR, in order to identify the critical stages at which prevention and control measures could be implemented most effectively. Part of the activities undertaken in these studies included engagement with farmers, supporting them in the adoption of good practices in animal production. Particular attention has been given to the need of preventing the necessity of using antimicrobials as feed additives, by applying effective biosecurity measures, good husbandry practices and ensuring only good quality animal feeds are used.

FAO/WHO joint activities

Ranking of foodborne parasites

In response to a request from the 42nd Session of the CCFH (December 2010) to identify parasite/commodity groups of greatest concern form a food hygiene perspective FAO and WHO initiated a series of activities that culminated in an expert meeting on 3-7 September 2012 which specifically focused on ranking of foodborne parasites. Preceding the meeting, relevant data were identified and a list of 95 potential foodborne parasites was initially identified for consideration. Through a stepwise documented process this was reduced to a list of 24 parasites for ranking. Experts further identified specific vehicles of transmission for each of the 24 parasites. The parasites were ranked using a multicriteria-based approach. Each parasite was scored against 9 criteria and each criterion was then weighted by the experts in terms of their importance. The overall score for each parasite was calculated by normalized parasite criteria scores multiplied by fractional weights and summed.

[7] http://www.fao.org/Ag/AGAInfo/resources/en/pubs_aprod.html#3
[8] https://twitter.com/FAOafeeding
[9] http://vimeo.com/faocast
[10] http://www.who.int/foodborne_disease/resistance/publications/en/index.html.
[11] http://www.who.int/foodborne_disease/resistance/cia/en/index.html.
[12] http://www.who.int/foodborne_disease/resistance/agisar/en/index.html.

The primary outputs of the expert meeting were the development of the ranking tool and the actual global ranking, based primarily on public health concerns, i.e., 85% of weights. The top 10 ranked foodborne parasites and their primary food vehicle in descending order was as follows: *Taenia solium* – Pork; *Echinococcus granulosus* – Fresh produce ; *Echinococcus multilocularis* – Fresh produce ; *Toxoplasma gondii* – Meat from small ruminants, pork, beef, game meat (red meat and organs) ; *Cryptosporidium* spp. – Fresh produce, fruit juice, milk; *Entamoeba histolytica* – Fresh produce; *Trichinella spiralis* – Pork; Opisthorchiidae – Fresh water fish; *Ascaris* spp. – Fresh produce and *Trypanosoma cruzi* – Fruit juices

This ranking should be considered a "picture" in time and representative of the information available at the time, the criteria used for ranking and the weighting which was given to those criteria. With more information or changes to existing knowledge parasite scoring and subsequent ranking could also change. As with many phases of risk analysis, it may be important to repeat and update the process on a regular basis. Since criteria weights were calculated separately from the individual parasite scoring, alternative weighting schemes reflecting the judgments of risk managers could be used to generate alternate ranking, using the scoring of the parasites undertaken by the expert meeting. Thus, the ranking process which was developed was considered to be as important an output of the meeting, since it allows the global ranking to be updated through changes in scoring and/or to reflect the priorities of different groups of risk managers or stakeholders through different weighting. The process can be completely rerun at national or regional levels using data more specific to that particular country or region. Such approaches can also be adapted for ranking and prioritization of other types of hazards relevant to food and feed. The preliminary report is available online[13].

Sampling plans for microbiological hazards

FAO/WHO have developed a user friendly web-based tool (WBT) to assess presence/absence sampling plans and concentration-based sampling plans for microbiological hazards in food and feed[14]. This tool aims to provide those responsible for the elaboration and implementation of sampling plans for microbiological testing as part of their food safety control and verification activities with the means of designing sampling plans that meet their needs and assessing their performance under a range of different contamination levels.

Chemical risk assessment

FAO and WHO have been assessing the risk of chemical substances and contaminants in food including the residues of pesticides and veterinary drugs, through the international expert bodies such as Joint FAO/WHO Expert Committee on Food Additives (JECFA) and Joint FAO/WHO Meeting on Pesticide Residues (JMPR)[15]. The JECFA summary report since the last Session of TFAF in which food additives including mineral oil (medium and low viscosity) classes II and III and flavouring agents such as 2-Aminoacetophenone were evaluated is available online[16]. In JMPR, the latest meeting evaluated Acetamiprid, Ametoctradin, etc. The summary conclusions are available online[17].

In these risk assessments, the implication of contamination of animal feed or feed ingredients on residue levels in food are taken into consideration as appropriate.

Enhanced response to food safety emergencies

Concerning INFOSAN, the coordination and networking with the animal production sector has been strengthened in inviting current food safety contact points of OIE to join the network. Food safety event scanning and verification as well as alerts also include events related to animal feed and petfood, in light of the lessons learnt following the contamination of milk products with melamine.

Data collection on mycotoxins in sorghum

An FAO/WHO project (funded by the EC) began in January 2012 to assist countries in generating data for JECFA to carry out a detailed risk assessment, with a view to the establishment of MLs for selected mycotoxins in sorghum. The project will facilitate an assessment of the types and levels of mycotoxins in sorghum in Burkina Faso, Ethiopia, Mali and Sudan (four major sorghum producing/exporting countries). While the focus of this project is assessing levels of mycotoxins in sorghum intended for human consumption, the results from the survey (samples taken at harvest and during storage) may be of interest to those countries where sorghum is used as an animal feed.

[13] http://www.fao.org/food/food-safety-quality/a-z-index/foodborne-parasites/en/ and http://www.who.int/foodsafety/micro/jemra/meetings/sep12/en/index.html.
[14] www.mramodels.org
[15] http://www.who.int/foodsafety/chem/en/
[16] http://www.who.int/foodsafety/chem/jecfa/summaries/en/index.html
[17] http://www.who.int/foodsafety/chem/jmpr/summaries/en/index.html

In addition to the survey, a “value chain” study will be carried out to collect information on sorghum production systems and practices in each of the countries (e.g. description of the production chain, quantities produced and uses – human consumption, feed, trade, private and public sector controls of sorghum quality and safety, testing and analytical capacities, etc.).

The CCCF is updated at regular intervals, and it is expected that data will be available in 2013.