MINUTES OF THE SEVENTIETH MEETING OF ACAF Held ON 17 JUNE 2016

Present:

Chairman Dr Ian Brown

Members Ms Angela Booth

Mr Geoff Brown

Ms Ann Davison

Professor Stephen Forsythe

Mr Peter Francis

Professor Ian Givens

Professor Wendy Harwood

Mrs Chris McAlinden

Dr David Peers

Dr Tim Riley

Professor Robert Smith

Mr Edwin Snow

Secretariat Mr Keith Millar (Secretary) – Food Standards Agency

Miss Mandy Jumnoodoo – Food Standards Agency

Dr Mark Bond – Food Standards Agency

Mr Freddie Lachhman – Food Standards Agency

Assessors Mr Alan McCartney – Department of Agriculture and Rural

Development

Ms Claire Moni – Food Standards Scotland

Mr Stephen Wyllie - Defra

Mr John Hirst – Food Standards Agency Wales

Officials Mrs Elspeth MacDonald – Food Standards Scotland

Speakers: Professor Brett Glencross – University of Stirling

Mr Alexander Döring – European Feed Manufacturers

Association (FEFAC)

Mrs Jacqui Angus – Food Standards Scotland

1. The Chairman welcomed delegates to the 70th meeting of ACAF and reminded them that there would be an opportunity to ask questions at the end of the meeting. He noted that ACAF had last visited Aberdeen in 2011 and thanked Food Standards Scotland (FSS) for hosting the meeting and invited Elspeth McDonald the Deputy Chief Executive of FSS to say a few words.

- 2. Ms MacDonald welcomed everyone to the meeting and hoped that visits the previous day had been successful. She explained that the FSS had been formed in 2015 and although a separate body from the FSA, it liaised with FSA on various issues. Ms MacDonald noted that as the independent food body for Scotland, the FSS still had its previous remit however with a strengthened role on nutrition. Finally, Ms MacDonald said she looked forward to hearing the work of the Committee.
- 3. Apologies for absence were received from Mrs Karen Pratt (FSA Assessor).

Agenda Item 1 Declaration of Members' interest

4. The ACAF Chairman said that the Responsible Use of Medicines in Agriculture Alliance (RUMA) had asked him to be more active on the use of antimicrobials in both humans and animals. Professor Wendy Harwood confirmed that she had received funding for research from BBSRC. Ms Davison said that she had become a Member of the British Standards Institute's Consumer and Public Interest Strategic Advisory Committee.

Agenda Item 2 – Draft Minutes of the Sixty Ninth Meeting (MIN/16/01)

5. The ACAF Secretariat agreed to check with the Environment Agency the accuracy of the fifth sentence in paragraph 12 of the minutes of the 17 February 2016 meeting.

Action: ACAF Secretariat

6. The minutes were adopted.

Agenda Item 3 –Update on the delivery of official controls of feed law in Scotland

- 7. Mrs Jacqui Angus discussed two main strands of feed enforcement delivery work (the official control model and earned recognition). These strands were considered in Scotland following agreement by the FSS Board in September 2015 and Scotland had carried out its general review of feed in 2015; later than the rest of the UK due to the establishment of FSS.
- 8. Mrs Angus said that in September 2015, the FSS Board had been asked to consider the options for future delivery of official feed controls in Scotland. Audits undertaken by the European Union Food and Veterinary Office (FVO) and the Food Standards Agency had identified that the current system for official controls delivery was not effective and that FSA colleagues in England, Wales and Northern Ireland had taken steps to secure improvements in their respective countries. In Scotland, 31 local authorities are responsible for carrying out feed law official control and enforcement in their respective areas. Although two models of delivery were put forward, one involved regional delivery i.e. delivery through a smaller number of better resourced lead authorities which are led by FSS as a single national body through a formal relationship and the second was a centralised model where FSS delivers all official controls, the former model was accepted by the FSS Board. However, work to progress the regional model could not be taken forward due to resourcing constraints at local authorities. In January 2016 FSS reverted to their Board to recommend that the regional delivery proposal be abandoned in favour of centralising feed controls, (to be delivered by FSS), and that funding would be withdrawn from local authorities at source.
- 9. Mrs Angus pointed out that at present, it was uncertain what the model would look like. She explained that the FSS were engaging with stakeholders on the merits of the following models for consideration by senior management: i) the first is that the FSS employs feed officers. However, it was uncertain if local authorities would agree to this option; ii) to contract the functions to a control body; iii) to revisit the regional model; and iv) to work with other relevant government departments such as Scottish Government and the Veterinary Medicines Directorate. Mrs Angus acknowledged that FSS colleagues agreed that one model may not fit the whole of Scotland, due to geographical constraints and resources. She confirmed that FSS senior management team would be consulted on the proposals in Summer 2016 with a view to implementation of the model by 1 April 2017.
- 10. Mrs Angus also reported that earned recognition was one of the outputs of the Feed Review that took place across the UK in 2012 and 2013. The FSS Board agreed that earned recognition should be implemented in April 2016. She said that the earned recognition scheme in Scotland does not mirror

schemes being implemented in England, Wales and Northern Ireland due to the implementation of a different risk rating system elsewhere that would require significant system changes in Scotland which cannot be supported due to the imminent change of the official control delivery model. The scheme in Scotland, however, reduces the inspection frequency of businesses that are members of assurance schemes.

Discussion

- 11. Following a question from the ACAF Chairman on why Scotland chose a different approach to its feed enforcement delivery to the rest of the UK, Mrs Angus replied that the original preferred model was through a regional basis but this was now not possible.
- 12. One Member of the Committee said that they understood the challenges in devising a different enforcement delivery system which would be fully implemented by 1 April 2017. The member asked when did the FSS envisage that it would make a decision on the framework and have people in place. Mrs Angus responded that a paper would be prepared by end of July for senior managers' consideration. Following senior management agreement, a change in legislation would be made in Autumn 2016, with recruitment and/or contract tenders, followed by training taking place in February and March 2017.
- 13. The ACAF Chairman asked if different assurance schemes were in place in Scotland, Ms Angus stated that the main scheme was run by the Agricultural Industries Confederation. She noted that in England, but not in Scotland the Red Tractor Assurance Scheme was predominant. A member of the Committee asked whether FSS would be working with all concerned to ensure that there is no duplication of visits. Ms Angus confirmed that the aim was to reduce footfall, and discussions with interested parties, to consider combining visits, had already taken place.
- 14. Following a question from the ACAF Chairman on responsibility for enforcement for a company based in both England and Scotland, Mrs Angus confirmed that it would be site specific. The ACAF Secretary stressed that the site specific element depended on the quality of the business and therefore the footfall would be lessened.
- 15.A Member of the Committee commented that the centralisation scheme would bring consistency but needs to ensure that a minimum level of training should be a consideration. The Defra Assessor asked if FSS was aware of the project Defra was undertaking with local authorities to consider reducing the number of on-farm visits. The Defra Assessor also asked whether the Animal and Plant Health Agency was being considered as a partner with FSS. Mrs Angus responded positively to both questions.

Agenda Item 4: University of Stirling presentation

- 16. Professor Glencross introduced paper ACAF/16/07. He said that salmon was Scotland's largest food export and was the second largest food industry after whisky production, with Scottish farmed salmon having a worldwide retail value of over £1 billion. Professor Glencross said that aquaculture now accounted for over 50% of the world's food fish. In salmon aquaculture, feed accounts for over 50% of all operating costs. Professor Glencross pointed out that feed and feeding accounted for the majority of aquaculture's environmental footprint, although studies carried out between 2009 and 2015 had shown that over 90% of some environmental impacts from salmon farming were related to the manufacture and use of feed. Additionally, in 2012 fish production overtook world beef production.
- 17. Professor Glencross said that the production of fish feed was highly complex and that systems in place to manufacture fish feed were similar to those employed for making cat, dog and human food, which also included a number of technical and risk assessments. He explained that animals needed nutrients and energy, not raw materials, outlining that all raw materials have variability issues. Professor Glencross stated that wild fish capture was not able to meet demand and therefore fish farming was the only option. In the long term the use of fishmeal was not viable and that there were alternatives without associated health, quality or productivity problems. changes introduced in 2013 allowed the use of certain animal by-products for use in fish feed. However, many were being used to create energy. Professor Glencross said that in Australia more avian meals were used than fish meals or imported vegetable products in aquaculture. This was sustainable, and reduced the reliance of third country imports. However, to be in a similar position in Europe it would take a significant amount of time and work. He then explained the historical and current legislative position.
- 18. Professor Glencross then provided details of the avian proteins in salmon (APIS) feed project that involved the University of Stirling and other stakeholders, including a retailer and representatives from the salmon industry. The aim of the project included the identification of the perceived versus actual risks on using avian proteins in fish feed; the identification of chemical and biological qualities of UK produced avian protein products (APPs); an assessment of the impact on fish health and fish quality; the determination of the environmental impact of using APPs, marine ingredients and alternatives, and finally to re-evaluate the perceived versus real constraints. Finally, Professor Glencross outlined that the benefits of the work including: environmental savings through more efficient use of UK food byproducts; a reduction of imported ingredients which have sustainability concerns; reduced risks in terms of currency, trade contaminants; improved profitability of rendering and finally cheaper salmon for the consumer.

Discussion

- 19. Following questions from the ACAF Chairman, Prof Glencross confirmed that in the UK, intra-species recycling is banned but not inter-species recycling. Professor Glencross stated that salmon were carnivorous and described the feeding habits for fish in general. The Defra assessor pointed out that although inter-species recycling is not banned in fish, EU TSE rules place restrictions on feeding terrestrial livestock on material derived from e.g. ruminants and other mammals. In response to a question from the ACAF Chairman on whether an avian diet would be foreign to salmon, Professor Glencross commented that it was more appropriate to look at nutrients and other aspects of fish food. Professor Glencross also commented that the use of animal by-products could be better employed as a fish food product rather than just being burned or used in pet feeds.
- 20.A Member of the Committee referred to how consumers think and make rational decisions, and stated that consumers would look at what was natural and would default to past issues and perceived risks. Therefore, any work carried out would need to be transparent on the risk process, especially in light of the history of BSE. Another factor for consideration would be the benefits to consumers in terms of price. The Member asked about the use of insects and colouring in salmon feed. Professor Glencross responded that all the pigments used in the UK are natural yeast products. Additionally, insect proteins offer potential opportunities at the start of the life cycle of salmon but the volume of insect production is not sufficient to meet industry needs. It was possible that by 2020 the situation may have changed. He also noted that with regard to consumer sentiment, the survey carried out in 2008 indicated that nearly 50% of consumers had no preference nor concern about the type of diet that farmed salmon would be given. However, he suggested that it was probable that this attitude had possibly changed but price was likely to remain the main driver in any consumer deliberations.
- 21. Another Member of the Committee asked which parts of the birds would be fed to salmon, assuming that there was no competition between human and animal feed. The Member also asked about the use of long chain omega 3 and the use of vegetable oil. Professor Glencross said that the key materials are frames and feathers, offal and blood. In some cases offal and blood are combined. The University of Stirling had led work on diluting fish oil with vegetable oil and in the UK, rapeseed oil (with 25% fish oil) was mainly used. The project at Stirling had seen the use of omega 3 reduce by 50%. Other alternative oils included microwaveable oils, first used in infant formulae, and genetically modified algae. The Committee Member noted that Omega -3 content was higher in farmed salmon than in wild salmon.
- 22. Another Member of the Committee asked how the omega-3 requirement was managed in salmon fed on zero fishmeal as well as the possible role of GM crops. Professor Glencross replied that when fishmeal was added, the composition was 10% oil by weight of which 30% was omega 3. Fish meal was less important than fish oil for omega 3 in the diet.

- 23. Another Member of the Committee raised the question of assurance of transmissible agents, namely were there any agents that could pose a risk to human health and what evidence existed on consumer perception of risk in this area? Professor Glencross said that research had so far demonstrated that there were no TSE/BSE transmission agents that could cause risk to human health in fish. He confirmed that the University of Stirling project would revisit the results of the consumer attitude survey and update as necessary. The Committee Member commented that there would be a need to see further evidence on transmissibility to allay any concerns. Following a question from the ACAF Chairman, Professor Glencross confirmed that he was not aware of any issues being raised on prion related disorders occurring in fish species.
- 24. Following a question from another Member of the Committee on a possible withdrawal period being introduced prior to slaughtering, Professor Glencross stated that fish were always feed restricted before harvest. However, he was unable to comment on the situation for the poultry chain.
- 25. Another Member of the Committee asked what was the existing level of fishmeal used in the UK aquaculture industry? The Member understood that the aquafeed industry used non-GM soya. Salmon had problems with eating soya. The Member asked why the project was only looking at avian not porcine protein products, and stated that the European Commission is carrying out a lifecycle analysis (LCA) project on fish products, and asked what methodology the University of Stirling was proposing to adopt. Professor Glencross was unable to answer the question on LCA, as this was being undertaken by a socio-economist. However, he did add that getting the acceptance of the use of avian protein products would be easier and more palatable to society in the short-term. Additionally, the current level of fishmeal (in aquaculture) use in the UK was 15-25%.
- 26. Another Member of the Committee stated that 100,000 tonnes of avian products remained unused, and asked what was happening with this unused product. Professor Glencross said there was an opportunity for costs to be co-generated between power production and pet foods, and that the project by Stirling University would be considering where the value was within the relevant chains.
- 27. Alexander Döring drew the Committee's attention to the mixed experience of EU fish feed manufacturers that had used non-ruminant processed animal proteins, (PAP) as feed material since the EU feed ban was lifted in June 2013. He explained that more than 50 RASFF information notifications had been submitted by central competent authorities regarding the presence of trace levels of ruminant DNA in fish feed or feed materials used in fish feed production, leading to blockages and withdrawal orders for fish feed consignments. These positive testing results had been obtained by applying the European Union Reference Laboratory Standard operation procedure

(EURL- SOP) of the new official Polymerase Chain Reaction (PCR) ruminant testing method which must be applied only for fish feed containing non ruminant PAPs. Traceability investigations had shown potential sources of cross-contamination via different feed materials (e.g. blood meal, fishmeal, trimmings and tallow). FEFAC had requested DG SANTE and the European Union Reference Laboratory to set a Reference point for action for national reference laboratories as part of the SOP, whilst realising that the methodological difficulties that need to be overcome as the official PCR method is purely a qualitative method.

28. The ACAF Secretary thanked Professor Glencross stating that the presentation had been very interesting and relevant to the work of the Committee. On behalf of the Committee he asked for a future update on developments.

Action: ACAF Secretariat

Agenda Item 5 - On-farm feeding practices

- 30. Ms Booth, Chairman of the sub-group, reported it had been a mammoth task to review the 2003 document. She thanked everyone for their input in revising the document and emphasised that the aim of the review was to improve and highlight areas of new risks, such as hobby farms.
- 31. In moving forward, Ms Booth suggested the document should be reviewed in 2018 and that it should be noted that the industry had improved significantly in controlling feed safety risks. The feed safety risks would not disappear, they were just being better controlled. Since the publication of the 2003 report, improvements in the control of feed safety risks had been made and that, in the future, there would be new challenges to tackle. However, the fundamental reasons for having the controls should not be forgotten.

Discussion

32. The Chairman agreed that the document was an excellent piece of work; however, an acknowledgement of who contributed to the review was missing and the preface needed to be signed. The ACAF Chairman also asked how the document was being publicised. The ACAF Secretary said the document was on the website and that links would be placed on other websites, adding that the document would be used by feed business operators, feed enforcement officers, lay people and academics. He added that the European Commission's FVO would undoubtedly give the Committee a 'pat on the back'. He asked the consumer representative to draw attention to the document through her various networks.

Action: Consumer Representative/FSS/ACAF Secretariat

- 33. Elspeth MacDonald said that the FSS would place a copy of the document on its website and would also advertise the document at the Royal Highland Show.
- 34. Finally, the ACAF Chairman noted that this was a living document that needed to be reviewed periodically as suggested by Ms Booth.

Agenda Item 6 - FEFAC

- 29. Alexander Döring introduced paper ACAF/16/09 stating that the feed industries were champions for recycling although pitfalls remained. Animal nutrition was seen as a key pillar in feed safety and sustainability. He said that FEFAC had clear visions for feed safety management; animal nutrition and sustainability which were adopted at FEFACs 2016 congress.
- 30. Mr Döring provided details of past incidents to demonstrate the challenges and potential issues with recycling. These included incidents involving feed borne diseases, zoonoses, residues of veterinary medicines, PCB/dioxins, melamine and aflatoxin contamination. Mr Döring said that FEFAC had welcomed the EU Circular Economy, which included revised legislative proposals on waste to stimulate Europe's transition which would boost global competitiveness, foster sustainable economic growth and generate new jobs. He noted that feed manufacturers were experts in converting co-and byproducts from other processing industries into feed. Examples include citrus pulp, brewers' and dried distillers grains from the brewing and spirit industries. FEFAC had been lobbying for the changes to the Waste Framework Directive. However, it was opposed to the potential of catering waste (pig swill) being used as animal feed.
- 31. He asked the Committee to agree to a formal consultation and evaluation of the circular economy proposal, which proposed the exclusion of feed materials from the scope of the EU Waste Framework Directive. Mr Döring also requested that Defra/FSA undertake a risk assessment of swill (including an evaluation of a study carried out in 2015).

Discussion

- 32. The ACAF Chairman asked if there was a forum (global/national) that considers recycling biology. Mr Döring responded that the FAO¹ and UNEP² are considering recycling. He considered that in Europe, the bio-economy approach needed to be considered.
- 33. A Member of the Committee asked if ACAF should consider endorsing the suggestion made by FEFAC. Another Member of the Committee also asked about the use of fertilisers and biostimulants in recycling. Mr Döring said that prior to the publication of the Circular Economy, the European Commission had presented proposals on fertilisers. The Regulation set out common rules on converting bio-waste into raw materials that could be used to manufacture fertilising products. It defines safety, quality and labelling requirements that all fertilising products needed to comply with if they are to be traded freely across the EU.
- 34. A Member of the Committee raised caution about recycling inorganic waste, adding that the feed industry needed to identify the source of the materials it used to minimise feed safety issues. Mr Döring said that the Commission estimated that the total amount of food waste is 88 million tonnes and the feed industry used approximately 90 million tonnes of co-product.
- 35. Finally, the Committee empathised with the issues raised by FEFAC.

Agenda item 7 – Matters arising from the minutes of previous meetings

Refuse Derived Fuels

36. The ACAF Secretary noted that the issue of refused derived fuels (RDF) was first drawn to his attention by the Grain and Feed Trade Association. RDF can be defined as material produced from waste that has undergone some sort of treatment process, and intended for use as a fuel. There was an increasing trade of RDF being exported to Europe, the majority being sent to Sweden. However, there were limited controls on this waste, which was often stored at docks near feed and food. The ACAF Secretary said that he would be visiting Tilbury (the largest UK port exporting RDF) to discuss the issue with a view for the Committee to draft good practice guidance with assistance from Defra and other relevant departments. The ACAF Secretary confirmed that the subject would be explored further at the Committee's October 2016 meeting.

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¹ Food and Agriculture Office

² United Nations Environment Programme

Agenda item 8 - Any Other Business

- 37. No issues were raised under this item.
- 38. The Chairman once again thanked FSS for hosting the meeting.

Information Papers

- 39. The ACAF Chairman drew the Committee's attention to the following information papers:
 - EU Developments (ACAF/16/10); and
 - Update on the work of other advisory committees (ACAF/16/11).

Date of the next meeting

40. The next meeting will take place on 27 October 2016 in Aviation House, London.

ACAF Secretariat

September 2016

Questions & Answers

University of Stirling - Presentation

Toby Parker (United Fish Industries) – questioned the negative attitude towards fishmeal and pointed out that in the production of fishmeal and fish oil the UK and Ireland, in excess of 200,000 metric tonnes of fish per annum is processed. Of this total, 70% plus is by-product from the human food industry, nearly all from supermarket and retailer approved sustainable fish stocks. Professor Glencross responded by saying that he was not negative towards fishmeal or fish oil, but that there was simply insufficient material for the future demands of a growing farmed fish industry.

Mr Parker added that:

- •globally, 33-35% of all fishmeal and fish oil is now produced from marine by-products;
- •in the UK and Ireland this 200,000 metric tonnes of raw material will yield some 42,000 metric tonnes of fishmeal and 14,000 metric tonnes of oil which would make the UK 50% self-sufficient in fishmeal and fish oil were it all to be fed in the UK and Ireland.
- •the UK fish rendering industry does process salmon by-product often referred to as trimmings, these are batch processed and sold in distinct lots away from the salmon feed industry;
- •the yield (the weight going to primary consumption) as percentage of weight from a whole salmon is just over 50%, the by-product is sent for i) export globally for human consumption ii) for pet food production iii) to renderers such as United Fish Industries to manufacture fishmeal and fish oil;
- •annual fish oil global production is now about 855,000 metric tonnes in total, not one million metric tonnes as reported. 22-25% of this oil is now sold for human consumption, mainly for the production of fish oil capsules, food / feed additives and cosmetic products;
- •salmon oil is now being fed back to salmon in controlled circumstances in certain parts of the world;

[Professor Glencross stated that the Stirling University consortium needed to work with consumers on the acceptance of avian protein in salmon feed diets, as the fishmeal industries have found that it is not the consumer that decides these matters

but the retailer, or supermarkets. This statement mirrors comments made by Alexander Döring.]

- •a large percentage of the avian meat and bone meal available currently in the UK is despatched into the pet food industry, competition from the aqua feed industry will just drive up prices;
- •as regards diluting fishmeal content in aqua feed rations, Scotland and Ireland have developed a niche for premium brands of salmon especially organic products. Many of these organic brands require a higher inclusion of fishmeal and fish oil. It is this higher inclusion of marine ingredients that distinguishes it from other global labels and allows premium prices to be maintained; and
- fishmeal, and to a much lesser extent fish oil, are withdrawn from a chicken rations at a very early age. Fishmeal is incorporated into chick starter rations as it gives the bird a blueprint for rapid growth. Carry-over of fish related feed problems, back to fish, through the use of avian protein would be highly unlikely as the birds spend much of their life with a fish free diet.

Presentation by FEFAC

Paul Featherstone – (SugaRich and Chairman of UKFFPA and EFFPA) – commented that there would be risks to the feed chain posed by the Circular Economy. The worldwide movement towards greater recycling would continue to drive challenges in feed risk, with the introduction of novel products onto the market. The former foodstuffs sector would wholly support the FEFAC view that the reintroduction of using pig swill would be unacceptable and unsafe for the UK and wider European livestock sector.