Welcome from FAO and IFIF and presentation of participants Berhe Tekola (FAO) and Joel Newman (IFIF) Emphasized the long standing partnership. Recognised presence of China feed Ind Assoc for first meeting. Animal health, regulatory issues (Codex), environmental foot prints(LEAP), sustainability (SFIS etc), green house gas emissions (solutions illustrate possibilities), feed safety, AMR are amongst issues- partnership ensures we work together to find the best solutions including IFRM.

Review of FAO and IFIF work plan 2017
Daniela Battaglia (FAO) and Alexandra de Athayde (IFIF) Refer summary and FAO publications. Noted particularly role of pre, probiotics in feed efficiency/AMR alternatives. Refer also feed safety via www.fao.org/feed-safety/en/

Key feed industry issues in China: China Feed Industry Association (CFIA) Chen Dan (Executive Vice President) Noted 206 Million T in 2016. 51 enterprises > 500kt which is 63% of total output. Corn and SBM are most important ingredients. (also biggest global importer of these plus fish meal). Compound feed growing 1.5% annually and premixes greater than this. Feed demand is slowing, continued import of protein ingredients, stricter feed quality & safety and industry integration (10,000 > 6000 enterprises and estimated further reducing to 4000- due to greater efficiency). Forward expectation growth around 1.9%. Pork around 4% and poultry 2% growth. Pressures on producers to comply with environmental risks. Focus also on integrated chains in production in future. Total yield target is 220 M T. Chickens 1.6:1 pigs 2.7:1 are targets. Focus on efficiency of environmental use, R&D especially feed additives and feed processing efficiency, improve international competitiveness via larger feed enterprises. Seeking to learn from global assocs in these processes. China enterprises focus on R&D (5% expectation of enterprises expenditure) and labour efficiency. Recognised importance of foreign enterprises (CP noted). Meat production is largest in world. Feed safety- includes raw materials, feed mill skills, feed equipment, product inspection and industry standards. As chair of Evergreen Co (not Gov’t) can verify these changes. Consumer views of progress- greatly improved food safety (not now big focus) due regulations in place and inspections. Seeking biggest co-operation from SE Asia due similar culture but Africa is greatest challenge due to stage of development. Large scale enterprise developments are key as evidenced by recent growth and skills development.

General Session 1: Regulatory and International Standards
Chair: Daniela Battaglia (FAQ)

Codex Alimentarius work relevant to animal feed Annamaria Bruno (Codex Secretariat) Update report- MRLs for lasalocid sodium, ivermectin and feflubenzuron. Work of ergots etc AMR and other issues. New board members noted. Main work includes AMR broadening of scope along food chain & harmonized approach. Noted next meeting in Korea late Nov. other committees include vet drugs in food- recommendations from JECFA incl risk management and MRLs for fish species, edible
offals, etc. Unintended presence of vet drugs if food commodities and carry over- incl risk management recommendations. See FAO website for lists of data assembled on drug residues. Aim to update Code of Practice (Good feeding guide) on dioxins & pesticide residues. Work on import and export certification systems- meeting late Oct in Australia....also accessed by webinar. Codex has an electronic WG for access by invitation.

**IFIF Regulatory Committee work**

Karine Tanan (Regulatory Committee Chair) Introduced IFIF and membership. Mentioned IFIF mission and strategic pillars including GHS and Contaminants projects. Importance of regulatory Standing Committee on “think tank” and selection of current projects. Referred to Codex participation, AMR, ISO (request for representation on specific areas of interest- focus on terminology).

**IFIF Guidance for implementing Global Harmonized System (GHS) project** Karine Tanan (GHS Chair) IFIF chose 2 projects on GHS and Contaminants to proceed. GHS is UN attempts to classify and manage hazards globally in feed ingredients especially on implementation. Work progressing into 2018 with support of a consultant. Seeking to share information via webinars in due course.

**IFIF International standards for contaminants in feed project** John Aird (Contaminants Chair) See presentation and initial draft report on Contaminants. Report is a drafted database for feed contaminants which requires IFIF to adopt, seek additional data (from its members) and publish the database for use by members (and perhaps others). Further discussion is expected at Regulatory Committee and also project committee members (probably by teleconference following this meeting).

**International Cooperation for Convergence of Technical Requirements for the assessment of feed ingredients (ICCF)**

Melissa Dumont (ICCF Chair) Philippe Becquet presented. Focus on closing gaps between jurisdictions. ICCF formed to include jurisdictions, regional associations and IFIF. (Canada, US and EU). ANAC is Chair (Melissa) secretariat is IFIF. Work will be via Expert WG’s to draw together information from members. An example of work includes stability testing of feed ingredients and oral toxicity in lab animals....both EWG are being formed. Possible early results at IFRM in Jan 2018....!

**11th International Feed Regulators Meeting (IFRM), Atlanta, January 2018 Alexandra de Athayde (IFIF) and Daniela Battaglia (FAO).** Includes standing items such as regulatory updates, Codex, FAO/IFIF updates. Specific sessions on sustainability, feed production etc. Focus on a specific theme such as AMR and use again of the “World café” as workshop format (as used last year). Other suggestion sought- risk assessment approach & inconsistencies (perhaps- sharing best practices as example), better share between industry and regulators- eg convergence project as good example, adaptation of regulatory frame to complement implementation of innovation and new technology and claims perhaps by example, fast track example “soft claims” as adapted by Australia.

**General Session 2: Sustainability**

*Chair: Daniel Bercovich (IFIF)*

**Presentation on Brazilian Tech driven Sustainability Programme Roberto Betancourt (Sindiracões)** Brasil has a significant areas where development is not permitted...eg Amazon where 80% is preserved. GPS systems are used to manage illegal land use....big brother! Demonstrates Brasils commitment to
preservation...farming is only 22% of land area, preserved areas within private properties are 74%! Hence productivity important as land area cannot expand. Grain production efficiency raised 157% since 1990. Legal and social pressures ensure compliance. Young people attracting to Ag Sc particularly females adds significantly to technology and productivity!

**Update on the Global Feed LCA Institute (GFLI) Mike Goble** (GFLI Chair) - Establish global reference for LCA data via a public database. Current coverage is US EU and China and added fish feed as new category...looking to add China Brasil and Aust. Website available at [www.globalfeedlca.org](http://www.globalfeedlca.org) launched in 2017. Aim is to create a sustainable long term business model covering 70% of global feed production.

**Update on the Specialty Feed Ingredients Sustainability (SFIS) project** Philippe Becquet (SFIS Chair) Preliminary results- Phase 3. Approaches incl modification of formulations, increase energy content and effects on FCR, mortality & growth. Impact of feed additives on Global warming potential is small but significant- range 3-5% on well balanced diets! Improvements of feed efficiency mitigates environmental footprint of livestock. Looking to evaluate results scientifically, external review and potential publication of outcomes....contribute to LEAP outcomes.

**Update on Livestock Environmental Assessment and Performance Partnership (LEAP +) and TAG on Feed Additives** Camillo De Camillis (FAO) multi stakeholder partnership hosted by FAO via Tech Advisory Group to build consensus on environmental performance of livestock supply chains. Global perspective, science based and use consensus and seeking harmonization, transparency and continuous improvement. Focus on green house gas reduction and efficiency. LEAP+ has broadened scope and taking steps toward sustainability via guidelines- nutrient flows, water use, soil carbon changes, biodiversity & impact assessments on use of feed additives. Seeking to complete report by Dec 2018. Longer term target is to develop a link between grassland agric and carbon storage with focus on positives of ruminants.

**Update on the Global Agenda for Sustainable livestock** Henning Steinfeld (FAO) Seeks continuous improvement in livestock sector. Established goals in 2016- platform for dialogue, tools & frameworks and seek change via continuous improvement- practice change. Ruminant production and impact of methane emissions....efficiency is key to reducing effects viz production! Efficiency can have dramatic effect per quantum of product! Also noted that there is no agreed global guideline for measuring changes in soil carbon- an opportunity for the future. Focus at FAO is on nutrition-proper & nutritious food consumption not too little but also balanced and not about reducing animal protein consumption.

**General Session 3: Education, training and capacity development**  
*Chair: Alexandra de Athayde (IFIF)*

**Update on FAO-coordinated Feed Safety Multi-Stakeholder Partnership Daniela Battaglia** (FAO) Target to strengthen capacities to produce safe feed. Driven by Steering Group and Partnership launched in 2016. Database available and forum to share information on FAO website.  

**Update on IFIF Global Animal Nutrition Programme: Train the Trainer Alexandra de Athayde (IFIF)** Target is to
expand global coverage/membership and commitment to feed safety. Hence created Code and need to promote its use. Program 2017 incl training in Tanzania....little existing knowledge of feed safety or standards. Perhaps IFIF might consider proactive development of the program via capacity development program and existing FAO resources.

6th Global Feed & Food Congress, Bangkok, Thailand 10-13 March 2019- Congress theme discussion Alexandra de Athayde (IFIF) and Daniela Battaglia (FAO) Formal announcement due later in Oct ...dates as above. Official IFIF event partnered with FAO. Seeking support and possible membership of Thai feed Assoc. and seek their perspectives on themes which engage with Asia.
General Session 4: Antimicrobial resistance
Chair: Daniela Battaglia (FAQ)

Update on FAO activities against antimicrobial resistance Sarah Cahill (FAO) Noted increased pressure on animal agriculture to “curb” use of AB’s. FAO published self assessment survey with nearly 80% response rate. Most major meat producing countries have a plan/surveillance in place....more focused in higher income countries. Practices to reduce incidence of infections greater also in higher income countries. Stewardship framework being developed and tabled for discussion at meeting early Nov in Geneva. Codex seeking experts and data to support their work. FAO fully engaged in Codex processes. Legislation- many gaps to support reduction endeavours. FAO seeking to have data available on options for review. Good practices to reduce need/use- FAO calling for good practice guidance where available as part of their review. Awareness- need to change agric practices- call for case studies from feed industry. 13-19 Nov = World awareness week AMR! Discussion included: Good practices- innovate- sustainable systems- phase out use as GP’s. Need to separate substances that provide an antibiotic affect and are not subject to resistance- eg acids. Terminology tends to be too generalized and could be better refined. Focus on medically important AB’s subject to resistance!

General Session 5: The way forward

FAO IFIF in 2018 and beyond - Discussion of FAO IFIF work plan 2018-2019, summary and conclusions Joel Newman (IFIF) GFFC noted as opportunity to make leadership agenda to support IFIF activities- feedback sought! Important to focus on how IFIF/FAO can make a difference. Ie set measurable goals! Daniela Battaglia (FAO) Noted better meeting than last time- lots of positives. Berhe Tekola (FAO) Noted IFIF commitment in support of deliverables and special thanks to retiring Pres Joel Newman.