In 2050 there will be over 9 billion people in the world... and the need for food will be 60% higher than today.

It is vital that the feed sector, as well as the wider agricultural chain, can meet future demands in a sustainable, safe and affordable manner, while maintaining consumer trust and confidence in the food supply chain.
Welcome Letters

DR. DANIEL BERCCVICI
Chairman IFIF 2018/19

The feed industry is at the center of one of the most significant challenges facing society in the decades to come: how to feed a growing world population and to do so safely, sustainably and affordably.

+ READ MORE

ALEXANDRA DE ATHAYDE
Executive Director IFIF

IFIF has continued to focus strongly on our vision and mission with our work centered on three strategic pillars, which reflect the key priorities of IFIF to support our industry on the road to the future.

+ READ MORE
Dear IFIF Members, dear friends and colleagues,

The feed industry is at the center of one of the most significant challenges facing our societies in the next decades: how to feed a growing, urbanizing, world population expected to reach over 9 billion by 2050 and do so safely, sustainably and affordably. Looking ahead, as many of you know well, demand for livestock products will continue to increase over the decades to come.

In meeting these future demands, I believe sustainability - produce more with using less high-quality and safe livestock products at an affordable cost under efficient production systems - is not optional.

Animal nutrition has a role to play to develop even better livestock farming for the human population, the planet environment, animal health and welfare under diverse production systems around the world. I believe that science-based standards must be further constructed and implemented to evaluate the quality of products and their contribution to a better human and animal health, as well as the solutions to mitigate the environmental impact of livestock farming. I believe this is what consumers need and request.

At the same time, we have to invest in the development of innovation and technology through a dynamic private sector and public research, in conjunction with an adequate regulatory frame and fair trade rules. Together, we can tackle the challenges of the animal nutrition to support the production of nutritious, safe and healthy foods.

I am pleased to report that the International Feed Industry Federation (IFIF) is fully engaged in meeting these challenges and providing a unified leadership for our industry in the food chain that provides sustainable, safe, nutritious and affordable food for a growing world population. And through all of this do our part to ‘feed the world’ now and in the future.
As you will see in this IFIF Annual Report 2018/19, our Federation is working on a number of strategic projects, which will positively impact the environmental footprint, the international regulatory framework, as well as the efficiency of our sector, while supporting capacity development for feed safety in key world regions.

In 2018 and 2019 our Federation has gone from strength to strength.

In March 2019 many of you joined us for the 6th Global Feed & Food Congress (GFFC) in Bangkok, Thailand. Together with 300 high level delegates and speakers we discussed the ‘The future of Feed & Food – are we ready?’ Based on our excellent discussions I am proud to say the GFFC can rightly claim to be the leading global platform to discuss critical issues of food and feed safety, technology and sustainability. Thank you to all IFIF members and our Sponsors for supporting such a world class forum.

In 2018 and 2019 we held two successful International Feed Regulators Meetings (IFRM) organized by IFIF together with Food and Agriculture Organization of the United Nations (FAO) and I am very pleased this meeting continues to grow and attract government officials and IFIF members from around the world.

The success of our joint IFRM, as well as our long-standing partnership on capacity development in feed safety and spreading of good feed manufacturing practices, are just two highlights of the strong collaborative relationship between IFIF and FAO dating back many years.

IFIF is also an active participant in the FAO-led Global Agenda for Sustainable Livestock, and an official stakeholder in the Livestock Environmental Assessment and Performance (LEAP) Partnership. IFIF will continue to be strongly engaged in these efforts and I am very pleased that LEAP this year finished an important guidance document on feed additives, which our IFIF experts contributed to.

IFIF also strengthened its long-standing relationships with the Codex Alimentarius Commission, the World Health Organization (WHO) and the World Organization for Animal Health (OIE).

Over the last two years, we launched a number of important new initiatives, which will benefit not only IFIF members, but also the wider feed chain.

For example, in May we launched our first ever IFIF e-learning course on ‘Good Production Practices in the Feed Industry’, an online training programme based on the IFIF FAO Feed Manual of Good Practices for the Feed Industry, which focuses on increasing safety and feed quality at the production level.

This further expand the reach of the successful IFIF Global Animal Nutrition feed safety training programme ‘Train the Trainer’, which has reached over 150 participants in emerging markets since 2016.
IFIF FAO Feed Manual of Good Practices for the Feed Industry, which focuses on increasing safety and feed quality at the production level.

This further expand the reach of the successful IFIF Global Animal Nutrition feed safety training programme ‘Train the Trainer’, which has reached over 150 participants in emerging markets since 2016.

In 2018 we established the IFIF working group on Nutritional Innovation, which has already highlighted how the feed sector plays a critical role in supporting animals’ optimal health with high resilience capabilities to stressors through safe and high-quality feed (feed formulation and processing) and access to nutritional innovation.

Each of these initiatives and our successes would not be possible without our IFIF members’ engagement in our expert committees, as well as the support of the IFIF Board of Directors and the IFIF Executive Committee. I want to thank all of you for your involvement and your continued support of our Federation.

Finally, over the last two years, our Federation continued to increase its membership and geographical reach and I want to again welcome all our new Members to the IFIF family!

I want to thank Alexandra de Athayde, IFIF’s Executive Director, for her leadership and together with Sebastian Csaki, for their continued excellent work and dedication to IFIF.

It is an honor and a pleasure to serve as your Chairman and I want to thank all of you for your continued trust to lead IFIF over the next two years. IFIF is on a strong footing and I know that together we will continue to work to meet future challenges and advance our industry for the benefit of consumers worldwide.

Yours sincerely,

Dr. Daniel Bercovici  
Chairman 2018 – 2019  
International Feed Industry Federation
Dear Members, dear Colleagues,

The last two years IFIF has grown even stronger and I am pleased to report that in 2018 and 2019 our Federation initiated and participated in a number of important activities, while strengthening our relationship with key stakeholders across the chain, and solidifying IFIFs position as the voice for our industry globally.

IFIF has continued to focus strongly on our vision and mission with our work centered on three strategic pillars, which reflect the key priorities of IFIF to support our industry on the road to the future.

This 2018-2019 IFIF Annual Report highlights the work we have undertaken and details our accomplishments and how we have managed to positively impact our industry by working together with our members and stakeholders.

This report also includes updates from all our national and regional association members, including feed and livestock production statistics, and I want to thank all of them for their contributions.

The IFIF family continues to grow and I want to recognize our new IFIF members, which joined in the last two years. These organizations all are continuing to IFIF mission and vision and we thank them for supporting IFIF’s work:

AB Agri, Arasco, CALYSTA Inc., Chamber of Feed Industry at the National Business Association of Colombia (ANDI), Delacon, Dupont / Danisco, FAMSUN, Nigerian Feed Industry Association (FIPAN) and Pancosma S.A.

I want to thank our dedicated 2018-2019 expert standing Committee Chairs Karine Tanan (Regulatory), Ruud Tijssen (Sustainability), Reinder Sijsma (Nutritional Innovation) as well as all the Members of our expert Committees and Working Groups for their support and expertise, which underpin IFIF’s accomplishments.
I want to thank our dedicated 2018-2019 expert standing Committee Chairs Karine Tanan (Regulatory), Ruud Tijssen (Sustainability), Reinder Sijtsma (Nutritional Innovation) as well as all the Members of our expert Committees and Working Groups for their support and expertise, which underpin IFIF’s accomplishments.

Finally this report provides an accounting of our organization’s structure, our membership, as well as our Board of Directors and Executive Committee.

I want to thank our Treasurer, Reinder Sijtsma, for his diligent and continued oversight of the Federation’s finances.

I want to thank our Chairman for 2018-2019, Daniel Bercovici, for his great leadership of IFIF over the last two years and his dedication, value and expertise, and I am delighted that he was unanimously elected to a second term for 2020-2021 as Chairman by the 32nd IFIF General Assembly in Rome in October 2019.

Last but not least, I want to thank our dedicated Executive Committee and our entire Board of Directors for their continued and strong support of IFIF’s mission and work.

**Pillar I: Sustainability**

One of the key parts of IFIF’s mission is to continue to support and encourage the sustainable development of animal production. To this end, IFIF has developed a number of strategic initiatives to measure and benchmark the environmental performance of the livestock production chain.

Our IFIF Sustainability Projects Steering Group composed of high-level experts drawn from our membership, continued its works over the last two years to closely align and cross-leverage our existing sustainability initiatives, while providing thought leadership for IFIF in this critical area.

IFIF continues to provide leadership and expert input to the multi-stakeholder FAO-led sustainability initiatives, including the Global Agenda for Sustainable Livestock and the Partnership on Livestock Environmental Assessment and Performance (LEAP). In 2018 and 2019 IFIF worked to support LEAP+, both through our work in the Steering Committee, as well as by providing IFIF expert to the LEAP Technical Advisory Group (TAG) on, as well feed additives. We will continue to support this important through 2020 and facilitate the adoption of the LEAP feed additive guidance, including though linking it with the Global Feed LCA Institute (GFLI).

IFIF is a founding member of the Global Feed LCA Institute (GFLI), which is working to use the LEAP methodology to develop a global standard for assessing and benchmarking feed industry impact and improvement in LCA calculation and we remain committed to support the broadening of this initiative to other world regions.

We continue to support the Specialty Feed Ingredients Sustainability Project (SFIS),
We continue to support the Specialty Feed Ingredients Sustainability Project (SFIS), which is now in Phase 3, and has now completed Phase 3. The aim is to achieve a harmonized approach for the assessment of the use of SFIs in animal feeding on a cradle to farm gate approach and I am very pleased that SFIS was able to provide a helpful base for the development of the LEAP feed additive guidance.

**Pillar II: Regulatory & International Standards**

Another key part of IFIF’s mission is to support worldwide trade and ensure that future demands for feed and food can be met efficiently. IFIF works to promote a balanced regulatory framework to support a fair global playing field to facilitate market access and support the competitiveness of the feed and livestock industries.

The 11th and 12th International Feed Regulators Meeting (IFRM) organized by IFIF in cooperation with the Food and Agriculture Organization of the United Nations (FAO) once again brought together record numbers of feed industry representatives and government officials from around the world to discuss critical issues facing the feed sector with IFIF and the FAO. The 12th IFRM was held in Bangkok right after our very successful 6th Global Feed & Food Congress (GFFC) and the excellent meeting attracted regulators from Asia and from around the world.

IFIF is a founding member of the International Cooperation for Convergence of Technical Requirements for the Assessment of Feed Ingredients (ICCF) and I am happy to report this important international cooperation has continued to grow and produce important and well received public guidance documents.

IFIF holds an official liaison status with the International Organization for Standardization (ISO) Technical Committee ISO/TC34/SCI10 to work on animal feeding stuffs – this was completed in 2019 and IFIF has supported the work of ISO/TC34/SC10 to ensure that it is aligned with other international initiatives related to animal feed terminology.

IFIF also joined global regulators at the annual Sessions of the Codex Alimentarius Commission (CAC) in 2018 and 2019, where together with the FAO, we kept feed safety on the agenda. IFIF was also actively involved in a number of important Codex Working Groups and we will continue to provide expert input into the various Codex WGs in the year ahead.

IFIF joined the World Organisation for Animal Health (OIE) 86th and 87th General Session, highlighting our on-going support in the development, updating and implementation of OIE standards and guidelines to contribute to improved animal health and productivity.

In 2018 we launched a new IFIF working group on Nutritional Innovation to, which among other things has already highlighted how the feed sector plays a critical role in supporting animals’ optimal health with high resilience capabilities to stressors through...
In 2018 we launched a new IFIF working group on Nutritional Innovation to, which among other things has already highlighted how the feed sector plays a critical role in supporting animals’ optimal health with high resilience capabilities to stressors through safe and high-quality feed (feed formulation and processing) and access to nutritional innovation.

**Pillar III: Education & sharing of Best Practices**

A third key element of IFIF’s mission is to support sharing of good practice and to promote science-based solutions for the feed industry and facilitate dialogue among key stakeholders.

I am pleased to report that in 2019 we launched the IFIF e-learning course ‘Good Production Practices in the Feed Industry’, an online training programme based on the IFIF FAO Feed Manual of Good Practices for the Feed Industry, which focuses on increasing safety and feed quality at the production level. IFIF partnered with the e-learning training platform Anpro Campus to develop the e-learning course to further expand the scope of the successful IFIF Global Animal Nutrition feed safety training programme ‘Train the Trainer’, which has reached over 150 participants in emerging markets since 2016.

The IFIF feed safety trainings use the IFIF FAO ‘Feed Manual of Good Practices’ for the Feed Industry based on the Codex Code of Practice on Good Animal Feeding as a basis for the training materials. Supported by the Standards and Trade and Development Facility (STDF) of the World Trade Organization (WTO), the feed manual is available in Arabic, Chinese, English, French and Spanish and remains a relevant document to help support better standards, particular in developing economies.

IFIF is a founding partner of the FAO-led Feed Safety Multi-Stakeholder Partnership, which was formally launched in April 2018 and aims at improving the safety of feed, and thus enhancing food safety, animal health and welfare and food security.

In March 2019 many of you joined us for what turned out to be an excellent 6th Global Feed & Food Congress (GFFC) in Bangkok, Thailand. The 6th GFFC attracted over 300 high level delegates and generated excellent and animated discussion under the theme ‘The future of Feed & Food – are we ready?’

Over 35 world-class speakers, including CEOs, leaders, and experts from global feed and food companies, international organizations and the scientific community, provided their insights and expertise at the 6th GFFC sessions that covered key aspects of the future of the feed and food value chain, with a special focus on the digital revolution in agriculture, sustainability, feed & food safety, nutritional innovation, global regulations & policy, and trade and market developments.

**Looking ahead 2020**
Feed & Food Congress (GFFC) in Bangkok, Thailand. The 6th GFFC attracted over 300 high level delegates and generated excellent and animated discussion under the theme ‘The future of Feed & Food – are we ready?’

Over 35 world-class speakers, including CEOs, leaders, and experts from global feed and food companies, international organizations and the scientific community, provided their insights and expertise at the 6th GFFC sessions that covered key aspects of the future of the feed and food value chain, with a special focus on the digital revolution in agriculture, sustainability, feed & food safety, nutritional innovation, global regulations & policy, and trade and market developments.

Looking ahead 2020

2020 promises to be an important and exciting year for our Federation under the continued leadership of our IFIF Chairman for 2020-2021 Daniel Bercovici.

In January we will kick-off with our 13th International Feed Regulators Meeting (IFRM) in Atlanta on 27-28 January 2020. It promises to be another excellent meeting and I look forward to seeing many of you there.

At the IFRM we will also continue to drive our feed safety capacity development efforts for 2020 and reach out to potential partners as we plan new trainings together with the FAO in Africa and Asia.

In 2020 we will continue our efforts to reach out to potential new members and support the building of national and regional feed associations, particularly in Africa and the Asia-Pacific region, in part as we start to prepare for the organization of the 7th Global Feed & Food Congress to be held in 2022.

I look forward to working with all of you to drive IFIF forward in the next years to ensure we can provide a unified leadership role for our industry in order to contribute to the sustainable, safe, nutritious and affordable food for a growing world population.

Thank you all for your continued support of IFIF.

Alexandra de Athayde
Executive Director
International Feed Industry Federation
IFIF’s vision is to provide a unified voice and leadership to represent and promote the global feed industry as an essential participant in the food chain that provides sustainable, safe, nutritious and affordable food for a growing world population.
Who we are

The International Feed Industry Federation (IFIF) provides a unified voice and leadership to represent and promote the global feed industry as an essential participant in the food chain that provides sustainable, safe, nutritious and affordable food for a growing world population.

In 2018-2019, IFIF undertook a number of projects to meet this challenge and continued to develop stronger relationships with international stakeholders, while welcoming a range of new Members to IFIF.

Over the last two years, IFIF continued it’s sharp focus on our strategic work plan. To support our industry on the road to the future, IFIF’s work with its Members and stakeholders is centred on three strategic pillars:

- Sustainability
- Regulatory & International Standards
- Education & sharing of best practices.

IFIF is made up of national and regional feed associations from Africa, Asia Pacific, Europe, North and South America and the Middle East, as well feed related organizations and corporate members from around the globe.

“IFIF members represent over 80% of total compound animal feed production worldwide.

IFIF believes that only by working together with all stakeholders in the feed industry, can we accelerate sustainability and the transition to a circular economy, while ensuring an affordable, safe and nutritious food for all.”
IFIF believes that only by working together with all stakeholders in the feed and food chain, including governments, the private sector and non-governmental groups, can we meet the demands of 60% more food, including animal proteins like beef, poultry, fish and dairy products in the future.

Given the anticipated growth of the world’s population to around 9 billion people by 2050, and the associated higher demand for animal proteins like beef, poultry and fish, it is vital that we can meet this challenge in a sustainable and safe way.

IFIF helps to ensure high standards of health and welfare for animals and people, by collaborating with the United Nations Food and Agriculture Organization (FAO), the World Organisation for Animal Health (OIE), the Codex Alimentarius Commission and other international bodies to help set international regulatory standards for the whole feed chain and support fair trade.

In addition, IFIF works with governmental, private sector, and nongovernmental partners on a number of fronts to measure, benchmark and improve the sustainability of the livestock production chain.

IFIF also aims to play a proactive role to promote science-based solutions and information sharing for feed manufacturers, consumers and regulatory authorities worldwide on a variety of issues that affect the supply of safe and affordable animal proteins such as beef, poultry, fish and dairy products.
What we do

Given the anticipated growth of the world’s population to around 9 billion people by 2050, and the associated higher demand for animal proteins like beef, poultry and fish, it is vital that we can meet this challenge in a sustainable and safe way.

In 2018-2019, IFIF continued to focus on its strategy and the following five-point mission to fully support our vision:

- Represent the global feed industry with international governmental organizations and agencies, including the FAO, WTO, WHO, OIE and CODEX Alimentarius, on crucial global feed and food issues.

- Promote science-based solutions and information sharing for the feed industry by facilitating global forums, such as the Global Feed & Food Congress (GFFC) and the International Feed Regulators Meeting (IFRM).

- Promote a balanced regulatory framework to support a fair global playing field, facilitate market access and support the competitiveness of the feed and livestock industries.

- Expand the global network of national and regional feed associations and promote the adoption of international standards and global equivalency.

- Continue to support and encourage the sustainable development of animal production.
In 2018 world compound feed exceeded an estimated one billion tonnes annually. Global commercial feed manufacturing generates an estimated annual turnover in excess of US $400 billion.

The last years have continued to see an increase in the demand for animal protein worldwide, including for livestock, dairy and fish. Generally we have seen a growth of production particularly in the developing world, with the developed world remaining more or less stable.

2018 GLOBAL ANIMAL FEED PRODUCTION IS CA. 1.085 BILLION TONNES WORTH OVER $400 BILLION

GLOBAL COMPOUND FEED PRODUCTION 2018 (MIO. T)
2018 GLOBAL ANIMAL FEED PRODUCTION IS CA. 1.085 BILLION TONNES WORTH OVER $400 BILLION

GLOBAL COMPOUND FEED PRODUCTION 2018 (MIO. T)

Source: IFIF / FEFAC

EVOLUTION OF GLOBAL COMPOUND FEED PRODUCTION (INDEX 100 = 1999)

Source: FEFA

The United Nations Food and Agriculture Organization (FAO) estimates that
The United Nations Food and Agriculture Organization (FAO) estimates that by 2050 the demand for food will grow by 60% and that between 2010 and 2050 production of animal proteins is expected to grow by around 1.7% per year, with meat production projected to rise by nearly 70%, aquaculture by 90% and dairy by 55%.

This should be good news for the feed industry and our partners along the agri-food chain. However such growth comes with significant challenges and it is vital that our sector, as well as the wider agricultural chain, can meet these demands in a sustainable, safe and affordable manner, while maintaining consumer trust and confidence in the food supply chain.

This challenge is a global one and IFIF is a global organization. Our members are made up of national and regional feed associations, feed related organizations, and corporations, which represent over 80% of worldwide animal compound feed production.

IFIF’s vision is to provide a unified voice and leadership to represent and promote the global feed industry as an essential participant in the food chain that provides sustainable, safe, nutritious and affordable food for a growing world population.

“In 2050 there will be over 9 billion people in the world...
In 2050 there will be over 9 billion people in the world... and the need for food will be 60% higher than today. How do we feed this population?

To support our industry on the road to the future, IFIF’s work with its Members and stakeholders is focussed on three strategic pillars, including (i) sustainability, (ii) regulatory matters and international standards, and (iii) supporting education and sharing of best practices.

Under these pillars IFIF has undertaken a number of strategic projects, which are outlined in this annual report.

### World Protein Production 2018 / 2019

<table>
<thead>
<tr>
<th>Protein Type</th>
<th>2018</th>
<th>2019*</th>
<th>VAR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOVINE</td>
<td>71.3</td>
<td>72.3</td>
<td>1.3%</td>
</tr>
<tr>
<td>POULTRY</td>
<td>124.6</td>
<td>130.5</td>
<td>4.7%</td>
</tr>
<tr>
<td>PIGS</td>
<td>120.7</td>
<td>110.5</td>
<td>-8.5%</td>
</tr>
<tr>
<td>OVININE</td>
<td>15.3</td>
<td>15.4</td>
<td>0.8%</td>
</tr>
<tr>
<td>MILK</td>
<td>840.5</td>
<td>852.0</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

Source: FAO Global Food Outlook November 2019 / *2019 FAO forecast
## FAO Outlook Until 2050: Times 1.6!

<table>
<thead>
<tr>
<th>Protein Type</th>
<th>2010</th>
<th>2050</th>
<th>Var.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bovine</strong></td>
<td>66.7</td>
<td>107.5</td>
<td>62%</td>
</tr>
<tr>
<td><strong>Poultry</strong></td>
<td>98.9</td>
<td>201.9</td>
<td>104%</td>
</tr>
<tr>
<td><strong>Pigs</strong></td>
<td>109.3</td>
<td>150.3</td>
<td>38%</td>
</tr>
<tr>
<td><strong>Aqua</strong></td>
<td>59.9</td>
<td>113.7</td>
<td>90%</td>
</tr>
<tr>
<td><strong>Milk</strong></td>
<td>722.9</td>
<td>1119.7</td>
<td>55%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1057.7</td>
<td>1693.1</td>
<td>60%</td>
</tr>
</tbody>
</table>

Members

IFIF is made up of national and regional feed associations from Africa, Asia Pacific, Europe, North and South America and the Middle East, as well feed related organizations and corporate members from around the globe.

IFIF is a membership driven organization and we want to thank all IFIF Members for their strong support of IFIF’s work, projects and mission to ensure the feed industry continues to be seen as an essential participant in the food chain that provides sustainable, safe and nutritious food.

“IFIF members represent over 80% of total compound animal feed production worldwide.”

IFIF is very pleased to welcome those new members to the IFIF family who...
IFIF is very pleased to welcome those new members to the IFIF family who joined the Federation in 2018 and 2019. They are all key players in their field and IFIF is extremely pleased to have them on board contributing their time and expertise to support IFIF’s vision and mission.

AB Agri, Arasco, CALYSTA Inc., Chamber of Feed Industry at the National Business Association of Colombia (ANDI), Delacon, Dupont / Danisco, FAMSUN, Nigerian Feed Industry Association (FIPAN) and Pancosma S.A.

These organisations are critical players in the feed production chain and we are very pleased to be able to draw on their expertise and support as members and benefit from their global reach and regional expertise.

“

We want to thank all IFIF Members for their strong support of IFIF’s work, projects and mission.

IFIF is a membership driven organization and together with our Members we work to ensure the feed industry continues to be seen as an essential participant in the food chain that provides sustainable, safe, nutritious and affordable food for a growing world population.

IFIF Members

National and Regional Associations
IFIF Members

National and Regional Associations

Corporate Members
Feed Related Organisations

Who we are

What we do

Challenge
In 2018/19 IFIF strengthened its work with key international organisations along the feed and food chain, to support feed and food safety and fair trade, while meeting the increased demands of food sustainably.

Click links for more info

Food and Agriculture Organization of the UN (FAO)
International Organization for Standardization (ISO)
Codex Alimentarius
World Organisation for Animal Health (OIE)
Partners across the Agri-Food chain
IFIF’s partnership with the Food and Agriculture Organization of the United Nations (FAO)

In 2018 and 2019 IFIF and the Food and Agriculture Organization of the United Nations (FAO) continued to strengthen their collaborative relationship with a number of key strategic initiatives, including IFRM and Capacity Development for feed safety.

The IFIF FAO collaboration has become a prominent example of how the public and private sector can work together in a number of key areas, which positively impact the feed and food chain.

Already in 2005 the FAO and IFIF, recognising their common interest in promoting the safe supply of animal feed throughout the world, signed a formal Memorandum of Understanding (MOU), which continues to form the basis of collaboration between the two organisations.

One highlight of the IFIF and the FAO Animal Production and Health Division, are efforts to facilitate dialogue between the private and public sector on key issues affecting the feed and food chain. This includes the annual International Feed Regulators Meeting (IFRM), which brings together feed regulators and industry from around the world, as well as the tri-annual Global
As global compound feed production continues to expand, especially in the developing world, IFIF continues to work with the FAO on Capacity Development for Feed Safety, an important effort that will continue on in the next years.

Since its launch in 2010 the FAO/IFIF “Manual of Good Practices for the Feed Industry” has been published in English, Chinese, Arabic, French and Spanish and distributed widely to regulators and industry. IFIF is also engaged in the recent efforts by the FAO to develop the capacities of relevant stakeholders globally to ensure the production and supply of safe feed based on latest Codex standards and good practices.

The IFIF FAO collaboration has become a prominent example of how the public and private sector can work together in a number of key areas, which positively impact the feed and food chain. IFIF’s relationship with the FAO continues to strengthen with IFIF’s participation in the Global Agenda for Sustainable Livestock, as an official stakeholder in the Livestock Environmental Assessment and Performance (LEAP) Partnership and the FAO’s Private Sector Initiative. IFIF will continue to be strongly engaged in these efforts.

**IFIF collaboration with Codex Alimentarius as a Codex-recognized NGO**

**IFIF Cooperation Agreement World Organisation for Animal Health (OIE)**
IFIF official liaison status with the International Organization for Standardization (ISO)

In 2018 and 2019 IFIF has official liaison status with the International Organization for Standardization (ISO) Technical Committee ISO/TC34/SC10 to work on animal feeding stuffs.

The scope of this Technical Committee (TC) is ‘Standardization in the field of animal feeding stuffs including: terminology, sampling, methods of test and analysis in quality control, specifications of raw material & finished product, guidelines and requirements for packaging, storage and transportation’.

The TC worked in 2018 and 2019 to establish Animal feeding stuffs Terminology and you can find more details about this Committee here https://www.iso.org/committee/47924.html and about ISO here: https://www.iso.org.

IFIF engaged and supported the work of ISO/TC34/SC10 to ensure that it is aligned with other international initiatives related to animal feed terminology.

IFIF’s partnership with the Food and Agriculture Organization of the United Nations (FAO)
IFIF collaboration with Codex Alimentarius as a Codex-recognized NGO

As a Codex recognized NGO, IFIF follows and inputs into in the work of the relevant Codex Committees and participates in Codex Side Events addressing feed safety for safe food.

In 2018 and 2019 IFIF joined global regulators at the annual Sessions of the Codex Alimentarius Commission, where together with the FAO, we held a number of side meetings related to feed safety. Feed safety is relevant to Codex Alimentarius Commission work as it impacts on the safety of food.

IFIF has been actively involved in the development of the Codex Code of Practice of Good Animal Feeding and was an active member of the ad hoc Codex Intergovernmental Task Force on Animal Feeding (TF AF).

“As a Codex recognized NGO, IFIF follows and inputs into in the work of the relevant Committees and participates in Codex Side Events addressing feed safety for safe food.

In 2018 and 2019 IFIF was actively involved in a number of Codex Working groups including participation in the eWG on the carry-over of unintentional residues of veterinary drugs in feed (CCVRDF), as well in the eWG on revision of the classification of food and feed (CCPR). The CCRVDF requested FAO and WHO in 2018 advice on the issue of unavoidable and
revision of the classification of food and feed (CCPR). The CCRVDF requested FAO and WHO in 2018 advice on the issue of unavoidable and unintended residues of veterinary drugs in foods resulting from the carry-over of drug residues in feed and to use lasalocid sodium in eggs as a case-study. There was a call for data Dec 2018, and IFIF participated in the FAO/WHO Stakeholder Meeting in Rome in Jan 2019.

In 2018 and 2019 IFIF also contributed to the eWG on the Revision of the Codex Code of Practice to Minimize and Contain Antimicrobial Resistance (CAC/RCP 61-2005), and the development of Codex guidelines on integrated monitoring and surveillance of foodborne antimicrobial resistance, as well as participation at the 6th session of the Ad hoc Codex TF AMR (Dec 2018), and the 7th session of the Ad hoc Codex TF AMR (Dec 2019).

In December 2018 FAO held a successful FAO side event with IFIF on animal nutrition and feed strategies during a meeting of the Ad hoc Codex Intergovernmental Task Force on Antimicrobial Resistance that took place in Busan, Republic of Korea, from 10 to 14 December 2018. The event highlighted the role of animal nutrition and feed strategies and options for reducing the need to use antimicrobials in animal production.

In 2019 IFIF has contributed to the eWGs in the Codex Committee on Contaminants in Food (CCCF) that are of relevance for the feed sector, in particular the eWG on the revision Revision of the Code of practice for the prevention and reduction of lead contamination in foods (CXC 56-2004), the eWG on Radioactivity in feed and food, and the eWG on development of an approach to identify the need for revision of existing Codex standards for contaminants and toxins in food and feed.

This work will continue into 2020 and supports IFIF’s on-going efforts to keep feed safety issues on the Codex agenda.
IFIF Cooperation Agreement World Organisation for Animal Health (OIE)

The OIE IFIF cooperation further aims to strengthen links between feed safety and food safety. IFIF works with the OIE to contribute to improved animal health and productivity, which in the end leads to a positive contribution to public health.

In 2018 and 2019 IFIF continued to strengthen its relationship with the World Organisation for Animal Health (OIE) and input in the development, updating and implementation of OIE standards and guidelines to contribute to improved animal health and productivity.
IFIF joined the 86th and 87th OIE General Session in Paris in 2018 and 2019 respectively, highlighting the cooperation between IFIF and OIE, in particular with regards to the prevention and management of infectious diseases, including zoonotic diseases, is vital and our cooperation should strengthen linkages between feed safety and food safety.

At the IFIF presentation to the 900 delegates of the 87th General Session of the World Assembly of the OIE Delegates in Paris May 2019, IFIF confirmed its commitment to partnership with the OIE, underlined that animal nutrition is an important contributor to promote animal health and welfare, and underlined the feed industry’s commitment to strong biosecurity measures under our control to ensure feed safety and integrity.

“The OIE IFIF cooperation further aims to strengthen links between feed safety and food safety. IFIF works with the OIE to contribute to improved animal health and productivity, which in the end leads to a positive contribution to public health.”

IFIF’s partnership with the Food and Agriculture...
Working with partners across the Agri-Food chain

IFIF strongly believes all partners along the agri chain have to work together to ensure sustainable and safe feed and food in the future.

IFIF works closely with other chain partners with the objective to find a common voice to address the challenges and opportunities in the agri chain, including with the following organisations:

- HealthforAnimals
- International Dairy Federation (IDF)
- International Egg Commission (IEC)
- International Fertilizer Association (IFA)
- International Marine Ingredients Organization (IFFO)
- International Meat Secretariat (IMS)
- International Poultry Council (IPC)

In 2018 and 2019, IFIF worked on a number of strategic join initiatives with these partners, including coordinating input and efforts at the FAO-led LEAP Partnership, the Global Agenda and the FAO Private Sector Initiative.

IFIF’s partnership with the Food and Agriculture Organization of the United Nations (FAO)
Our Pillars

To support our industry on the road to the future, in 2018/19 IFIF’s work is focussed on three strategic pillars:

Sustainability
Regulatory & International Standards
Education & Best Practices

OUR THREE PILLARS
Our Three Pillars

### Sustainability
IFIF supports and encourages the sustainable development of animal production.

**PROJECTS**
- Specialty Feed Ingredients Sustainability Project (SFISP)
- Global Feed LCA Institute (GFLI)
- Partnership on Livestock Environmental Assessment and Performance (LEAP)
- Global Agenda for Sustainable Livestock

### Regulatory & International Standards
IFIF promotes a balanced regulatory framework to support a fair global playing field to facilitate market access and support the competitiveness of the feed & livestock industries.

**PROJECTS**
- International Feed Regulators Meeting (IFRM)
- The ICCF
- CODEX work relevant to animal feeding
- Implementation of the Global Harmonized System
- International standards for contaminants in feed

### Education & Sharing of Best Practices
IFIF supports sharing of good practices: promotes science-based solutions for the feed industry and facilitates dialogue among key stakeholders.

**PROJECTS**
- IFIF/FAO Feed Manual
- IFIF Capacity Development Programme
- Feed Safety Multi-Stakeholder Partnership
- Global Feed & Food Congress (GFFC)
- Global Feed Statistics

NATIONAL AND REGIONAL UPDATES
One of the key parts of IFIF’s mission is to continue to support and encourage the sustainable development of animal production.

One of the key Pillars underlying IFIF is working with its members to meet the sustainability challenge - produce more, using less, at an affordable cost. IFIF’s main contributions in this critical area focus on the following three elements, which are overseen by the IFIF Sustainability Steering Group, made of senior sustainability experts and thought leaders from our Members:

• Promote global standards to assess the livestock production impact on the environment.

• Leverage and support relevant multi-stakeholder environmental sustainability initiatives with the IFIF brand.

• Communicate the positive contributions from the feed sector on the environmental sustainability of livestock production to the relevant public and private stakeholders.

Over the last decades through innovation and efficiency, animal feed has proven to be an essential part of the solution to make the livestock production chain more sustainable.

In December 2015 IFIF joined a side event with the International Meat Secretariat (IMS) during the UN conference on Climate Change (COP21/CMP11) to launch a paper outlining IFIF’s work with our members, as well as international organizations, such as FAO, as well as our agri-food chain partners to measure, benchmark and reduce the greenhouse gases (GHG)
In December 2015 IFIF joined a side event with the International Meat Secretariat (IMS) during the UN conference on Climate Change (COP21/CMP11) to launch a paper outlining IFIF’s work with our members, as well as international organizations, such as FAO, as well as our agri-food chain partners to measure, benchmark and reduce the greenhouse gases (GHG) impact of livestock production globally.

In 2018 and 2019 these efforts have continued strongly and IFIF provides leadership and expert input to FAO-led sustainability initiatives, including the Global Agenda for Sustainable Livestock and the Partnership on Livestock Environmental Assessment and Performance (LEAP).

Furthermore, IFIF has developed a number of strategic initiatives to measure and benchmark the environmental performance of the livestock production chain. IFIF is founding member of the Global Feed LCA Institute (GFLI), which used the FAO LEAP methodology to develop a golden global standard for assessing and benchmarking feed industry impact and improvement in LCA calculation, in order to support the reduction of the environmental footprint of livestock products.

IFIF has also together with the EU Association of Specialty Feed Ingredients and their Mixtures (FEFANA) and a consortium of international companies and associations, launched the Specialty Feed Ingredients Sustainability Project (SFIS), which measured and established the role of specialty feed ingredients (SFIs) on the environmental impact of livestock production.

In 2018 IFIF has worked to ensure the next phase of LEAP, called LEAP+, will include feed additives in order to link them to the existing LEAP methodologies, which should also include the link of the SFIS project work into LEAP.
The Specialty Feed Ingredients Sustainability Project (SFIS)

The Specialty Feed Ingredients Sustainability (SFIS) project brings together a consortium of international companies and associations dedicated to reducing the environmental impact of livestock through innovative specialty feed ingredients.

SFIS Phase 3 (Ongoing)

The SFIS project phase 3 aims to achieve a harmonized approach for the assessment of the use of SFIs in animal feeding on a cradle to farm gate approach. This includes the production of the SFIs from cradle to factory gate as well as the use on the farm and the further recycling or application of manure. Based on this approach, future LCAs for animal products should become transparent, reliable and thus, comparable.

The SFIS Phase 3 is looking at Australia, US and Europe pigs and poultry and initial results have shown an improvement, mainly due to improved feed conversion rates. The SFIS Phase 3 is currently undergoing an expert scientific review and results are likely to be published at the end of 2020.

SFIS Phase 1 & 2 (Completed)

In the SFIS project phase 1 and 2, the project partners joined together to measure and establish the role of specialty feed ingredients (SFIs), specifically amino acids and enzymes, on the environmental impact of livestock production and are united in their goal to contribute to the reduction of
assessment of the use of SFIs in animal feeding on a cradle to farm gate approach. This includes the production of the SFIs from cradle to factory gate as well as the use on the farm and the further recycling or application of manure. Based on this approach, future LCAs for animal products should become transparent, reliable and thus, comparable.

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SFIS Phase 1 & 2 (Completed)
In the SFIS project phase 1 and 2, the project partners joined together to measure and establish the role of specialty feed ingredients (SFIs), specifically amino acids and enzymes, on the environmental impact of livestock production and are united in their goal to contribute to the reduction of emissions in the food and feed chain.

The overall results of the study announced on 5 February 2014 show that the use of these SFIs in animal diets reduces the consumption of basic feed ingredients. Furthermore the study demonstrates that the use of SFIs, such as amino acids and phytase, results in clear reductions of the Global Warming Potential, as well as the Eutrophication and Acidification Potential during livestock production.

You can download the overview and results of the study from Europe, North America and South America on the left side of this page or here. The results have also been published in the peer reviewed Journal of Animal Science under the title ‘Environmental impact of using specialty feed ingredients in swine and poultry production: A life cycle assessment’ by Kebreab et al. 2016. You can download the paper here.
Global Feed LCA Institute (GFLI)

IFIF is a founding members of the Global Feed LCA Institute (GFLI), a feed industry initiative with the aim to develop a freely and publicly available feed LCA database and tool.

The GFLI database and LCA tool will support meaningful LCAs of livestock products using region specific data and enable our sector to benchmark feed industry environmental impacts on a level playing field.

The GFLI database and tool is based on the internationally recognized feed LCA methodology developed by the FAO-led Livestock Environmental Assessment and Performance (LEAP) Partnership. However, currently neither the LEAP guidelines nor as result the GFLI database, include the production impact and the use benefits of feed additives/specialty feed ingredients (SFIs).

Environmental footprinting of livestock products is a challenging but essential task to improve the accuracy of reporting on the real impacts of livestock products. This includes both understanding where the livestock chain stands in in terms of impact and encouraging the benchmarking and measurement of both individual and collective reduction efforts.

"The GFLI aims to bring the major feed producing regions together and develop the golden global standard for assessing and benchmarking feed industry..."
The GFLI aims to bring the major feed producing regions together and develop the golden global standard for assessing and benchmarking feed industry impact and improvement in LCA calculations.

Feed is an important part of the agri-food chain and it is essential that feed operators are able to understand their impact, not only from a business efficiency perspective but also to meet the expectations of our customers and public bodies, at both at national and international level.

Supported by the FAO and LEAP, the GFLI is working to bring the major feed producing regions to the initiative with the aim to become the golden global standard for assessing and benchmarking feed industry impact and improvement in LCA calculations.

The GFLI partners are working to develop and build a feed specific publicly available LCA tool to facilitate environmental assessments and the measurement of continuous improvement, which is both comparable and measurable across world regions.

The database and the tool would be public and freely accessible. The Global Feed LCA Institute has established a formal partnership with FAO and LEAP, to ensure that the deliverables of the GFLI are compliant with the FAO/LEAP methodological requirements.

For more information about the GFLI please visit http://globalfeedlca.org/.

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**Regulatory & International Standards**

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**Education & Sharing of Best Practices**
Sustainability

Partnership on Livestock Environmental Assessment and Performance (LEAP)

Livestock raising and the consumption of animal products make a crucial contribution to the economic and nutritional wellbeing of millions of people around the world – particularly in developing countries. Yet the need to improve environmental performance of the livestock sector will continue as the FAO estimates that demand for livestock products will continue to intensify over the decades to come.

Meat consumption is projected to rise nearly 73 percent by 2050; dairy consumption will grow 58 percent over current levels.

In September 2020, LEAP published the guidelines on the environmental performance of feed additives in livestock supply chains, which follows the publication of the Global Feed LCA Guidelines methodology in April 2015 – these guidelines represented a significant achievement and milestone.

This ground-breaking methodology introduced a harmonized, science-based, practical and international approach to the assessment of the environmental
This ground-breaking methodology introduced a harmonized, science-based, practical and international approach to the assessment of the environmental performance of feed supply chains, while taking into account the specificity of the diverse production systems that exist globally.

In 2018 the LEAP Steering Committee agreed to establish a Technical Advisory Group (TAG) on Feed Additives. The TAG will developed technical guidance for the accounting of: (i) environmental impacts associated with the production of feed additives and (ii) environmental impacts of livestock systems using feed additives.

In 2018 and 2019 IFIF experts worked in the feed additives TAG of LEAP, whose important work was in large part based on the previous scientific work of the SFIS project.

The LEAP/FAO Feed LCA Guidelines reflect a common vision among partners, including the FAO, national governments, private sector organizations as well as NGOs. The Guidelines carry an international scientific consensus based on the input of twenty international experts in the drafting process and a thorough international public review, which took place ahead of their official release.

The Guidelines represent a significant milestone for the global feed industry and will enable consistent and credible environmental assessments with a view to reduce the environmental footprint of livestock products.

Based on this IFIF will continue to work with partners on the agri-feed chain to develop practical tools for feed and livestock producers to assist them in further reducing the environmental footprint of their activities.

For more information about LEAP please visit: http://www.fao.org/partnerships/leap/en/.

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**Regulatory & International Standards**

**Education & Sharing of Best Practices**
Global Agenda for Sustainable Livestock

Throughout 2018 and 2019 IFIF has been involved as a Member of the Guiding Group in the FAO-led Global Agenda for Sustainable Livestock. IFIF has signed the Global Agenda Consensus and actively inputs in the work of the Agenda, and has supported the development of the initiative since its start in 2010.

In 2018 and 2019 IFIF continued to support the work of the FAO-led Global Agenda for Sustainable Livestock. IFIF is a Member of the Guiding Group of the Global Agenda, has signed the Global Agenda Consensus and has supported the development of the initiative since its beginnings in 2010. IFIF attended 8th Multi-Stakeholder Partnership meeting of the Global Agenda in Mongolia in 2018.

The Agenda is a partnership of livestock sector stakeholders supported by the FAO and committed to the sustainable development of the sector. Together the partners develop and implement an ambitious Agenda to ensure that sector growth contributes to socially desirable objectives. The partnership brings together public and private sector, producers, research and academia, civil society, NGOs, and inter-governmental organizations to focus on three areas of work:

The Agenda builds consensus on the path towards sustainability and catalyses coherent and collective practice change through dialogue,
The Agenda builds consensus on the path towards sustainability and catalyses coherent and collective practice change through dialogue, consultation and joint analysis.

The partnership unites the forces of the public and private sectors, producers, research and academic institutions, NGOs, social movements and community-based organizations, and foundations.

The Global Agenda work to support the UN Sustainable Development Goals as part of the UN 2030 Agenda for Sustainable Development and the important contribution of livestock to the, including:

- the vital role of livestock to end poverty and hunger, and to improve food security, nutrition and health;
- the potential contribution of livestock to the sustainable use of terrestrial ecosystems, to address environmental degradation and climate change, and to improve biodiversity;
- the role of the livestock sector in promoting peaceful and inclusive societies;

It simultaneously addresses the following issues:

- **Global food security and health**: The sector is critical to human health and global food and nutritional security. The Agenda promotes an inclusive approach to managing disease threats at the animal-human-environment interface that involves all sector stakeholders at every level in the development and implementation of animal-disease and food-safety programmes.

- **Equity and growth**: Livestock is essential to the livelihoods of an estimated one billion poor. The Agenda supports a viable growth in value chains that have access to all necessary resources and services, and in which the poor can find secure livelihoods and participate in growing markets or take up other opportunities outside the sector.

- **Resources and climate**: Livestock production based mainly on materials not competing with direct use as human food, and incentives and rewards for environmental stewardship will allow the sector to transition to existing and new resource use efficient ways of production and a greater contribution to climate change mitigation.

For more information about the Global Agenda please visit: http://www.livestockdialogue.org/.
One key part of IFIF’s mission is to promote a balanced regulatory framework to support a fair global playing field to facilitate market access and support the competitiveness of the feed and livestock industries.

IFIF’s work aims to support worldwide trade and ensure that future demands for feed and food can be met efficiently.

Engagement with international institutions is vital for this and IFIF collaborates with the FAO, the World Organisation for Animal Health (OIE), the Codex Alimentarius Commission, and other international bodies to help set international regulatory standards for the whole feed chain and support fair trade.

IFIF has a strong collaborative relationship with the FAO dating back many years, and IFIF and the FAO Animal Production and Health Division organize the annual International Feed Regulatory Meeting (IFRM). The IFRM continues as a successful joint effort to bring together government officers, intergovernmental organizations, academia and feed and food companies and organizations from around the world to discuss key issues of relevance, including mutual recognition and global feed safety standards.

In 2017, IFIF together with regulatory authorities and feed and feed ingredient associations from Canada, the European Union and the United States launched the International Cooperation for Convergence of Technical Requirements for the Assessment of Feed Ingredients (ICCF). This important international cooperation aims to develop and establish common guidance that covers technical requirements for the assessment of feed ingredients,
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**IFIF works to promote a balanced regulatory framework to support a fair global playing field to facilitate market access and support the competitiveness of the feed and livestock industries.**

As animal health is also a vital component of the feed chain, IFIF holds a cooperation agreement with the World Organisation for Animal Health (OIE). The two organizations work together with the regards to the prevention and management of infectious diseases, including zoonotic disease, as well as the support for the development, updating and implementation of OIE standards and guidelines.

Finally, feed safety is relevant to Codex Alimentarius work as it impacts on the safety of food. IFIF is a Codex Alimentarius recognized NGO and was actively involved in the development of the Codex Code of Practice of Good Animal Feeding, as well as a member of the ad hoc Codex Intergovernmental Task Force on Animal Feeding (TF AF).

Codex work on animal feed continues in individual Committees (within their mandate) and the participation of IFIF feed experts in Codex work contributes to keep feed safety on Codex agenda.

In 2017 IFIF Board also approved two new key projects, which will support the global feed industry. The first project on developing guidance on implementation of the Global Harmonized System (GHS), aims to provide guidance and tools to operators and countries on implementing GHS requirements worldwide to support a harmonized approach.

The second Project on developing international standards for contaminants in feed aims to establish or identify and maintain an appropriate international list of contaminants standards for ingredients and their mixtures for safe feed manufacture reflecting a risk based approach.
International Feed Regulators Meeting (IFRM)

The annual International Feed Regulators Meeting (IFRM) organized by IFIF in cooperation with the FAO provides an opportunity for regulators and feed industry professionals from across the globe to exchange their thoughts and discuss concrete ideas for providing safe feed and food in a sustainable manner around the world.

In 2019, The 12th annual International Feed Regulators Meeting (IFRM) organized by the International Feed Industry Federation (IFIF) in cooperation
In 2019, The **12th annual International Feed Regulators Meeting (IFRM)** organized by the International Feed Industry Federation (IFIF) in cooperation with the Food and Agriculture Organization of the United Nations (FAO) brought together feed industry representatives and government officials from around the world to Bangkok on 14 March 2019 to discuss critical issues facing the feed sector with IFIF and the FAO.

The meeting, yet again, proved to be an important opportunity for the global feed industry and feed regulators to discuss key issues for the feed and food chain, including Codex Alimentarius work relevant to feed and programmes for capacity development for feed safety.

Other topics discussed at the 12th IFRM included AMR, feed safety risk assessment and carry-over of residues of veterinary drugs from feed to food, as well as a session on the work of the International Cooperation for Convergence of Technical Requirements for the Assessment of Feed Ingredients (ICCF), which aims towards convergence of technical requirements specific to feed additive/ingredient authorization across regions.

In 2018, the **11th annual International Feed Regulators Meeting (IFRM)** organized by IFIF in cooperation with the Food and Agriculture Organization of the United Nations (FAO) brought together feed industry representatives and government officials from around the world in Atlanta USA on 29-30 January 2018 to discuss critical issues facing the feed sector with IFIF and the
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For more information about the IFRM please click here.
International Cooperation for Convergence of Technical Requirements for the Assessment of Feed Ingredients (ICCF)

IFIF together with regulatory authorities and feed and feed ingredient associations from Canada, the European Union and the United States launched the International Cooperation for Convergence of Technical Requirements for the Assessment of Feed Ingredients (ICCF). This important international cooperation aims to develop and establish common guidance that covers technical requirements for the assessment of feed ingredients, including new uses of existing feed ingredients.

Following a public consultation in 2019, the International Cooperation for Convergence of Technical Requirements for the Assessment of Feed Ingredients (ICCF) published its third guidance document covering ‘Homogeneity Testing of Feed Ingredients’ in September 2020.

This follows the first two guidance documents which were published in April 2019, covering ‘Stability Testing of Feed Ingredients’ and ‘Sub-chronic Oral Toxicity Testing in Laboratory Animals’.

The founding members of the ICCF include the Canadian Food Inspection
The founding members of the ICCF include the Canadian Food Inspection Agency (CFIA), the European Commission (DG SANTE), the U.S. Food and Drug Administration (FDA), as well as the American Feed Industry Association (AFIA), the Animal Nutrition Association of Canada (ANAC), the EU Association of Specialty Feed Ingredients and their Mixtures (FEFANA) and the International Feed Industry Federation (IFIF).

The ICCF is the result of a concerted effort to bring together feed regulators and industry feed associations to work together to develop common guidance documents for technical requirements needed in the assessment of feed ingredients. This will benefit not only the three regions covered, as the guidance documents will be made available for reference and use by other jurisdictions around the globe.

The ICCF should help to facilitate free and fair trade of feed ingredients as well as support the feed and food chain as it works to safely and sustainably meet the global growing demand for animal protein.

The ICCF Steering Committee, made up of representatives from the founding members of the ICCF, is responsible for defining the priorities and activities of the project and establishing and overseeing the Expert Working Groups, which will be tasked with developing specific technical guidance documents. As this initiative develops, observer countries will be invited to join the expert groups and may be invited as non-voting members to the ICCF Steering Committee on an ad-hoc basis.

The ICCF builds on the work of the 2013 IFIF “Comparison of Regulatory Management of Authorized Ingredients, Approval Processes, and Risk-Assessment Procedures for Feed Ingredients” report, which covered synergies and gaps for product approvals in Brazil, Canada, China, EU, Japan, South Africa and USA. This report was drafted based on expert input and supported by government feed regulators and feed and feed ingredients associations in the seven regions covered.

For further information about the ICCF please contact the ICCF Secretariat at info@ifif.org.

Sustainability

Education & Sharing of Best Practices
Regulatory & International Standards

REGULATORY & INTERNATIONAL STANDARDS PROJECTS

CODEX work relevant to animal feeding

IFIF is a Codex Alimentarius recognized NGO and has been actively involved in the development of the Codex Code of Practice of Good Animal Feeding and was an active member of the ad hoc Codex Intergovernmental Task Force on Animal Feeding (TF AF).

IFIF is engaged to keep feed safety issues on the Codex agenda following the completion of the work of the Codex TF AF last year and together with the FAO, IFIF participates and organizes side events on feed safety in conjunction with Codex meetings.

In 2018 and 2019 IFIF joined global regulators at the annual Sessions of the Codex Alimentarius Commission, where together with the FAO, we held a number of side meetings related to feed safety. Feed safety is relevant to Codex Alimentarius Commission work as it impacts on the safety of food.

IFIF has been actively involved in the development of the Codex Code of Practice of Good Animal Feeding and was an active member of the ad hoc Codex Intergovernmental Task Force on Animal Feeding (TF AF).

As a Codex recognized NGO, IFIF follows and inputs into in the work of the...
As a Codex recognized NGO, IFIF follows and inputs into in the work of the relevant Committees and participates in Codex Side Events addressing feed safety for safe food.

In 2018 and 2019 IFIF was actively involved in a number of Codex Working groups including participation in the eWG on the carry-over of unintentional residues of veterinary drugs in feed (CCVRDF), as well in the eWG on revision of the classification of food and feed (CCPR). The CCRVDF requested FAO and WHO in 2018 advice on the issue of unavoidable and unintended residues of veterinary drugs in foods resulting from the carry-over of drug residues in feed and to use lasalocid sodium in eggs as a case-study. There was a call for data Dec 2018, and IFIF participated in the FAO/WHO Stakeholder Meeting in Rome in Jan 2019.

In 2018 and 2019 IFIF also contributed to the eWG on the Revision of the Codex Code of Practice to Minimize and Contain Antimicrobial Resistance (CAC/RCP 61-2005), and the development of Codex guidelines on integrated monitoring and surveillance of foodborne antimicrobial resistance, as well as participation at the 6th session of the Ad hoc Codex TF AMR (Dec 2018), and the 7th session of the Ad hoc Codex TF AMR (Dec 2019).

In December 2018 FAO held a successful FAO side event with IFIF on animal nutrition and feed strategies during a meeting of the Ad hoc Codex Intergovernmental Task Force on Antimicrobial Resistance that took place in Busan, Republic of Korea, from 10 to 14 December 2018. The event highlighted the role of animal nutrition and feed strategies and options for reducing the need to use antimicrobials in animal production.

In 2019 IFIF has contributed to the eWGs in the Codex Committee on Contaminants in Food (CCCF) that are of relevance for the feed sector, in particular the eWG on the revision Revision of the Code of practice for the prevention and reduction of lead contamination in foods (CXC 56-2004), the eWG on Radioactivity in feed and food, and the eWG on development of an approach to identify the need for revision of existing codex standards for contaminants and toxins in food and feed.

This work will continue into 2020 and supports IFIF’s on-going efforts to keep feed safety issues on the Codex agenda.
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This work will continue into 2020 and supports IFIF’s on-going efforts to keep feed safety issues on the Codex agenda.

As a Codex recognized NGO, IFIF follows and inputs into the work of the relevant Committees and participates in Codex Side Events addressing Feed Safety.

Sustainability

Education & Sharing of Best Practices
Guidance on implementation of the Global Harmonized System

In 2018 and 2019 IFIF developed Guidance on implementation of the Global Harmonized System (GHS).

Starting in 2018, IFIF developed the below guidance and tools to help operators and countries to implement GHS requirements worldwide to support a harmonized approach.

GHS is an internationally agreed-upon system and it addresses the classification of chemicals by type of hazard and proposes harmonized hazard communication elements, including labels and safety data sheets.

Currently GHS is under implementation worldwide but in some countries or regions, the implementation of GHS has resulted in questions concerning its scope for feed and has led to some uncertainty on the application of the GHS rules for feed ingredients and their mixtures. This can create inconsistencies among feed industry operators understanding on whether GHS needs to be implemented and how.

The tools and guidance documents IFIF developed to support the feed industry can be found on the IFIF website here.
Regulatory & International Standards

Guidance on International standards for contaminants in feed

In 2018 IFIF launched a database on international standards for contaminants in feed.

At international level recommended standards exist for contaminants in food additives but not for feed additives, making risk management decisions difficult. This may also impact on regulatory compliance of internationally traded specialty feed ingredients.

The objective of this expert group is to establish or identify and maintain an appropriate international list of contaminants standards for ingredients and their mixtures for safe feed manufacture reflecting a risk-based approach.

In 2018, the IFIF WG has completed the first version of the IFIF Feed Contaminants Database, which provides a reference overview for Animal Feed Contaminants in Australia, Brazil, Canada, Chile, China, Colombia, Europe, South Africa, USA and Vietnam.

This database is available for download below only for IFIF members. If you are an IFIF member please login to access the database. Should you have questions please email info@ifif.org.
Education & Sharing of Best Practices

IFIF supports sharing of good practices, promotes science-based solutions for the feed industry and facilitates dialogue among key stakeholders.

In 2016 and 2017 IFIF launched the Global Animal Nutrition Programme ‘Train the Trainer’ to develop and train the capacities of the relevant compound feed production stakeholders in a developing region. This reflects IFIF’s mission to promote science-based solutions and information sharing for the feed industry, as well as stimulate the adoption of international standards and global equivalency.

IFIF has so far held two successful training programmes, one in Nigeria and one in Tanzania. IFIF will continue to roll out the Global Animal Nutrition Programme to other countries to support, train and develop the capacities of the local feed industries to raise feed and food safety standards globally.

The IFIF feed safety trainings use the IFIF FAO ‘Feed Manual of Good Practices’ for the Feed Industry based on the Codex Code of Practice on Good Animal Feeding as a basis for the training materials. Supported by the Standards and Trade and Development Facility (STDF) of the World Trade Organization (WTO), the feed manual is available in Arabic, Chinese, English, French and Spanish.

IFIF continues to encourage countries, particularly in the developing world, to use the IFIF FAO ‘Manual of Good Practices for the Feed Industry’ as a guidance document to increase safety and feed quality at the production level both for industrial production and on farm mixing.
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IFIF continues to encourage countries, particularly in the developing world, to use the IFIF FAO ‘Manual of Good Practices for the Feed Industry’ as a guidance document to increase safety and feed quality at the production level both for industrial production and on farm mixing.

In 2016 IFIF was a founding partner of the FAO-led Feed Safety Multi-Stakeholder Partnership, which was formally launched in April 2016 and aims at improving the safety of feed, and thus enhancing food safety, animal health and welfare and food security.

The 5th Global Feed & Food Congress (GFFC) was successfully held in Antalya, Turkey, on 18-20 April 2016. Over 900 delegates attended the Congress and the theme “Equity and Prosperity for All” linked to the global challenge to provide safe, affordable and sustainable animal protein sources to feed 9 billion people by 2050. For more information and to view the full 5th GFFC programme please visit www.gffc2016.com.

In 2017 IFIF laid the groundwork for the 6th Global Feed & Food Congress (GFFC), which will be held in Bangkok, Thailand on 10-13 March 2019. The 6th GFFC will bring together food and feed experts from around the world, representing public sector, civil society, industry and academia.

Sustainability

Regulatory & International Standards
Education & Sharing of Best Practices

IFIF/FAO Feed Manual

In 2018 and 2019 the Manual was the basis for the IFIF Feed Safety Training ‘Global Animal Nutrition Programme – Train the Trainer’. The Feed Manual will be fully revised and updated by FAO and IFIF in 2020.

This manual provides updated 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 application of this Code is an important step for the expansion of international trade in feed products as well as in products of animal origin. Both food exporting and importing countries can benefit from a more level playing field to support the trade of safe food products.

The Manual is a very relevant document to help support better standards, particular in developing economies and some results from the manual include:

- ‘Feed Manual of Good Practices for the Feed Industry’ shared with regulators and industry globally as a key resource to increase the safety of feed (and food) production. The Manual is available in Arabic, Chinese, English, French and Spanish.
• ‘Feed Manual of Good Practices for the Feed Industry’ shared with regulators and industry globally as a key resource to increase the safety of feed (and food) production. The Manual is available in Arabic, Chinese, English, French and Spanish.

• IFIF-led workshops and training reached feed producers and feed industries worldwide, including: over 30 trainers in Nigeria, 60 feed millers in Tanzania, and government officials from 10 countries in Latin America. Workshops have also been carried out in Nigeria, Egypt, India and Brazil.

• Setting up the Southern African Feed Manufacturers’ Association to help harmonize legislation and regulations, boosting trade among countries and creating a self-regulating regional industry.

• Catalyzing the FAO-led Feed Safety Multi-Stakeholder Partnership to promote and support global capacity development.

The Feed Manual is meant to increase safety and feed quality at the production level both for industrial production and on farm mixing with a particular focus on the developing world.

Thanks to the project support, feed safety, and, as a result, food safety, continues to improve worldwide:

• Feed regulators and industry in developing countries regularly use the Feed Manual as a reference for updating and comparing legislation and regulations. Across Africa, Asia and Latin America governments and companies have made changes to meet the Codex Code of Practice on Good Animal Feeding.

• The Manual is being used to train industry and raise awareness among policy makers and producers. It is also being used as a teaching tool in universities, receiving positive feedback from students.

The production and publication of the Feed Manual was made possible by a grant from the Standards and Trade Development Facility (STDF), a global partnership that supports developing countries in building their capacity to implement international sanitary and phytosanitary (SPS) standards, guidelines and recommendations as a means to improve their human, animal and plant health status and ability to gain or maintain access to markets.
IFIF Global Animal Nutrition Programme ‘Train the Trainer’

IFIF launched the Global Animal Nutrition Programme ‘Train the Trainer’ to develop and train the capacities of the relevant compound feed production stakeholders in a developing region using the FAO/IFIF Manual of Good Practices for the Feed Industry based on the Codex Code of Practice on Good Animal Feeding.

Capacity Development for feed safety is one of the key priorities of IFIF under our strategic Pillar III: Education & Best Practices and links closely to FAO initiatives in this area.

IFIF launched the Global Animal Nutrition Programme ‘Train the Trainer’ to develop and train the capacities of the relevant compound feed production stakeholders in a developing region using the FAO/IFIF Manual of Good Practices for the Feed Industry based on the Codex Code of Practice on Good Animal Feeding.

In 2019, IFIF launched the e-learning course ‘Good Production Practices in the Feed Industry’, aimed at stakeholders working in the feed chain and is available at no cost for government officials working in fields related to feed production as well as qualifying stakeholders and feed millers in emerging markets. Participants who successfully complete the 10 online modules and pass a final exam will receive a certificate, as well as have the opportunity to
Participants who successfully complete the 10 online modules and pass a final exam will receive a certificate, as well as have the opportunity to participate in a live virtual classroom with an IFIF expert trainer at the end. The IFIF course can be accessed at the following link:
https://www.anprocampus.com/ttpages/info/?id=43.

Ghana Feed Safety Training - July 2018
Held in Accra in July 2018 and supported by the Ghana Ministry of Food and Agriculture (MoFA), the training programme based on the IFIF FAO Feed Manual of Good Practices for the Feed Industry focussed on increasing safety and feed quality at the production level. Over 30 national and regional feed officials and feed mill representatives participated in the training and they will act as multipliers by sharing the training with colleagues throughout Ghana.
Dr. Abdul Razak Okine, Deputy Director at the Animal Production Directorate of the Ministry of Food and Agriculture (MoFA), said, “the Ghana feed industry is diverse and we are committed to continue working with stakeholders in the industry towards achieving good practice benchmarks for animal feed safety and human food safety.

Through the IFIF training programme our livestock officers/feed officials and feed millers are better able to understand the FAO/IFIF Code of Practice for Good Animal Feeding and other Codex standards, including hazards associated with animal feed, good production practices, cross contamination, and sampling and analysis. Dr. Okine expressed the country’s gratitude for the selection of Ghana as a beneficiary of the IFIF ToT programme.

Developed by IFIF in 2015, the Global Animal Nutrition Programme is designed to raise capacities for feed safety in developing regions by training key individuals who can then apply and share their new skills with colleagues on site within a country. This reflects IFIF’s mission to promote solutions and information sharing for the feed industry, as well as stimulate the adoption of international standards and global equivalency.

Already in 2010, IFIF together with the FAO published the Feed Manual of Good Practices for the Feed Industry, in order to support the spreading of good manufacturing practice and higher feed safety standards around the globe. The publication of the Feed Manual is intended to increase safety and feed quality at the production level both for industrial production and on farm mixing with a particular focus on the developing world.

The IFIF Training Programme focuses on the Implementation of IFIF/FAO Manual on Good Practices for the Feed Industry. Each training programme is tailor made to take into account local needs, and includes the following elements:
The IFIF Training Programme focuses on the Implementation of IFIF/FAO Manual on Good Practices for the Feed Industry. Each training programme is tailor made to take into account local needs, and includes the following elements:

- Health hazards associated with animal feed
- Good Production Practices – Pre Requisite Programs
- HACCP
- On farm production and use of feed and feed ingredients
- Cross contamination
- Sampling and analysis

**Tanzania Feed Safety Training**

Held in Dar es Salaam in July 2017 and supported by the U.S. Grains Council and the Tanzanian Feed Industry Association (TAFMA), the IFIF training programme in Tanzania focussed on increasing safety and feed quality at the production level by training over 60 representatives from the Tanzanian feed industries. The IFIF training had real impacts for participants who can apply their new feed safety skills in feed mills across Tanzania and I congratulate all the participants for their dedication to increase feed safety and quality at the production level.
Sufian Z. Kyarua, Secretary general of TAFMA, said “the Tanzania feed industry is diverse and we are committed to continue working with our members towards achieving international benchmarks for animal feed safety and human food safety. Through the IFIF training programme our feed millers are better able to understand and implement the FAO/IFIF Code of Practice for Good Animal Feeding and other Codex standards, including hazards associated with animal feed, good production practices, cross contamination, and sampling and analysis.”

**Nigeria Feed Safety Training**
Held in October 2015, the IFIF training event in Lagos supported by the Nigerian Institute of Animal Science (NIAS) brought together over 30 representatives from the Nigerian feed industries, who will act as multipliers by sharing the training with colleagues throughout Nigeria.
Dr. Godwin Oyediji, Registrar and Chief Executive of the Nigerian Institute of Animal Science (NIAS), said, “current laws in Nigeria are still weak and some are without enforcement powers. But Nigeria is making steady progress on feed legislation to achieve international benchmarks for animal feed safety and human food safety.” Dr. Oyediji added “the industry is being mobilised to embrace the FAO/IFIF Code of Practice for Good Animal Feeding and other Codex standards on traceability, contaminants and HACCP.”

The objectives of the Pilot Project in Nigeria were to:

- Extend capacity building to those countries and industries that lack knowledge and feed safety tools;
- Secure feed safety growth to governments and independent companies;
- Introduce systems and structures that are required to comply with international feed safety practices;
- Increase the quality and safety of feed for domestic consumption and international trade.
Education & Sharing of Best Practices

Feed Safety Multi-Stakeholder Partnership

IFIF is a founding partner of the FAO-led Feed Safety Multi-Stakeholder Partnership, which aims at improving the safety of feed, and thus enhancing food safety, animal health and welfare and food security.

The Feed Safety Multi-Stakeholder Partnership undertook a number of initiatives in 2018 and 2019 to support feed safety:
As global compound feed production continues to expand, especially in the developing world, IFIF continues to work with the FAO on Capacity Development for Feed Safety, an important effort that will continue on in the next years.

The Feed Safety Multi-Stakeholder Partnership is a FAO-led Partnership for Capacity Development for Feed Safety, with the objective to strengthen the capacity of relevant stakeholders along the feed and food value chain to produce and supply safer feed – thereby contributing to animal health and welfare and enhancing food safety and food security.

The Partnership addresses feed safety in the feed and food continuum that includes feed ingredients, feed inputs, feeding practices, feed handling, packaging, transportation, storage and manufacture. Activities of the Partnership will be relevant to all major feed and livestock products and related supply chains. Some activities will benefit stakeholders globally, while others will address more localized feed safety issues. The primary beneficiaries will be producers and policy-makers in feed and livestock producing countries. Producers will benefit through the development of capacities to address feed safety issues.

In particular the Partnerships’ purpose is to:

- strengthen and develop technical and functional capacities of producers, policy makers and other operators along the supply and production chain;
- share best practices and risk-based measures for preventing and controlling hazards in feed;
- support smallholders in reducing health risks for their animals and in reducing feed and foodborne risks.
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In particular the Partnerships’ purpose is to:

- strengthen and develop technical and functional capacities of producers, policy makers and other operators along the supply and production chain;
- share best practices and risk-based measures for preventing and controlling hazards in feed;
- support smallholders in reducing health risks for their animals and in reducing feed and food losses; and
- create and share scientific knowledge on new feed and technologies.

All activities implemented in the Feed Safety Multi-Stakeholder Partnership will follow a capacity development approach. Capacity development addresses different dimensions: i) individual; ii) organizational; and iii) the enabling environment. It considers social, economic and policy aspects, together with technical ones, and provides stakeholders and countries a leading role to ensure the sustainability of activities.

Education & Sharing of Best Practices

Global Feed & Food Congress (GFFC)

The 6th GFFC brought together leaders from the global feed & food chain in Bangkok on 11-13 March 2019 under the theme ‘The future of Feed & Food – are we ready?’

In March 2019 global feed and food leaders discussed the future of feed and food at the 6th Global Feed & Food Congress (GFFC) in Bangkok, Thailand. Organized by the International Feed Industry Federation (IFIF) with technical support provided by the Food and Agriculture Organization of the United Nations (FAO) and in collaboration with VIV worldwide, delegates at the 6th GFFC examined the global challenge to provide safe, affordable, nutritious and sustainable animal protein sources through innovative solutions to feed 9 billion people by 2050.
The Honorable Dr. Sorravis Thaneto, Director-General of the Thai Ministry of Agriculture’s Department of Livestock Development joined Dr. Daniel Bercovici, IFIF Chairman, Dr. Berhe Tekola, Director of FAO’s Animal Production and Health Division and Mr. Pornsil Patchrintananukul, President of the Thai Feed Mill Association, to open the Congress. They welcomed 300 world-class experts and executive level delegates from Asia, Europe, Africa, the Middle East and the Americas representing feed and food chain stakeholders from over 50 countries.

The 6th GFFC was a great success and holding it in Thailand places it at the heart of a fast-growing region for the feed and food sector, while the focus on the future of the feed to food chain is timely, given the imperative of finding innovative solutions to feed a growing world population.

Over 35 world-class speakers, including CEOs, leaders, and experts from global feed and food companies, international organizations and the scientific community, provided their insights and expertise at the 6th GFFC sessions that covered key aspects of the future of the feed and food value chain, with a special focus on the digital revolution in agriculture, sustainability, feed & food safety, nutritional innovation, global regulations & policy, and trade and market developments.

The excellent plenary sessions were followed by a global leaders panel, which included Dr. Rob Koremans, CEO of Nutreco, Joe Stone, Executive Vice President and Chief Risk Officer at Cargill, Dr. Mark Lyons, CEO of Alltech and Dr. Berhe Tekola, Director of FAO’s Animal Production and Health Division. The global leaders discussion with delegates touched on critical issues facing the agri-food chain, including sustainability, how to drive innovation, the importance of a balanced regulatory framework, capacity development as well as free and fair trade, and highlighting the importance of cooperation and partnership not only with industry and chain partners, but also with other stakeholders.

For more information and to view the full 6th GFFC programme please visit www.gffc2019.com.
well as free and fair trade, and highlighting the importance of cooperation and partnership not only with industry and chain partners, but also with other stakeholders.

For more information and to view the full 6th GFFC programme please visit www.gffc2019.com.

The Global Feed & Food Congress series was launched in 2005 by IFIF in cooperation with the FAO to provide a global platform for industry and governments to come together to discuss critical issues of food and feed safety, technology and sustainability. The tri-annual Congress has established itself as the leading global event of its kind and was last held in Bangkok, Thailand in March 2019.

Sustainability

Regulatory & International Standards
Global Feed Statistics

In 2018 world compound feed production exceeded an estimated at one billion tonnes annually. Global commercial feed manufacturing generates an estimated annual turnover of over US $400 billion.

The last years have continued to see an increase in the demand for animal protein worldwide, including for livestock, dairy and fish. Generally we have seen a growth of production particularly in the developing world, with the developed world remaining more or less stable.

The United Nations Food and Agriculture Organization (FAO) estimates that by 2050 the demand for food will grow by 60% and that between 2010 and 2050 production of animal proteins is expected to grow by around 1.7% per year, with meat production projected to rise by nearly 70%, aquaculture by 90% and dairy by 55%. This already marks a growth factor of almost two, however if we were to extrapolate the growth rates of the last forty years forward to 2050, this would in theory quadruple the needs.

The last years have continued to see an increase in the demand for animal protein worldwide, including for livestock, dairy and fish. Generally we have seen a growth of production particularly in the developing world, with the developed world remaining more or less stable.

Below you will find a selection of data for production of feed as well as livestock globally. These are estimates only and are meant to demonstrate...
Below you will find a selection of data for production of feed as well as livestock globally. These are estimates only and are meant to demonstrate global trends. For specific country and regional information please see the national and regional updates section of this report.

2018 GLOBAL ANIMAL FEED PRODUCTION IS CA.1.085 BILLION TONNES WORTH OVER $400 BILLION

GLOBAL COMPOUND FEED PRODUCTION 2018 (MIO. T)

- EU 28 (incl. EL): 165
- Other Europe: 91
- China: 188
- Japan: 24
- Brazil: 69
- Mexico: 35
- USA: 177
- Canada: 22
- Other America: 61
- Other Asia: 185
- Others: 68

Source: IFIF / FEFAC

GLOBAL FEED MARKET AS PERCENTAGE BY SPECIES - 2018 ESTIMATES

- Poultry: 44%
- Pig: 28%
- Dairy: 13%
- Aqua: 4%
- Other: 3%
GLOBAL FEED MARKET AS PERCENTAGE BY SPECIES - 2018 ESTIMATES

- Poultry: 44%
- Pig: 28%
- Ruminant: 8%
- Dairy: 13%
- Other: 3%
- Aqua: 4%

FOUR COUNTRIES PRODUCE OVER 55% OF COMPOUND FEED GLOBALLY

- China: 17%
- EU: 15%
- USA: 16%
- Brazil: 7%
- Rest of the world: 45%

Source: 2019 IFIF estimates / National and Regional Associations

EVOLUTION OF GLOBAL COMPOUND FEED PRODUCTION (INDEX 100 = 1999)
### Evolution of Global Compound Feed Production (Index 100 = 1999)

- **EU 28**
- **Other Europe**
- **Brazil**
- **USA**
- **China**

Source: FEFAC

### World Protein Production 2018 / 2019

<table>
<thead>
<tr>
<th>Protein Type</th>
<th>2018</th>
<th>2019*</th>
<th>VAR.</th>
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</thead>
<tbody>
<tr>
<td>Bovine</td>
<td>71.3</td>
<td>72.3</td>
<td>1.3%</td>
</tr>
<tr>
<td>Poultry</td>
<td>124.6</td>
<td>130.5</td>
<td>4.7%</td>
</tr>
<tr>
<td>Pigs</td>
<td>120.7</td>
<td>110.5</td>
<td>-8.5%</td>
</tr>
<tr>
<td>Ovine</td>
<td>15.3</td>
<td>15.4</td>
<td>0.8%</td>
</tr>
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</table>
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<tr>
<td>OVINE</td>
<td>15.3</td>
<td>15.4</td>
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</tr>
<tr>
<td>MILK</td>
<td>840.5</td>
<td>852.0</td>
<td>1.4%</td>
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*Source: FAO Global Food Outlook November 2019 / *2019 FAO forecast

### FAO OUTLOOK UNTIL 2050: TIMES 1.6!

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<tr>
<td>BOVINE</td>
<td>66.7</td>
<td>107.5</td>
<td>62%</td>
</tr>
<tr>
<td>POULTRY</td>
<td>98.9</td>
<td>201.9</td>
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## FAO Outlook Until 2050: Times 1.6!

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<tr>
<td>Pigs</td>
<td>109.3</td>
<td>150.3</td>
<td>38%</td>
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<tr>
<td>Aqua</td>
<td>59.9</td>
<td>113.7</td>
<td>90%</td>
</tr>
<tr>
<td>Milk</td>
<td>722.9</td>
<td>1119.7</td>
<td>55%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1057.7</td>
<td>1693.1</td>
<td>60%</td>
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### Sustainability

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### Regulatory & International Standards
IFIF Members include national and regional feed associations from around the globe, including from Africa, Asia Pacific, Europe, North and South America and the Middle East. Here you will find our Association Members’ 2018/19 updates on their particular region, including feed production figures.
Regional Updates

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<tr>
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<tr>
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</tr>
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<td>Iran</td>
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<td>JFMA</td>
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Feed Ingredients and Additives Association of Australia (FIAAA)

The Feed Ingredients and Additives Association of Australia was formed to meet the needs of our feed and petfood industry customers and other stakeholders so that they could be confident of the quality and integrity of feed ingredients and additives being used in Australia. Our work includes advocating and promoting the safe use of feed ingredients and the interests of our 64 members and to cooperate with other stakeholders in the interests of the broader industry.

FIAAA Code of Practice/FAMI-QS

The FIAAA Code of Practice has an important role in the stewardship endeavours of our members. It is recognised that certification to the Code gives assurance of the quality of our members’ products. The Code is based on international best practice. It succeeds through insistence on:

- Management responsibility & Compliance with AgVet regulations
- Resource management & Traceability of supply
- Product and component standards
- Quality document systems

Over the next 18 months FIAAA has decided to transition from the Code of Practice to a new FAMI-QS Certification Scheme.
Quality document systems

Over the next 18 months FIAAA has decided to transition from the Code of Practice to FAMI-QS. It was a decision of the members and one that will keep them in good stead for the years to come. FAMI-QS and the FIAAA have signed a strategic agreement of cooperation for the adoption of the FAMI-QS Code in the region of Australia-New Zealand. The given name to the implementation of the FAMI-QS Code in Australia through FIAAA is FAMI-QS/FIAAA. With regards to the agreement, the current FAMI-QS Certification documents and accreditation will apply. FIAAA members may apply to FIAAA for what would be known as FAMI-QS/FIAAA Certification. This will entail an audit against the current version of the FAMI-QS Code and the relevant process document(s) applicable to the operation of the members. The application shall be done according to the current version of FAMI-QS Rules for Operators V6.

Biological Import Standards

The last 12 months has seen the Association work with the Australian Government to develop a system that will provide clear guidelines for the importation of feed additives and ingredients. A major component of this approach is the drafting and agreement of clear manufacturing standards for products that don’t vary greatly wherever or by whomever they are produced (e.g. enzymes, amino acids). Work is still continuing in this area to ensure the system meets the needs of both government and industry.

END Product Registration Process

Following consistent lobbying with government a new deregulated system was launched in 2015. This has proven to be a huge step forward for our industry as it still imposes compliance obligations but allows an industry led system to underwrite appropriate product safety consistent with the risk of our products. The system permits products to be sold without product registration provided 5 criteria are met: fed orally, product quality using an industry based code, listing of the ingredient on an international listing (including the EU ingredient register and AAFCO), claims limited to prevent/alleviate being supported by a technical dossier and appropriate labelling.

See additional work, set out below, undertaken in conjunction with the SFMCA.

For further information on the FIAAA please visit www.fiaaa.com.au

Stock Feed Manufacturers’ Council of Australia (SFMCA)

The SFMCA is the national industry association representing...
Stock Feed Manufacturers’ Council of Australia (SFMCA)

The SFMCA is the national industry association representing 237 corporate and individual manufacturers of stock feed and their supply chain associates located throughout Australia. The organisation operates with five state based branches where members meet to address industry specific issues. Together SFMCA’s membership represents 95% of commercial feed manufactured in Australia. From the organisation’s inception, it has played an active role in addressing national industry issues, many of these relating to raw material ingredient supply, quality standards, Federal and State government legislation and regulations.

FeedSafe

The SFMCA operates FeedSafe® as the Integrity Accreditation Program for the Australian stock feed industry. It is third party audited and works in a co-regulatory manner with the Australian governments.

All full (active manufacturer) members of the SFMCA are required to comply with FeedSafe® to retain their Association membership. The central aspect of FeedSafe® is a Code of Good Manufacturing Practice (GMP), which has been developed in conjunction with the Chief Veterinary Officers within each State, and the final document has Primary Industries Ministerial Council endorsement.

FeedSafe® requires feed manufacturers to meet minimum standards in relation to:

- Premises and mill buildings
FeedSafe® requires feed manufacturers to meet minimum standards in relation to:

- Premises and mill buildings
- Personnel training and qualifications
- Plant and equipment
- Raw material sourcing and purchasing
- Raw material quality and storage
- Feed formulation and manufacturing
- Product labelling
- Loading, transport and delivery to clients
- Product inspection, sampling and testing
- Customer complaint investigation

There are presently 115 accredited (and provisional) members that produce 95% of the feed manufactured in Australia.

**Movement Controls within Australia**

2018-19 has seen the continuation of widespread drought in Australia, which in some regions has been running for two to three years already. As a result of the drought, there has been increased pressures placed on moving grain and fodder from parts of Australia to regions that are prohibited due to weeds and diseases. Biosecurity issues need to be negotiated for the entry (or even movement through) some regions to ensure that a new biosecurity event is not resultant. This can take a lot of effort at times and a will from Governments, the feed industry and other agricultural sectors to ensure feed staffs can be moved. The SFMCA applauds the Australian Governments and other industry sectors for their approach to these negotiations.

**Sustainability Framework**

The SFMCA Members have endorsed the development of a Sustainability Framework for the industry. Work has started to research what needs to be undertaken as well as how this industry fits into the supply chain and helps other sectors meet their goals whether they are suppliers or customers. We have only just started this process and a lot more research and consultation is
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*For further information on the SFMCA please visit www.sfmca.com.au*

**Combined Work of FIAAA and SFMCA**

The last 12 months has seen the FIAAA and SFMCA work closely together on issues of mutual benefit. Programs of noting include:

**Australasian Milling Conference (AMC)**

A major activity of the industry calendar is the biennial AMC held in conjunction with the Poultry Information Exchange (PIX). Both invited international and local speakers address current issues and the outlook for the feed supply chain. AMC is known to be the major Australian conference for milling and livestock production in Australia. During 2018 we had in excess of 450 registrants (and another 640 registrants for PIX) and some 380 exhibition sites.

**Antimicrobial Resistance Stewardship Program**

A major issue confronting the feed industry is how to deal with the minimisation of antibiotic use in livestock and human health. The development and subsequent implementation of a Stewardship program will go a long way to assisting industry take responsibility, review progress against targets, reduce use, refine and improve plans and replace antibiotics without compromising health and wellbeing. The Australian feed industry is working closely with Governments and livestock industries to ensure Australia can avoid resitency issues in Australia and maintain a commitment amongst its members.

**National Feed Standards**

These Standards will form the backbone of Australia’s co-regulation of the feed and additives industry. Having been drafted and reviewed over the last few years the Australian Governments and industry have started the final push to finalise and legislate for the introduction of the Standards. This will ensure consistent legislative oversight across eight jurisdictions. It will also enable to more strongly regulate the import of feedstuffs.

**Collaboration along the Supply Chain**
Antimicrobial Resistance Stewardship Program
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Collaboration along the Supply Chain
The FIAAA and SFMCA work closely together leveraging against each other to ensure a harmonised approach to the issues faced by the production chain. In addition we also work closely with Australian Association of Ruminant Nutritionists, Australian Technical Millers Association, Australian Renderers Association and Pet Food Industry Association of Australia. Without this level of collaboration major projects cannot be achieved in an effective manner. Its always a pleasure to work with these organisations and kick some goals.

In addition we also have very strong relationships with the Australian Government that has enabled such a strong ability to achieve the transparent co-regulatory system that Australia has been working on for the last seven to ten years.

Both the FIAAA and SFMCA are proud to be active members of the IFIF.
Figures from the OECD/FAO report (Agricultural Outlook 2017/2027) stated that Brazil is going to exceed 23% of global meat exports (bovine, pork and chicken, as well) by 2027, at around 8.7 million of the overall amount of almost 37 million MT.

This upcoming national participation is expected to increase shipments by 49%, 5% and 26%, in beef (1.8 million MT/2017 and 2.7 million MT/2027); pork (688 thousand tons/2017 and 720 thousand MT/2027); and chicken (4.2 million MT/2017 and 5.3 million MT/2027), even higher marks, when compared to the expected global export rate of 16% (11 million MT/2017 and 12 million MT); 4% (8.3 million MT/2017 and 8.6 million MT/2027); and 25% (12.7 million MT/2017 and 15.8 million MT/2027), respectively. In addition, the FAO study (Biennial Report on Global Food Markets/May 2019) noticed that global trade rebounded to some extent, and reached 33.8 million MT and grew by 1.8% in 2018 (the largest advance since 2013), representing some recovery, when compared to 2017 which recorded 32.8 million MT.

Taking into account the history of recent years and relying on the economic recovery, it is possible to bet on progress towards the production chain in 2019, since its performance is quite modulated by animal protein producers/exporters. World trade in meat and meat products is forecast to surpass 35 million MT in 2019, up 4.8 percent from last year. Much of the expansion is projected to stem from an expected increase of 19-20% in overall meat imports by China, besides others, as well as this expected expansion in world import demand is forecast to be met largely by increased exports from Brazil, EU and USA, among others.
Brazil, EU and USA, among others.

In Brazil, the settlement of the domestic structural reforms, such Public Social Pensions and Labor, as well, eased to some extent the entrepreneur’s tension and restored some confidence to the investors and domestic consumer. The positive grain harvest (mainly corn and soybean) mitigated the cost of feed and favoured the animal protein production chain, although the resurgence of global trade protectionism and especially the postponement of other reforms, such Taxes and Public Federal Employee Package, has bring some turmoil.

Once again, playing futurology and sprinkling a reasonable dose of optimism, it is possible to forecast the production of 74.7 million MT of complete feed and mineral supplements in 2019, an advance of 3.4% when compared to the 72.2 million MT accounted in 2018.

### BRAZILIAN FEED (MILLION METRIC TONNES)

<table>
<thead>
<tr>
<th>FEED TYPE</th>
<th>2018</th>
<th>2019*</th>
<th>% CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poultry</td>
<td>38.5</td>
<td>39.4</td>
<td>2.5</td>
</tr>
<tr>
<td>→ Broiler</td>
<td>31.7</td>
<td>32.6</td>
<td>3.0</td>
</tr>
<tr>
<td>→ Layer</td>
<td>6.8</td>
<td>6.8</td>
<td>0</td>
</tr>
<tr>
<td>Swine</td>
<td>16.8</td>
<td>17.7</td>
<td>5.5</td>
</tr>
<tr>
<td>Cattle</td>
<td>8.6</td>
<td>8.9</td>
<td>3.7</td>
</tr>
<tr>
<td>→ Dairy</td>
<td>6.0</td>
<td>6.2</td>
<td>3.9</td>
</tr>
<tr>
<td>→ Beef</td>
<td>2.6</td>
<td>2.69</td>
<td>3.4</td>
</tr>
<tr>
<td>Dogs and Cats</td>
<td>2.65</td>
<td>2.77</td>
<td>4.4</td>
</tr>
<tr>
<td>Equine</td>
<td>0.585</td>
<td>0.594</td>
<td>1.6</td>
</tr>
<tr>
<td>Aquaculture</td>
<td>1.23</td>
<td>1.30</td>
<td>5.0</td>
</tr>
<tr>
<td>→ Fish</td>
<td>1.16</td>
<td>1.22</td>
<td>5.0</td>
</tr>
<tr>
<td>→ Shrimp</td>
<td>0.074</td>
<td>0.079</td>
<td>7.0</td>
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<tr>
<td>Others</td>
<td>0.850</td>
<td>0.840</td>
<td>-1.1</td>
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<tr>
<td>TOTAL FEED</td>
<td>69.2</td>
<td>71.5</td>
<td>3.4</td>
</tr>
<tr>
<td>MINERAL SUPPLEMENTS</td>
<td>3.04</td>
<td>3.20</td>
<td>5.5</td>
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<tr>
<td>OVERALL</td>
<td>72.2</td>
<td>74.9</td>
<td>3.7</td>
</tr>
</tbody>
</table>


According to Dr. Zani, during 2018, the broiler producer demanded 31.7
According to Dr. Zani, during 2018, the broiler producer demanded 31.7 million tons of feed, a drop of 2%, in line with the chicks’ housing, which declined 2.3%, mainly due to the cost of corn and soybean meal at the beginning of the year, the international trade embargo and the logistical strike, as well as, the continued fragility of the domestic consumer. The forecast is that the production of ration for broilers in 2019 will reach 32.6 million MT, an increase of 3.0%.

In the case of laying hens, the production of rations amounted to 6.8 million MT and a 10% increase in response to the strong chicks housing and egg production, which in the second half broke a historical record. However, the continuity of this rhythm is not sure the demand for layers feed can account only 6.8 million MT in 2019, without advance when compared to the amount produced in 2018.

The demand for swine feed increased 1.5% in 2018 and totalled 16.8 million MT, despite the decline in exports, mainly because of the Russian embargo and the low price paid to live pigs that eroded the profitability of pig producers. Because the advent of devastating African Swine Fever in China, it is great the opportunity for resuming shipments during 2019, and the outlook is at least 5.5% in feed production for pork in 2019 or 17.7 million MT.

In turn, the production of feed/concentrate for beef cattle reached 2.6 million MT, or 2.1% increase when compared to last year, mainly due to the resilience of this production chain, also hit by the truck drivers’ strike in the first half of 2018. The forecast is to produce 2.69 million MT in 2019, a growth of 3.4% when compared to 2018.

In the case of dairy cattle chain, it suffered mainly due to the logistic strike that disturbed the feed delivery through the herds and disturbed the raw milk uptake. The feed production did not increase and only accounted 6 million MT in 2018. In contrast, the scarce supply of raw milk to dairy products favoured the increase of its price during most of the year. This apparent improvement brought some vitality, especially to more advanced producers. The improved climatic and pasture conditions, the greater interest of the consumer and the fall in the feed cost along the first half allows to forecast the production of 6.2 million MT in 2019, that is, a 3.9% increase compared to 2018.

The production of fish and shrimp feeds amounted 1.23 million MT, and increased 4.3% in 2018, exclusively because the performance of fish farming. Despite the difficulty in granting environmental licenses and the producer profit pressure, continued investment in vertical integration systems may lead to the production of approximately 1.3 million MT in 2019, an increase of nearly 5% over 2018.
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The production of fish and shrimp feeds amounted 1.23 million MT, and increased 4.3% in 2018, exclusively because the performance of fish farming. Despite the difficulty in granting environmental licenses and the producer profit pressure, continued investment in vertical integration systems may lead to the production of approximately 1.3 million MT in 2019, an increase of nearly 5% over 2018.

Finally, because the economic status and the political uncertainties, the Brazilian consumers remain with a very compromised budget and driven to buy cheaper goods. Despite the gravity of contemporary circumstances, owners continue to offer more pet food to companion animals. The estimate is that in 2018 the amount produced increased 2.9% and reached 2.65 million MT, while the forecast for 2019 is 2.77 million MT, or 4.4% higher than 2018, concluded Dr. Ariovaldo Zani, CEO of the Brazilian Feed Industry Association/Sindirações.

For more information please visit: www.sindiracoes.org.br.
The Animal Nutrition Association of Canada (ANAC) is the national trade association of the livestock and poultry feed industry. Our 164 members include feed and ingredient manufacturers and distributors, as well as suppliers of a wide range of goods and services to the feed industry. Taken together, ANAC’s membership represents 90 percent of commercial feed manufactured in Canada.

ANAC acts as the voice of the feed industry in dealings with government policy makers and regulators. Our efforts are aimed at fostering a favourable regulatory and business environment for the industry, while supporting initiatives to maintain the highest standards of feed and food safety. Our priorities have evolved to include increased outreach to industry stakeholders as well as the development of additional tools to help the feed industry adapt to change – be it regulatory, food safety, or customer requirements.

**Strategic Plan 2018-2023**

The pillars of ANAC’s 2018-2023 Strategic Plan include Food Safety, Communication, Growth and Strategic Resources. The feed industry is undergoing significant changes related to the regulatory and business environment and the new plan will help focus and direct the work of the association to enhance its effectiveness and to meet the needs of members today and into the future.

**Regulatory modernization**

Much of our advocacy efforts in recent years have been directed towards the modernization of the feed industry’s regulatory framework, which has been
Regulatory modernization
Much of our advocacy efforts in recent years have been directed towards the modernization of the feed industry’s regulatory framework, which has been underway since 2012. The CFIA released the remaining consultation documents on technical aspects to be included in 2019. The modernization initiative has been long and complex and is nearing completion although significantly behind schedule. Due to new regulatory priorities and an upcoming election, we now anticipate a first publication of the new regulatory text by spring 2020 with a coming into force sometime in 2021-2022. ANAC’s priority will continue to be working with government to resolve outstanding issues as well as to start preparing the industry for upcoming changes stemming from the new regulations.

FeedAssure®
In 2019, ANAC’s customized feed HACCP and certification program celebrated 20 years since its development. Bringing the highest safety standard to food production, there are now 185 certified facilities certified under the program which accounts for more than 70 per cent of Canada’s commercial feed production. With preventive control plans anticipated to be required in the new regulations, the program will be getting a refresh to ensure it continues to be recognized by CFIA and meet the needs of program participants and customers.

Medically important antimicrobial policy changes
Our industry spent the better part of 2018 preparing for a sweeping set of policy changes that took effect on December 1, 2018 related to the sale and use of medically important antimicrobials. Many of these products have historically been included on Health Canada’s over-the-counter drug list and their move to the prescription drug list is a significant change for all players in the livestock and poultry value chain. Going forward, producers will require a veterinary prescription to purchase any of these products no matter the route of administration. ANAC worked extensively with key stakeholders to ensure a smooth transition for the feed industry, including the development of several sector-specific fact sheets.

African swine fever and biosecurity
The outbreak of African Swine Fever (ASF) in China in August 2018 reminded the feed industry how important it is to be vigilant and to practice good biosecurity at all times. As an industry, we continued to collaborate with other stakeholders and with government to help support good biosecurity throughout the feed value chain.

In September 2018, ANAC published a “National Biosecurity Guide for the Livestock and Poultry Sector”, which had been developed in collaboration
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In September 2018, ANAC published a “National Biosecurity Guide for the Livestock and Poultry Sector”, which had been developed in collaboration with nutritionists, feed companies, veterinarians, and government from across Canada over the course of the previous few months. Although commodity-, producer-, regional-, and company-specific biosecurity guides exist, there was no national guide for the Canadian feed industry. The guide represents best practices, specific to the feed industry, that can be used both within a company and in conjunction with suppliers and customers to limit the introduction and spread of animal diseases, pests, and pathogens. It addresses daily best practices as well as provides direction in the event of an active disease outbreak, bringing focus to biosecurity measures critical to the sustainability and profitability of the Canadian agricultural sector.

Zootechnical additives
For many years, industry has been advocating that zootechnical products are needed for Canadian livestock and poultry production in order to remain competitive with international markets where access to these products is readily available. Producer groups have also stressed the importance of these additives in their animal health toolbox due to increased pressure to reduce the use of antimicrobials.

Although regulatory roadblocks remain, pathways for the registration of the following category of products for feed are now available: mycotoxin detoxifying agents, gut modifiers and products with stress-related claims. Enabling access to new and innovative products in Canada will be a crucial step in aligning our regulatory approaches with those of our international counterparts as we move towards a modernized regulatory framework and is a top priority for ANAC.

Guidance for the Marketing of Animal Feed Products in Canada
ANAC published its “Guidance for the Marketing of Animal Feed Products in Canada” in June of 2018. The goal of creating this document was to ensure a level playing field between companies and to enhance the credibility of our industry by encouraging the dissemination of accurate, fair, and objective information on animal feed products. The document has been well received by both CFIA and Health Canada and has alleviated some of their concerns regarding product marketing practices in Canada. As government gains trust,
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**Workplace Hazardous Materials Information System (WHMIS 2015)**

As the June 1, 2018 implementation deadline approached for the implementation of the Globally Harmonized System (WHMIS 2015 in Canada), ANAC received numerous calls from members for additional guidance on its application in feed. Following further discussion with Health Canada and CFIA, ANAC published additional guidance on the broad use of generic safety data sheets for feed. These have the potential to significantly reduce the administrative burden of WHMIS 2015 implementation for the feed industry.

*For more information please visit: www.anacan.org.*

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**Browse other regions**
From 19 April to 23 April 2016, the China Feed Industry Association (CFIA) successfully held the 2016 China Feed Industry Expo in Hefei, Anhui province. The theme of the expo was ‘Transformation and Upgrading to Build the Brand Image’.

The expo was divided to 12 show and trading areas functionally, owning almost 2000 negotiation booths. The booth area was about 60,000 square meters. More than 50,000 professional audiences visited the expo. The expo played an important role in releasing information, exchanging technology and negotiating the business. It has been already the most influential professional brand expo and platform in the China feed industry.

National Feed Industry Office and China Feed Industry Association organized ‘The 12th Five-Year Plan Achievements Exhibition of China Feed Industry’, showing Chinese feed industry and companies achievements in industry developments, technology innovation, company development and industry service systematically, which boosted the development confidence of industry and companies in ‘the 13th Five-Year Plan’.

CFIA organized the 2016 Feed Ingredients Forum, investigating on the topics of China macro-economics situation, planting industry structure adjustment, animal husbandry transformation and upgrading, ingredients marketing supply and demand, Internet boosting industry development and so on. It set up a high-end sharing information and communicating cooperation platform for the companies to study and judge supply-demand situation on feed ingredients market and utilize the resources effectively. Over 600 representatives participated the forum, both at home and aboard.
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CFIA organized the 2016 Feed Industry Technology Exchange Seminar. The seminar invited famous professors including 4 academicians from the Chinese Academy of Engineering to communicate and discuss on industry development hot issues about precision nutrition, antibiotics control and alternative technology under the environment of ‘Internet+’ and Big Data to expand new development space consistently by using new ideas and technologies.

To Promote Feed Industry Standardization Positively
To organize the formulation and revise of feed industry standards is an important responsibility of CFIA. The secretariat of National Feed Industry Standardization Technology Committee is set up in CFIA. In 2016, CFIA organized 6 review meetings and inspected 10 national standards and 21 industrial standards. 11 national standards and 16 industrial standards were for approval. 38 standards was established and 5 standards was published. In addition, CFIA finished the cleanup assessment for 15 mandatory standards and reviewed 258 recommended national standards.

To Improve Feed Industry Supporting Regulations
CFIA reviewed new feed, new feed additives, imported feed and feed additives legally and approved 1 product. Also CFIA evaluate 5 revision suggestions which is proposed by the companies about sunflower oil and so on to Feed Ingredients Catalog and 4 revision suggestions about sodium metabisulfite and so on to Feed Additives Breed Catalog. We keep to expand the application range of Feed Ingredients Catalog and Feed Additives Breed Catalog.

To Enhance Feed Industry Monitoring and Warning
According to National Feed Industry Statistic Reporting Institution, CFIA has implemented the industry monitoring and warning nationally and published situation analysis reports termly. CFIA can master the industry news timely from more than 260 statistic monitoring spots. We also held the feed situation analysis consultant meeting termly and published Chinese Feed Industry Yearbook and National Feed Industry Statistic Data to provide the reference for government scientific decision and company production.

In 2016, the total nationwide commercial feed production is 20,918 million tonnes, with year-on-year growth of 4.5%, in which compound feed production is 18,395 million tonnes, increasing 5.7% year on year; Concentrated feed production is 1,832 million tonnes, dropping 6.5% year on year; Additive premix feed production is 691 million tonnes, increasing 5.8% year on year.
Concentrated feed production is 1832 million tonnes, dropping 6.5% year on year; Additive premix feed production is 691 million tonnes, increasing 5.8% year on year.

The proportion of compound feed, concentrated feed and additive premix feed in overall production is 87.9%, 8.8%, 3.3% respectively. The compound feed proportion increased 1%, concentrated feed proportion decreased 1% and additive premix feed proportion is flatter than the last year.

**Total Quantity of Feed Production**
In 1980, total feed production was 1.1 million tonnes, in 2005, total quantity increased to 107.32 million. In 2011, it reached 180.63 million. In 2014, total feed production increased to 197.27 million tonnes.

**Feed Additives Production**
From 2008 to 2014, amino acid, vitamin and minerals & clathrate increased respectively 452.4%, 72.3%, 227.8%; feed enzyme, antiseptic agent & preservatives and microorganism increased 174.2%, 1456.4%, 159.3%. Feed amino acid is sufficient for domestic use, with certain amount for export.

**Mergers and Acquisition**
There are more and more large-scale feed manufacturers appeared and feed industry concentration degree improved. In 2003, total number of feed producers were 13,874. In 2014, the total number of feed manufacturers decreased to 9,584, 30% less than that of 2003. In 2003, there were 67 manufacturers with production capacity of 100 thousand tonnes/year, while in 2014, there were 500 manufacturers with production capacity of 100 thousand tonnes/year. Now there are 31 feed enterprises with annual production capacity of 1 million tonnes.

**The Development of Feed industry Has Promoted Development of Animal Husbandry**
China has long history in raising domestic animals, it is now in the transitional period from traditional to modern animal husbandry.

**Major Livestock Products Output**
In 2013, total production of meat, egg and milk were respectively 85.35 million tonnes, 28.76 million tonnes and 35.31 million tonnes, with average per caput of meat, egg and milk was 62.9 kgs, 21.2 kgs and 26.1 kgs.

*For more information please visit: www.chinafeed.org.cn.*
The Chamber of Feed Industry is mainly responsible for managing the representation and communications in front of different entities of the National and Regional Government, in order to make public policy recommendations that result in a better framework to carry out business activity in the country. Currently, the Chamber works hand in hand with public entities of the national order, associations and private companies to contribute to the sustainability and competitiveness of the country in the production of animal protein, improve health and nutrition of the Colombian population and the welfare of pets.

The Chamber of Feed Industry brings together the main companies in the country that produce animal feed in its different lines: poultry, swine, livestock, pets, minor species and aquaculture. The Feed Industry is the agroindustrial link of the livestock sector chain that converts raw materials of agricultural origin into food for the production of meat, fish, eggs, milk, cheese and dairy products, being the primary source of animal protein. The companies affiliated to the Chamber of Feed Industry represent the 85% of the total production of manufactured commercial animal feed.

The Chamber also participates in the shaping of public policies and projects that seek to improve legal certainty, close gaps in human capital and promote innovation and entrepreneurship, framed in a strategy of social and sustainable development.
sustainable development.

In order to achieve its goals, the Chamber is currently working on five strategic issues: Environmental; Taxes; Labor; Trade, logistics and customs; and Technic, agricultural and health.

The main effort in the technical area is oriented to the regulatory modernization of the feed industry in Colombia. To this end, the Chamber has been developing technical proposals based on the best international standards for feed and additives safety, best manufacturing practices and strategies for the development of an inspection, surveillance and control model based on risk analysis.

**FEED INDUSTRY STATISTICS (TONNES)**

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>GROWTH</th>
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<tbody>
<tr>
<td>Total Feed Production</td>
<td>8,036,307</td>
<td>8,435,207</td>
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</tbody>
</table>

*Source: Chamber of Feed Industry, ANDI estimates.*

**FEED PRODUCTION IN COLOMBIA, 2011 – 2018 [MILLION TONNES]**

![Graph showing feed production from 2011 to 2018]

*Source: Chamber of Feed Industry, ANDI estimates.*

**BREAKDOWN OF FINISHED FEED PRODUCTION BY CATEGORY, 2018**
BREAKDOWN OF FINISHED FEED PRODUCTION BY CATEGORY, 2018

Poultry: 65%
Swine: 16%
Cattle: 9%
Pets: 4%
Equines, rabbits, and others: 3%
Aquaculture: 3%

Source: Chamber of Feed Industry, ANDI estimates.

Browse other regions
FEFAC, the European Compound Feed Manufacturers’ Federation, represents 23 national Associations in 23 EU Member States as well as Associations in Switzerland, Turkey, Norway, Serbia and Russia with observer/associate member status. The European Manufacturers of Feed Minerals Association (EMFEMA) as well as the European Former Foodstuffs Processors Associations (EFFPA) also hold associate membership. The European compound feed industry employs over 100,000 persons at approximately 3,500 production sites often in rural areas which offer few other employment opportunities.

Key Market Developments

**Compound feed production estimates for 2018**

The industrial compound feed production for farmed animals in the EU-28 in 2018 reached an estimated level of 165 mio. t, i.e. 2.4% higher than in 2017, according to data provided by FEFAC members.

**INDUSTRIAL COMPOUND FEED PRODUCTION PER COUNTRY 155 MIO. T IN 2018 IN THE EU-28**

Source: The European Feed Manufacturers’ Federation (FEFAC)

As regards cattle feed, 2018 results were affected by adverse weather conditions. There were exceptional drought and heat waves, in particular during late spring/summer in North-Western Europe, which severely
other employment opportunities.

Key Market Developments

**Compound feed production estimates for 2018**
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As regards cattle feed, 2018 results were affected by adverse weather conditions. There were exceptional drought and heat waves, in particular during late spring/summer in North-Western Europe, which severely impacted forage production. This led to a significant but not dramatic increase in the compound feed demand in certain regions, as the effect became more visible at the end of winter 2019 when forage stocks reached their lowest point. Farmers in certain countries have also reverted to early culling of cows, which, together with heat stress, lowered milk production but also the feed demand. All in all, the demand for cattle feed in 2018 was 5.7% higher than in 2017.

Concerning poultry feed production, the overall production increased by 1.6%, mostly driven by the development of poultry production in Finland, Czech Republic and Poland recording a growth of app. 5%. In certain countries like Germany, the demand for laying hens feed dropped dramatically (-4%). In France, the positive result (+1.8%) was to a large extent linked to recovery of the duck feed market (+51%). (Fertiliser prices remained essentially stable.)
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The positive trend in poultry exports and sharp reduction of imports from Brazil contributed to support a positive momentum for the EU poultry sector and, therefore, an increased demand for commercial feed. EU poultry feed production remains the leading segment of EU industrial compound feed production, well ahead of pig feed.

On the pig feed side, production remained stable in 2018, although Spain set another production record (10.6 mio. t), and several Central European countries (Hungary, Poland, Slovakia, Bulgaria, Croatia) enjoyed growth by 3.5% and higher. On the opposite, a number of North Western European countries (The Netherlands, France, Germany) have seen their production of pig feed fall by 2-3%.

INDUSTRIAL COMPOUND FEED PRODUCTION PER COUNTRY 163.3 MIO. T IN 2018 IN THE EU-28

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>24.3%</td>
</tr>
<tr>
<td>France</td>
<td>20.8%</td>
</tr>
<tr>
<td>Spain</td>
<td>11.6%</td>
</tr>
<tr>
<td>Poland</td>
<td>14%</td>
</tr>
<tr>
<td>UK</td>
<td>14%</td>
</tr>
<tr>
<td>Ireland</td>
<td>14%</td>
</tr>
<tr>
<td>Portugal</td>
<td>3.8%</td>
</tr>
<tr>
<td>Romania</td>
<td>3.1%</td>
</tr>
<tr>
<td>Belgium</td>
<td>2.4%</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>2.4%</td>
</tr>
<tr>
<td>Denmark</td>
<td>4.3%</td>
</tr>
<tr>
<td>Slovenia</td>
<td>0.4%</td>
</tr>
<tr>
<td>Sweden</td>
<td>2%</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

OTHER NATIONS (DETAILED BREAKDOWN)
For the fifth year in a row, Poland was the best performing country, with annual growth of total compound feed production of +5.5%, boosted equally by the demand for poultry, pig and dairy feed. Among the largest compound feed producing countries, France, Italy, UK and Spain increased their production of compound feed by 1.2, 3 and 4% respectively, whereas the

Source: The European Feed Manufacturers’ Federation (FEFAC)
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**Key Regulatory & Policy Developments**

The FEFAC Animal Feed Industry Vision 2030, based on the three key pillars Animal Nutrition, Feed Safety Management and Sustainability, has served as the backbone and reference for FEFAC’s key activities since its adoption at the XXVII FEFAC Congress in April 2016. FEFAC has continued on the road to implementation of the Vision 2030 to reposition feed production and livestock farming as part of the solution to societal demands.

**Environmental footprinting**

The European Feed Industry has shown rising awareness and responsibility about its share and contribution to the environmental footprint of animal products, including meat, eggs, milk and farmed fish. Further to the European Commission Publication on the “Feed for Food-producing Animals” PEFCR on its website, FEFAC won a second EU tender in February 2019 to update and extend the EU PEF database beyond 2021.

In the meantime, our international GF LI Consortium managed to publish the 1st public-access global Feed LCA database in December 2018 and subsequently the first version of the LCA feed calculation tool in April 2019 delivering all tools linked to our partnership with IFIF, AFIA (US feed industry) and ANAC (Canadian feed industry) on the development of the GF LI Database with datasets for more than 1,500 key feed ingredients. Further sector PEF and GF LI projects are developed for marine ingredients, rendered products and forage feedstuffs, showing the growing interest of other supply chain partners in generating GF LI datasets. In 2019.

**Responsible soy sourcing**

FEFAC has approved its responsible soy action plan 2019-2020 which will allow FEFAC to explore the use of LCA methodology for (PEF & GF LI) for providing financial incentives to soy farmers willing to invest in environmentally sound production methods. FEFAC’s Sustainability Committee started reviewing the guidelines criteria in the autumn 2019 to evaluate options to tackle deforestation-free criteria present in several programmes.
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The FEFAC Steering Group members agreed to co-sign a common declaration on the responsible sourcing of soy including a commitment at individual company level to source responsible soy meeting FEFAC’s soy guidelines criteria by 2025.

With a view to the announced EU Commission communication on its Deforestation action plan, FEFAC issued its own updated position on deforestation stressing the need for interaction between governments and other stakeholders at different levels to invest in effective implementation of national environmental legislation and relevant supply chain initiatives.

Co-products: an essential component of animal nutrition

In the margins of the 60th Anniversary event, FEFAC released a publication on the use of co-products by the European feed industry. This publication answers the long-standing request from members for FEFAC to be more active in communication and better explain what the sector does to improve the sustainability of food systems.

European Protein Plan & EU Protein balance sheet

The European Feed Industry is seen as one of the most important stakeholders to help develop a successful European Protein Plan. FEFAC explained to policy makers what drives the demand for vegetable proteins from the animal nutrition perspective, i.e. protein quality (amino acid profile, concentration & nutrient density and anti-nutrients). As a follow-up action, a further milestone was achieved in May 2019 with the publication of the updated and expanded EU protein balance sheet now covering roughages, accounting for 45% of the total feed protein supply and raising the EU self-sufficiency level to 80% in total feed proteins. FEFAC is now promoting to make active use of the revised balance sheet as an assessment tool for the impact of EU policies on protein supply and for national strategic CAP reform plans.

Animal Nutrition – Further steps at EU and global level to support the role of animal nutrition in optimal animal health management

FEFAC’s Animal Nutrition and Premix & Mineral Feed Committees organised a
Animal Nutrition – Further steps at EU and global level to support the role of animal nutrition in optimal animal health management

FEFAC’s Animal Nutrition and Premix & Mineral Feed Committees organised a dedicated workshop on the role of Animal Nutrition to reduce the need for antibiotics in October 2018 in Lisbon, which was attended by industry experts, scientists and public policy makers. The presentations provided practical examples on how animal feeding systems can make a significant contribution in prevention programmes to manage gut health, thus supporting farm animal resilience to cope with pathogens. This approach was also presented and well received during the CODEX Task Force meeting on AMR held in South Korea in December 2018, where FAO organised jointly with IFIF a side-event to share both the scientific and industry perspective in which way animal nutrition can contribute to the UN objective of reducing the use of antibiotics in livestock production.

Feed Safety Management – Further scrutiny of feed additives produced by fermentation can be expected

FEFAC has engaged with FEFANA, FAMI-QS and other European organisations from the fermentation sector to find a solution how to ensure compliance of essential feed additives produced by fermentation using GMOs with the EU GM legislation after several RASFF notifications on Vitamin B2. Beyond the question of compliance with EU GM legislation, what is at stake is the EU sourcing of essential feed additives and how to manage the risk of potential fraud.

FEFAC has continued the commitment from the Vision 2030 to work with all key supply chain partners and policy makers on optimal feed safety management, including official feed control. FEFAC has also continued the work on a benchmarking initiative with ITC for private sector assurance programmes including a pilot project carried out in May 2019 comparing two feed safety programmes and EFMC against the extended list of ITC food & feed safety criteria.

Animal diseases – Feed industry contribution to preserving farm biosecurity

African Swine Fever (ASF) has seen continued expansion from the Eastern EU border of the EU to the West over the past year. The FEFAC Task Force on Biosecurity delivered its Recommendations for the development of a Biosecurity plan in the EU Compound feed industry.

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COMPOUND FEED PRODUCTION IN EUROPEAN PRODUCTION (INDEX 100 = 1995)
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COMPOUND FEED PRODUCTION IN EUROPEAN PRODUCTION (INDEX 100 = 1995)

Source: FEFAC – Altech – Feed International

For more information please visit https://www.fefac.eu/

Browse other regions
FEFANA is the EU Association of Specialty Feed Ingredients and their Mixtures. It acts as the united voice of the specialty feed ingredients business in Europe. Its membership comprises manufacturers and traders of feed additives, functional feed ingredients, premixes and other mixtures of specialty ingredients that enter the food chain via feed. FEFANA facilitates the dialogue between EU institutions and feed business operators while promoting feed and food safety and a fair and competitive market.

FEFANA’s overall mission is to promote, safeguard and defend the common and general interests of the industry of SFIs and their Mixtures. It represents the views of its Members to the EU authorities and, via its network of national partners in key EU Member States, also to the Competent Authorities of these countries. FEFANA has gained a strong positive reputation across Europe to key decision-makers and it has built close contact with other stakeholders of the feed and food chain.

FEFANA is a well-recognized IFIF full member. Representing the supplying industry, FEFANA plays a significant role in the feed & food chain and shares a common responsibility with the compound feed industry. FEFANA views IFIF as the interface to certain key international organisations, such as FAO, Codex, OIE and ISO, and the ideal platform to meet with other actors of the feed and food chain.

FEFANA consortia for the authorization of feed additives in the EU
Through its efficient consortia system, FEFANA is involved in the authorization process of new additives and implements all necessary measures to ensure the safety and quality of the feed and food products.
FEFANA consortia for the authorization of feed additives in the EU

Through an efficient cooperation system, manufacturers and importers of feed additives were offered the opportunity to participate in FEFANA Consortia and jointly prepare and submit applications for the re-authorisation of over 1000 additives. These are being evaluated by European Food Safety Authority (EFSA) prior to re-authorisation by the European Commission. The evaluation phase of some Consortia dossiers is still on-going and its completion might take a few more years.

A major milestone was achieved in early 2017 with the publication of a first set of authorisations of feed flavourings compounds including more than 150 compounds pertaining to 15 dossiers of Chemically Defined Substances. The conditions of use of these re-authorisations are significantly different from their previous authorised use as per Directive 70/524/EEC. Whereas the previous authorisation did not provide limits for level of inclusion of the great majority of flavourings in feed, the new authorisations have in their majority a recommended use level for all species and few of them have also a maximum permitted level. Such levels are recommended on the basis of the safety assessments performed by EFSA. The finalisation of the EFSA evaluation and subsequent EU re-authorization of all botanical feed flavourings is still pending.

FEFANA is committed not only in the daily management of the dossiers, but also on the practical implications that each re-authorisation may carry.

FEFANA Publications

Being the technical expert on Specialty Feed Ingredients and their Mixtures, FEFANA aims at providing technical and scientifically sound information on the benefits and safety of the products of its industry. In order to disseminate such knowledge, FEFANA has issued so far:

- Factsheets: in the last few years FEFANA has published a series of Factsheets or one-pagers on the benefits of SFIs in the context of current global challenges (e.g. antimicrobial resistance, sustainability) and on activities carried out within FEFANA’s groups of experts (e.g. organic farming, revision of guidelines and more) and on topics handled by FEFANA strategic and expert groups (e.g. revision of guidelines, feed additives in organic farming and more).
- Booklets: FEFANA has published five booklets on different categories of products: Premixtures, Organic Acids, Carotenoids, Amino Acids, and Vitamins.

These and other publications are available on FEFANA’s virtual info center.
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**FEFANA On-line classification tools guiding the industry on EU regulatory requirements**

The distinction between feed materials and feed additives has critical implications for the placing of these products on the EU market. Feed business operators and competent control authorities are frequently faced with questions regarding the classification of products. EU guidelines for the distinction between feed materials, feed additives, biocidal products and veterinary medicinal products (EC Recommendation 2011/25/EU of 14th January 2011) were established to avoid inconsistencies and to provide an appropriate level of legal certainty, misclassification having potentially severe consequences. Since the guidelines remain somewhat theoretical, a need for such a useful tool was perceived by the operators. The FEFANA on-line tool does not aim to substitute for the operators’ or the authorities’ responsibility to take a decision but is expected to be an important benchmark in the decision process: [http://fefana.org/ClassTool/](http://fefana.org/ClassTool/)

FEFANA has also launched another user-friendly tool to support business operators in the categorization of the different types of mixtures as defined in the EU’s regulatory framework. The new tool is based on the definitions covered by the three reference EU Regulations for mixtures:

- Regulation (EC) No 1831/2003 on additives for use in animal nutrition (premixtures):
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- Regulation (EC) No 1831/2003 on additives for use in animal nutrition (premixtures);
- Regulation (EC) No 767/2009 on the placing on the market and use of feed (compound feed);
- Regulation (EC) No 327/2015 on the requirements for the placing on the market and conditions of use of additives consisting of preparations (feed additive preparations).

This voluntary tool, alongside the one launched earlier on for the identification of single substances, will continue facilitating businesses and authorities in their efforts to ensure compliance with the relevant regulatory requirements in the EU:

http://www.fefana.com/MixtureClassificationTool/

**FEFANA’s EU Code of Practice on voluntary labelling particulars (claims) for feed additives and premixtures**

Claims on feed additives and premixtures are a common practice in the feed sector, while they are not referred to in Regulation (EC) 1831/2003 on additives for use in animal nutrition. FEFANA has decided to develop its Code in order to achieve a common approach amongst Feed Business Operators (FBOs), which can also be recognized by the authorities, to foster transparency, fair competition and predictability.

In order to ensure alignment along the European feed chain, FEFANA has taken into account other relevant codes of practice already in use; notably the “Code of good practice for the labelling of compound feed for food producing animals” developed jointly by FEFAC and Copa-Cogeca, and the “Code of good labelling practice for pet food” developed by FEDIAF. Complementarily to these documents, the FEFANA Code intends to improve the appropriateness of labelling and to bring a common understanding with regard to the rules applicable to voluntary labelling of feed additives and premixtures.

More information on the rationale and the process behind it, alongside the Code itself, is available at: http://fefana.org/eu-legislation/tools/code-of-practice-claims/

For more information please visit: www.fefana.org or contact us by e-mail at:
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CLFMA of India the apex association formed in 1967 represents dynamic livestock sector in the Country. The association has membership on PAN India basis from diverse subsectors across the animal protein value chain including feed manufacturing; poultry, dairy and aquaculture businesses; animal nutrition and health, veterinary services, machinery & equipment; and processing, distribution and retailing of meat.

CLFMA OF INDIA was broad based from the year 2002, to accommodate all the sectors of the Livestock Industry. All feed manufacturers including Non-Feed in Private, Government and Co-Operative Sectors, the Feed Additives / Feed Supplements Manufacturers and Suppliers. Animal Health products, Manufacturers’ and Suppliers and Importers located all over the country as well as some of the MNC companies as well are our members.

CLFMA OF INDIA is recognized by Livestock farmers, Central and State Governments, Government Departments, Agricultural Universities, Veterinary Colleges and National Research Institutes in the Country as well as by related Sectors outside the Country. CLFMA’s views are solicited and considered as well by the Central and State Governments while formulating policies governing not only animal feed industry but also the entire gamut of animal production.

Indian Feed Industry:
The Indian Feed Industry is going through a phase which will set the direction for the next decade of Indian protein sufficiency.
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The Indian Feed Industry is going through a phase which will set the direction for the next decade of Indian protein sufficiency.

The Livestock sector provides about 4-4.5% to the GDP and total about 25% of the contribution to the Agricultural GDP. The Growth of the feed Industry is what we called as close to the Indian GDP number of 6-7% with a target to move upto 10% PA. The reasons attributed to this growth percentage has been the rise of Middle class with disposable Income, awareness about the dietary requirements and the overall rise in Population numbers. The feed industry is getting support from consumers in terms of market size moving higher but on the other there are challenges like:

- Industry Consolidation.
- Higher cost of Feed Raw Material cost.
- Import Export Policies and procedures.
- Country Protective policies.

In spite of all these challenges India has managed to achieve fantastic results in terms of being:

1. **NUMBER 1 IN MILK PRODUCTION.**
   Production of 176.2 MYN MT in 2016 versus 116 MYN MT in 2010.

2. **NUMBER 2 IN AQUA PRODUCTION.**
   Production of 10.76 MYN MT in Year 2018 versus 8.1 MYN MT in 2010.

3. **NUMBER 3 IN EGG PRODUCTION.**
   88.15 Billion Egg production versus 54 Billion in 2010.

4. **NUMBER 4 IN BROILER MEAT PRODUCTION.**
   Production of 4.85 MYN MT. Versus 2.65 MYN MT in 2010.

*Source NDDB, Govt Agencies*
NUMBER 3 IN EGG PRODUCTION. 88.15 BILLION EGG PRODUCTION VERSUS 54 BILLION IN 2010.

NUMBER 4 IN BROILER MEAT PRODUCTION. PRODUCTION OF 4.85 MYN MT. VERSUS 2.65 MYN MT IN 2010.

Source NDDB, Govt Agencies

SHARE OF AGRICULTURE & ALLIED AND LIVESTOCK SECTOR IN GVA - (AT CURRENT PRICES IN RS. CRORE)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>GVA (TOTAL)</th>
<th>GVA (AGRICULTURE &amp; ALLIED)</th>
<th>GVA (LIVESTOCK SECTOR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-16</td>
<td>12458642</td>
<td>2175547 (17.5 %)</td>
<td>560613 (4.5%)</td>
</tr>
</tbody>
</table>

Source: Chamber of Feed Industry, ANDI estimates.

Indian Government Focus:
The newly elected government wants to increase the farmer income by 100% by the year 2022, all measures expected for the Industry to do well likely to be undertaken. It has already started with small crop loan like MUDRA scheme, Farmer Insurance etc.

The coming Budget (July 05, 2019) will have special coverage to Agriculture and Indian Agriculture keenly awaits the policies to be made and implemented for the livestock sector for current year and provide a roadmap for the next five years. One India One market has been getting advocated and Agriculture Mandis are being connected through E-NAM. Integration and Connectivity will be the Key words for the coming times.

CLFMA has and will try to engage government as a signboard for the livestock sector for the government and through its members and association there will be for the overall growth and development of the livestock sector in India.
Iran Feed Industry Association, IFIA, based in Tehran, is Iran’s largest organization devoted exclusively to representing the business, legislative and regulatory interests of the Iran animal feed industry and its suppliers. Founded in 2013, IFIA also is the recognized leader for international companies and provincial associations.

Members include 645 certified facilities including animal feed and feed Additive manufacturers, integrators, pharmaceutical companies, ingredient suppliers, equipment manufacturers and companies which supply other products, services and suppliers to feed manufacturers. The feed industry makes a major contribution to feed safety, nutrition and the environment, and it plays a critical role in the production of healthy, wholesome meat, milk, fish and eggs.

General services provided by IFIA:

- Consulting Services for Social Insurance
- Contract Affairs
- Legal Claims
- Tax consultancy
- Arbitration Center
- Ranking Centers

The report of the Iran Feed Industry Association was presented on Strategic Actions, Structural Measures, Major Studies, Research and Publication, and
The report of the Iran Feed Industry Association was presented on Strategic Actions, Structural Measures, Major Studies, Research and Publication, and the most important International Measures. Some guild activities are informed with the aim of developing and strengthening the share of animal feed industry, employment and the national economy.

**Strategic Actions**

- Setting up “Statistics and Economic Information Center” of Iran Animal Feed Industry
- Establishment of the “National Fund” to support the development of Animal Feed Manufacturers
- Removing the Export Tariffs of animal feed
- Setting up the Arbitration center for Iran Animal Feed Industry
- Prohibition of the production of animal feed in breeding units during a five-year period (more than 60% of feed production in breeding units)
- Allocation annual Usence for export of 500 thousand tons of Feed to the international customers
- Providing the scheme of reforming the distribution pattern of feed stuff in order to supply affordable financial resources in different rings of Protein supply chain in the country
- Removing the import tariffs of Feed Stuffs
- Decreasing the tax exemption from 12% to 6% in Iran Feed Mills
- Reducing investment risk in Iran Animal Feed Industry
- Setting up the National Center for Ranking and Competitiveness in Animal Feed Industry
- Launching the Arbitration Center of Animal Feed Industry

**Structural Measures**

- Instruction the Principles and foundations of planning and control to the association’s staff as well as the industry executives
- Setting up a continuous communication system with the members through SMS, and social networks like WhatsApp and Telegram
- Compilation of instructions and programming for the foreign delegation acceptance and sending missions abroad based on the qualitative goals
- With the aim of informing the members, quick following up and correction
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- Setting up a continuous communication system with the members through SMS, and social networks like WhatsApp and Telegram
- Compilation of instructions and programming for the foreign delegation acceptance and sending missions abroad based on the qualitative goals
- With the aim of informing the members, quick following up and correction the disruptive business issues, the unit of the surveillance of regulations and directives has been launched
- Standardization of processes and consolidation of ISO 9001 in the IFIA
- Official Audit of 54 Feed Production units for issuing Export Code
- Holding expert meetings and forming the joint commissions with the presence of government and parliament representatives to establish a bridge between the government and the private sector
- Holding Summit on surveying Monetary, banking and Currency challenges in Animal Feed Industry
- Holding 12 training courses of GMP in different cities of Iran for promoting the level of Feed Safety in Feed Production with participation of IVO, Ministry of Agriculture-Jihad representatives and the directors, QC and Technical managers of Feed Mills
- Holding the Seminar of “Blockchain and the future of the animal feed industry”

Major Studies, Research and Publication

- Publication of the international book of Iran Feed Industry Association: “Iran Animal Feed Market”, with the goal of increasing the information of activists and stakeholders both domestic and international, as well as developing investment and exports in the field of Animal Feed Industry
- Publishing the book of “Iran a new Era” 2018,2019 version
- Publishing the book of “Ranking” in Animal Feed in Iran
- Publishing the book of “Principles and Procedures for Feed Sampling”
- Translating the booklet of “Code of Practice on Good Animal Feeding” “Codex Alimentarius Commission Standard”
- Preparation and Compilation of Glossary of Animal Feed science (underway by the IFIA)
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- Running the first national competitions for successful experiments and Benchmarking in Animal Feed industry, with the aim of encouraging feed manufacturers to share their successful experiences.

The most important International Measures

- Holding The first meeting on “Trade and Investment Opportunities in Iran Animal Feed Industry” with the presence of the president and the Board of Directors of Iran’s Chamber of Commerce, 42 Ambassadors and Economic Advisers of the major countries in the supply chain of Animal Feed, 6 Deputy Ministers, 14 Directors of Economic Ministry, 3 General Directors of the Ministry of Foreign Affairs. Also 11 heads of Reputable Associations and 61 Managers of Livestock, Poultry and Aquatic feed mills were attended in this summit. The representatives of international organizations such as FAO and UNIDO in Iran attended in this meeting as well and read their organization’s messages to the audience.
- Joint Meeting of the Chairman of IFIA and Senior Directors of FAO in November 2018, in Rom, Italy and negotiated for developing partnership with FAO for implementing joint research projects aimed at sustainable development; and
- Translation of the recent published book of FAO: “Transforming the livestock sector through the Sustainable Development Goals”
- Holding the Summit on “Introducing Investment and Commercial Opportunities in Animal Feed” in Euro Tier Exhibition, Hanover, Germany. It was an honor for IFIA that at this ceremony, Dr. Daniel Bercovici, Honorable Chairman of the International Feed Industry Federation (IFIF) presented a lecture on “the development of the private sector relations in the world”.
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The most important steps taken by Iran Veterinary Organization in relation to the Animal Feed Manufacturers Units

Official audits of units supervised to issue export code
54 facilities of Livestock, Poultry and Aquaculture Feed

Issue or renewal of the Export Code (EC / IR)
36 facilities of Livestock, Poultry and Aquaculture Feed

Assessment of documents for approval of importing raw materials and Ready- to- Feed for livestock, poultry and aquaculture:
Aquaculture Feed: 30 facilities
Pet Feed (Dog, Cat, Birds, etc...) 100 facilities
Livestock Feed (Milk Powder) 30 facilities
Feed Ingredients (Concentrate, Fat Powder, Gluten, etc...) 120 facilities

Participate in scientific-specialized working groups
Specialist working groups of Livestock, Poultry and Aquaculture Feed: 32 cases
Feed Technical Committees: 7 cases
National Standards Organization meetings: 45 cases
Working Group of Residue (for animal feed use): 24 cases

State of Iran Compound Feed in 2017, 18
In year ended March 2018, 649 feed mills manufactured 9,896 thousand tons of animal feed, of which 5,654 thousand tons cattle feed, 3,960 thousand tons poultry feed and 291 thousand tons Aquaculture feed.

Statistics shows that compound feed production in Iran increased about 60 percent during 2011 to 2017. Also feed production has 7 percent growth comparing 2016.

FEED PRODUCTION BY TYPE IN 2017 AND THE YEAR ENDED MARCH 2018 (1000 TONS)

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed Mills</td>
<td>645</td>
<td>645</td>
</tr>
<tr>
<td>Cattle &amp; Dairy Feed</td>
<td>5,383</td>
<td>5,645</td>
</tr>
</tbody>
</table>
### FEED PRODUCTION BY TYPE IN 2017 AND THE YEAR ENDED MARCH 2018 (1000 TONS)

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed Mills</td>
<td>645</td>
<td>645</td>
</tr>
<tr>
<td>Cattle &amp; Dairy Feed</td>
<td>5,353</td>
<td>5,645</td>
</tr>
<tr>
<td>Poultry Feed</td>
<td>3,252</td>
<td>3,960</td>
</tr>
<tr>
<td>Aquatics Feed</td>
<td>200</td>
<td>291</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>8,805</td>
<td>9,896</td>
</tr>
<tr>
<td><strong>ACTUAL CAPACITY</strong></td>
<td>20,000</td>
<td>21,000</td>
</tr>
</tbody>
</table>

*Note: About 60% of different types of animal feed are produced by farmers themselves in their farms.*

*Source: Iran Feed Industry Association*

According to official statistics of Agriculture-Jihad Ministry, the total amount of required feed ingredients is 72,264 thousand tons. The highest required ingredient of wheat and barley bran is 14,446 thousand tons, and the lowest required input of feed wheat is 766 thousand tons.

### REQUIRED ANIMAL FEED INGREDIENTS IN 2018 (1000 TONS)

<table>
<thead>
<tr>
<th>FEED TYPE</th>
<th>TONS (1000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed Corn</td>
<td>6,664</td>
</tr>
<tr>
<td>Feed wheat</td>
<td>766</td>
</tr>
<tr>
<td>Feed Barley</td>
<td>5,094</td>
</tr>
<tr>
<td>All type of Meal</td>
<td>3,481</td>
</tr>
<tr>
<td>Alfalfa</td>
<td>7,331</td>
</tr>
<tr>
<td>Forage Corn</td>
<td>12,199</td>
</tr>
<tr>
<td>Sorghum &amp; Millet</td>
<td>3,460</td>
</tr>
<tr>
<td>Weat and Barley Bran</td>
<td>14,446</td>
</tr>
<tr>
<td>Rice and Wheat Bran</td>
<td>2,236</td>
</tr>
<tr>
<td>Pasture Forage</td>
<td>9,000</td>
</tr>
<tr>
<td>Agricultural and Industrial waste</td>
<td>7,567</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>72,264</td>
</tr>
</tbody>
</table>
Required input of feed wheat is 766 thousand tons.

<table>
<thead>
<tr>
<th>FEED TYPE</th>
<th>TONS (1000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed Corn</td>
<td>6,684</td>
</tr>
<tr>
<td>Feed Wheat</td>
<td>766</td>
</tr>
<tr>
<td>Feed Barley</td>
<td>5,094</td>
</tr>
<tr>
<td>All type of Meal</td>
<td>3,481</td>
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<tr>
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<tr>
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<td>7,567</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>72,264</strong></td>
</tr>
</tbody>
</table>

Source: Iran Feed Industry Association

**Feed Export state in 2017/18**

Exporting Animal Feed includes compound feed, concentrates (cattle, broiler and aquaculture), premixes (minerals and vitamins), high energy feedstuff, supplementary protein sources, and animal feed additives. According to Iran Custom Administration (IRICA), animal feed has been exported to 16 different countries in the region of the CIS and Middle East which displays estimation of 173,000 tons by 76 m USD in the year ended March 2017, and 188,000 tons by 86 m USD in the year ended March 2018 of which about 19 m USD Aquatics feed and additives, and 67 m USD of Livestock and poultry feed has been exported in the year ended March 2018.
The Japan Feed Manufacturers Association (JFMA) was established in 1957 as a cooperative to contribute to the prosperity of Japanese feed and livestock industry.

Our organisation

JFMA has 46 member companies and 71 feed mills as of 01 October 2019, which produce formula and mixed feed in Japan.

JFMA’s total feed production by member companies was approx. 16.0 million tons (0.4% increase from the previous fiscal year), and Japanese total formula and mixed feed production was 23,802 million tons (decreased by 0.3% from previous year) in 2018.

We are relying on imported feed ingredients

Japan has been relying on imports for most of feed grains such as corn, sorghum, barley, wheat totaling 13,267 thousands tons a fiscal year of which most are imported from United States but now imports from diversified countries, Brazil and Argentina due to the improvement of their inland transportation and also the port facilities.

Japan used to import corn, which accounts for about 48.3% of formula and mixed feed and second largest is Soybean Meal (12.3%), the third one is the Rapeseed Meal (4.7%), the usage of the rice for feed is decreased to 3.1%.

Fights against infectious animal diseases

Since September last year, a certain area of the central Japan has been suffering from an outbreak of classical swine fever, and the Japanese government has just recently resolved to embark on preventive vaccination for hogs to confine the disease as soon as possible. There is no case of
Fights against infectious animal diseases
Since September last year, a certain area of the central Japan has been suffering from an outbreak of classical swine fever, and the Japanese government has just recently resolved to embark on preventive vaccination for hogs to confine the disease as soon as possible. There is no case of African swine fever reported in Japan, but it has very widely and quickly spread from China and other South-East Asian countries to South Korea, a neighboring country of Japan although separated by the sea. Our animal hygiene authorities and the related industries are on their highest alert, and the members of JFMA have been taking tightest sanitary measures on their plants.

In the coming winter season, avian flu carried by migratory birds is a source of another threat.

Our initiatives to pursue sustainability and environmental goals
In the last several years, under some government support measures to promote diversification of rice production, we have dramatically increased the use of domestically produced rice as a raw material for compound feed to substitute imported corn. Such development of new market for domestic rice has prevented paddy fields from being abandoned in the economically and socially declining countryside, and has contributed to land conservation and local revitalization.

We are also making technical efforts to produce low phosphor and low nitrogen feed to lead to smaller release of these substances in the environment.

Recycling use of food by-products under appropriate sanitary control is another initiative taken by our feed industry to encourage effective use of limited resources and reduction of environmental burdens.

Number of households raising livestock
As of February 1st 2019, the number of households raising dairy cattle was 15,000 (a decrease of 4.5%), the number of heads for dairy cows totalled 1.332 million (an increase of 0.3%).

The number of households raising beef cattle decreased by 4.1%, the number of heads totalled 2.5 million (a decrease of 0.4%).

The number of households raising pigs was 4.300 (a decrease of 2.2%), the number of pigs totalled 9.156 million (a decrease of 0.3%).

The number of households raising layers was 2,200 (no change), the number of layers totalled 184.9 million (an increase of 1.6%).
Number of households raising livestock

As of February 1st 2019, the number of households raising dairy cattle was 15,000 (a decrease of 4.5%), the number of heads for dairy cows totalled 1.332 million (an increase of 0.3%).

The number of households raising beef cattle decreased by 4.1%, the number of heads totalled 2.5 million (a decrease of 0.4%).

The number of households raising pigs was 4,300 (a decrease of 2.2%), the number of pigs totalled 9.156 million (a decrease of 0.3%).

The number of households raising layers was 2,200 (no change), the number of layers totalled 184.9 million (an increase of 1.6%).

The number of households raising broilers was 2,200 (no change), the number of broilers totalled 138.2 million (no change).

<table>
<thead>
<tr>
<th>FEED TYPE</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicks</td>
<td>699</td>
<td>696</td>
<td>713</td>
<td>710</td>
</tr>
<tr>
<td>Layers</td>
<td>5,573</td>
<td>5,604</td>
<td>5,751</td>
<td>5,769</td>
</tr>
<tr>
<td>Broilers</td>
<td>3,832</td>
<td>3,813</td>
<td>3,853</td>
<td>3,803</td>
</tr>
<tr>
<td>Hog</td>
<td>5,638</td>
<td>5,613</td>
<td>5,579</td>
<td>5,548</td>
</tr>
<tr>
<td>Dairy Cattle</td>
<td>2,990</td>
<td>2,998</td>
<td>2,991</td>
<td>2,982</td>
</tr>
<tr>
<td>Beef Cattle</td>
<td>4,336</td>
<td>4,397</td>
<td>4,442</td>
<td>4,437</td>
</tr>
<tr>
<td>Quail</td>
<td>32</td>
<td>31</td>
<td>32</td>
<td>31</td>
</tr>
<tr>
<td>Others</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>27</td>
</tr>
<tr>
<td>Mixed Feed</td>
<td>418</td>
<td>450</td>
<td>482</td>
<td>495</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>23,543</strong></td>
<td><strong>23,627</strong></td>
<td><strong>23,868</strong></td>
<td><strong>23,802</strong></td>
</tr>
</tbody>
</table>

Source: MAFF (Ministry of Agriculture, Forestry and Fisheries)

PRODUCTION OF FEED IN JAPAN IN 2018 (1000 TONNES)

Mixed Feed 495 / Quail 31 / Others 710: 1236
Chicks: 710
Beef Cattle: 4437
Layers: 5769
PRODUCTION OF FEED IN JAPAN IN 2018 (1000 TONNES)

- Mixed Feed: 495
- Quail: 31
- Others: 1236
- Chicks: 710
- Beef Cattle: 4437
- Dairy Cattle: 2982
- Layers: 5769
- Broilers: 3803
- Hog: 5548

Source: MAFF (Ministry of Agriculture, Forestry and Fisheries)

USAGE OF FOOD BY-PRODUCTS IN 2018

<table>
<thead>
<tr>
<th>FOOD BY-PRODUCT</th>
<th>USED AMOUNT (MT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tofu/Tofu Lees</td>
<td>18,022</td>
</tr>
<tr>
<td>Crumbs</td>
<td>24,230</td>
</tr>
<tr>
<td>Confectionery Waste</td>
<td>139,563</td>
</tr>
<tr>
<td>Noodle Scrap</td>
<td>7,423</td>
</tr>
<tr>
<td>Juice Lees</td>
<td>320</td>
</tr>
<tr>
<td>Sake Lees</td>
<td>435</td>
</tr>
<tr>
<td>Japanese Spirit Lees</td>
<td>4,108</td>
</tr>
<tr>
<td>Whisky Lees</td>
<td>9</td>
</tr>
<tr>
<td>Beer Cake</td>
<td>12,492</td>
</tr>
<tr>
<td>Other</td>
<td>3,205</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>209,807</strong></td>
</tr>
</tbody>
</table>

Source: MAFF (Ministry of Agriculture, Forestry and Fisheries)
### FEED INGREDIENTS USED IN COMPOUND & MIXED FEED APRIL 2018 TO MARCH 2019 (1000 TONNES)

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japanese Spirit Lees</td>
<td>4,108</td>
</tr>
<tr>
<td>Whisky Lees</td>
<td>9</td>
</tr>
<tr>
<td>Beer Cake</td>
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</tr>
<tr>
<td>Other</td>
<td>3,205</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>209,807</strong></td>
</tr>
</tbody>
</table>

*Source: MAFF (Ministry of Agriculture, Forestry and Fisheries)*

For more information please visit: [www.jafma.or.jp](http://www.jafma.or.jp).

**Browse other regions >**
FEEDLATINA: The Latin American and Caribbean Feed Industries Association, is based in Uruguay and aims to be the main voice of information, preparation, performance and credibility of the animal feed sector. Between Public and Private actors at all levels.

Feedlatina works to promote increased dialogue between the feed industry and regulatory agencies and is based on a further sharing of responsibilities between them in order to promote compliance with technical and commercial regulations “Co Regulation”.

Feedlatina implemented its STDF/PG/345: Feed and Food Security Program, a project for regulatory harmonization and feed safety in Latin America and the Caribbean. The STDF/PG/345 program was supported by the Standards and Trade Development Facility (STDF) a global partnership that supports developing countries in building their capacity to implement international sanitary and phytosanitary (SPS) standards, guidelines and recommendations as a means to improve their human, animal, and plants health status to gain or maintain access to markets.

Started in 2013 STDF/PG/345 had support from FAO Office in Latin America, the OIE Americas, the Inter- American Institute for Cooperation on Agriculture(IICA), Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, México, Paraguay, Perú, Uruguay.

Feedlatina, Private Companies and National Association also help in this project such us: Audina, Caena, Conafab, Sindiracoes, ADISSEO, APC, BASF, BIOFARMA,
Feedlatina, Private Companies and National Association also help in this project such as:
Audina, Caena, Conafab, Sindiracoes, ADISSEO, APC, BASF, BIOFARMA, CARGILL, DSM, DUPONT, IMPECTRACO, NOVUS, POLI NUTRI, BIOMIN, GRUPO NUTEC, TROUW NUTRITION, INTERNATIONAL RENDERES ASSOCIATION.

The (CTM) Joint Technical Committee, made up of public and private agents from ten countries involved in the project, together with the Associated International Organizations, which met regularly during the four years of duration of the project strengthened in their capacities to implement GMP, HACCP, Pollutant Control and Risk Analysis in the animal feed sectors.

The project was ended on November of 2019, was developed with depth and intensity during the execution of the same, which consolidated as a permanent regional and International space for public-private cooperation in the field of animal nutrition. Let by Feedlatina.

**The Project Mission:**
The Proactivity of the industry and the regulatory harmonization are key elements that the project sought to strengthen through the implementation of good practices that range from the production of inputs for agricultural activity, animal feed and food processing, up to storage in distribution centers and commercialization in retail markets, where the challenge is to maintain controls, quality and traceability in all the chain including storage, handling till the food reaches the final consumers. As FAO mean: From Farm to Fork.

The regulatory harmonization and implementation of good manufacturing practices published by the Codex Alimentarius in 2004 and other food safety assurance tools are a sine qua non condition for the development of the production and commercialization of foods of animal origin in the whole region.

The regulatory equivalence in animal nutrition, elaborated and agreed upon, with at least 4 harmonized procedures or equivalent among the ten participating countries with the recognition of the International Organization involved:

- Glossary of Product Concepts for Animal Feed
- Cadastre of laboratories in animal feed analysis in the region.
- GMP and HACCP Training Program fully developed, with the active participation of the CTM members and 20 National public-private
• Glossary of Product Concepts for Animal Feed
• Cadastre of laboratories in animal feed analysis in the region.
• GMP and HACCP Training Program fully developed, with the active participation of the CTM members and 20 National public-private facilitators (2 persons per country on average) with the respective courses being held in all the 10 countries participating in the project with 900 participations and 685 approvals of students from public and private sectors, where fully developed through the IICA e Learning Platform.
• Promote a balanced regulatory frame to facilitate market access and promote the adoption of International Standards for a better Global feed Industry.

The Association seeks to strengthen the image of Latin America and Caribbean to the consumers, and enable developing countries to join forces and strengthen their representation.

It was hoped that by the end of the project, public agents, regulatory bodies, veterinary, agricultural and food safety services and the private sector related to the animal feed chain would have institutionalized and consolidated public-private cooperation strategies, which allow for further progress in regulatory harmonization and institutional strengthening to promote food safety and the sustainability of the production. The integration between the countries of the region and the region with the world, facilitating trade of Latin America Block.

Feedlatina will continue working to support a robust, integrated and strong Latin America.

**Feed Statistics**

**FEED PRODUCTION IN LATIN AMERICA 2009–2018 [1,000T]**
FEEDLATINA estimates - In absence of official/association source. The estimates were based on information from producers of the respective countries, FAOSTAT and FEEDLATINA companies operating in the Latin American market.

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FEEDPRODUCTION IN LATIN AMERICA 2009-2018 [1,000T]

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FEEDLATINA - BREAKDOWN OF FINISHED FEED PRODUCTION 2018 BY CATEGORY

---
### FEEDLATINA - ESTIMATE OF PRODUCTION OF FINISHED FEED [1,000T] / 2018

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>TOTAL</th>
<th>POULTRY</th>
<th>PORK</th>
<th>CATTLE</th>
<th>AQUA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>69,156</td>
<td>38,469</td>
<td>16,776</td>
<td>8,594</td>
<td>1,232</td>
</tr>
<tr>
<td>Mexico</td>
<td>34,814</td>
<td>17,008</td>
<td>5,540</td>
<td>9,323</td>
<td>381</td>
</tr>
<tr>
<td>Argentina</td>
<td>22,305</td>
<td>7,270</td>
<td>3,059</td>
<td>11,221</td>
<td>4</td>
</tr>
<tr>
<td>Colombia</td>
<td>7,620</td>
<td>5,597</td>
<td>1,367</td>
<td>—</td>
<td>202</td>
</tr>
<tr>
<td>Chile</td>
<td>7,012</td>
<td>2,025</td>
<td>1,883</td>
<td>700</td>
<td>1,300</td>
</tr>
<tr>
<td>Peru</td>
<td>4,951</td>
<td>4,343</td>
<td>607</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Ecuador</td>
<td>3,354</td>
<td>1,644</td>
<td>840</td>
<td>—</td>
<td>800</td>
</tr>
<tr>
<td>Venezuela</td>
<td>1,968</td>
<td>1,341</td>
<td>628</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Bolivia</td>
<td>1,872</td>
<td>1,464</td>
<td>408</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Rep.Dominicana</td>
<td>1,543</td>
<td>1,247</td>
<td>296</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Guatemala</td>
<td>1,494</td>
<td>1,255</td>
<td>239</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Uruguay</td>
<td>1,435</td>
<td>312</td>
<td>46</td>
<td>550</td>
<td>—</td>
</tr>
<tr>
<td>Cuba</td>
<td>1,323</td>
<td>417</td>
<td>905</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Paraguay</td>
<td>1,227</td>
<td>487</td>
<td>739</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Honduras</td>
<td>762</td>
<td>720</td>
<td>42</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>708</td>
<td>475</td>
<td>233</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Panama</td>
<td>697</td>
<td>541</td>
<td>157</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>El Salvador</td>
<td>540</td>
<td>508</td>
<td>32</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>464</td>
<td>418</td>
<td>46</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>163,246</strong></td>
<td><strong>85,541</strong></td>
<td><strong>30,808</strong></td>
<td><strong>17,796</strong></td>
<td><strong>3,919</strong></td>
</tr>
</tbody>
</table>

Production estimate for 2018.

**FEEDLATINA estimates - in absence of official/association source. The estimates were based on information from producers of the respective countries, FAOSTAT and Feedlatina companies operating in the Latin American market.**

Author: MV Marcel Louis Joineau, Member of the Board, Feedlatina
### FEEDLATINA - ESTIMATE OF PRODUCTION OF FINISHED FEED FOR POULTRY [1,000T] / 2018

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>TOTAL</th>
<th>BROILERS</th>
<th>LAYERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>38,469</td>
<td>31,655</td>
<td>6,814</td>
</tr>
<tr>
<td>Mexico</td>
<td>17,008</td>
<td>10,169</td>
<td>6,839</td>
</tr>
<tr>
<td>Argentina</td>
<td>7,270</td>
<td>5,503</td>
<td>1,767</td>
</tr>
<tr>
<td>Colombia</td>
<td>5,597</td>
<td>3,440</td>
<td>2,157</td>
</tr>
<tr>
<td>Chile</td>
<td>2,025</td>
<td>1,403</td>
<td>622</td>
</tr>
<tr>
<td>Peru</td>
<td>4,343</td>
<td>3,222</td>
<td>1,121</td>
</tr>
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Author: MV Marcel Louis Jolieau, Member of the Board, Feedlatina

### FEEDLATINA - ESTIMATE OF PRODUCTION OF FINISHED FEED FOR CATTLE [1,000T] / 2018

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<table>
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<th>COUNTRY</th>
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<th>BROILERS</th>
<th>LAYERS</th>
</tr>
</thead>
<tbody>
<tr>
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<td>17,008</td>
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*Author: MV Marcel Louis Joineau, Vice-President of FEEDLATINA*

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<tbody>
<tr>
<td>Argentina</td>
<td>11,721</td>
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<td>5,924</td>
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<td>Country</td>
<td>Total</td>
<td>Dairy</td>
<td>Beef</td>
</tr>
<tr>
<td>--------------</td>
<td>---------</td>
<td>--------</td>
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The New Zealand Feed Manufacturers Association (NZFMA) represents the interests of almost all the animal feed manufacturing companies in New Zealand. Manufacturers and blenders of compound feeds, premixes and dietary supplements are amongst our member companies. The majority of feed is produced for the intensive livestock industries (poultry and pig), however feed is also produced for the ruminant and equine industries. A small amount of feed is also produced for animals such as dogs, emus, rabbits and fish.

Activities 2017/18
NZFMA has conducted a revision of training qualifications for the 2017 year for feed company employees to obtain the NZFMA Certificate of Stock Feed Manufacture, and has a continuing commitment to encourage companies and trainees to participate.

We are raising the profile of FeedSafeNZ accreditation and have reviewed the scheme. Blenders, as well as Compound members, have been invited to become accredited.

We have been organising industry seminars of interest to our members around the country.

Annual Feed Production Statistics for the Year Ending December 2018
These statistics report total tonnage of manufactured animal feed and total
Annual Feed Production Statistics for the Year Ending December 2018

These statistics report total tonnage of manufactured animal feed and total tonnage of raw materials used in feed production. This report does not include blended feed.

These statistics now include the breakdown of species specific data for feed production. This breakdown had been excluded in previous publications between 2010 to 2012.

Please note all figures reported in the tables below in this Executive Summary are in metric tonnes (unless otherwise specified).

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**FEED PRODUCTION 2018**

<table>
<thead>
<tr>
<th></th>
<th>NORTH ISLAND (798,282)</th>
<th>SOUTH ISLAND (328,397)</th>
</tr>
</thead>
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<tr>
<td>BULK</td>
<td>683,167</td>
<td>274,307</td>
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<tr>
<td>BAGGED</td>
<td>115,115</td>
<td>54,090</td>
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<tr>
<td>TOTAL</td>
<td>1,126,679</td>
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<tr>
<td>SAME PERIOD LAST YEAR</td>
<td>1,127,679</td>
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</tr>
<tr>
<td>% CHANGE</td>
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*Source: New Zealand Feed Manufacturers Association Annual Feed Statistics Reports*

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**RAW MATERIAL USE 2018**

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<th>NORTH ISLAND</th>
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<tr>
<td>GRAINS</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>295,336</td>
<td>144,497</td>
<td>439,833</td>
<td>447,556</td>
<td>-1.7</td>
</tr>
<tr>
<td>Maize</td>
<td>113,387</td>
<td>18,048</td>
<td>131,435</td>
<td>74,649</td>
<td>+76.1</td>
</tr>
<tr>
<td>Barley</td>
<td>36,846</td>
<td>43,146</td>
<td>79,992</td>
<td>103,594</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meat and Bone Meal</td>
<td>17,970</td>
<td>8,406</td>
<td>26,376</td>
<td>30,969</td>
<td>-14.8</td>
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<tr>
<td>(non-poultry)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Soya Meal</td>
<td>114,468</td>
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## PALM KERNEL IMPORTS 2018

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<tr>
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<th>SOUTH ISLAND</th>
<th>TOTAL</th>
<th>SAME QUARTER LAST YEAR</th>
<th>% CHANGE FROM PREVIOUS YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,520,431</td>
<td>444,921</td>
<td>1,965,352</td>
<td>2,236,999</td>
<td>-12</td>
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Source: New Zealand Feed Manufacturers Association Annual Feed Statistics Reports

## SPECIES SPECIFIC DATA 2018

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<th>SPECIES</th>
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<th>SOUTH ISLAND</th>
<th>TOTAL</th>
<th>% CHANGE FROM PREVIOUS YEAR</th>
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</thead>
<tbody>
<tr>
<td>Poultry - Meat</td>
<td>436,100</td>
<td>81,634</td>
<td>519,734</td>
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</tr>
<tr>
<td>Poultry - Layer</td>
<td>127,801</td>
<td>41,758</td>
<td>169,559</td>
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<tr>
<td>Pig</td>
<td>45,100</td>
<td>107,846</td>
<td>147,946</td>
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</tr>
<tr>
<td>Calf</td>
<td>68,161</td>
<td>23,261</td>
<td>91,422</td>
<td>-2.8</td>
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<tr>
<td>Dairy</td>
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**Palm Kernel Imports 2018**

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<thead>
<tr>
<th></th>
<th>North Island</th>
<th>South Island</th>
<th>Total</th>
<th>Same Quarter Last Year</th>
<th>% Change from Previous Year</th>
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For more information please visit: www.nzfma.org.nz.

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Browse other regions
The Animal Feed Manufacturers Association of South Africa (AFMA), is the official industry representative body of the South African feed industry in the livestock feed sector and larger agricultural environment and reports on the period under review – 2017/18.

As the official representative body of more than 160 members, not only from South Africa but also from certain SADC Member States such as Namibia; Botswana; Swaziland and Mauritius, AFMA positioned and aligned itself by identifying the business environment that will benefit its members. This is achieved through its liaison and cooperation with various directly affected groups.

AFMA acts on behalf of, and represents, the animal feed industry on various platforms and committees to enhance, protect and ensure the present and future interests of the industry. These activities also include liaison and engagements on all levels, i.e. liaising, workshop, debating and lobbying with the following primary interest groups:

**Regulatory**

- The Feed Regulator
- Directly involved government departments and officials
- International Feed Industry Federation (IFIF) and its members
- International agricultural organisations

**Academic**
• International agricultural organisations

Academia

• Tertiary higher education institutions
• Agricultural research institutes
• Agricultural schools
• Students at universities, technical colleges and related colleges

Industry participants

• Non-AFMA feed manufacturers
• Value chain partners and links in the food and feed value chain
• Premix manufacturers
• Traders
• Raw materials suppliers
• Equipment manufacturers
• Animal nutritionists
• Consultants
• Veterinary professionals
• Livestock industry organisations and livestock producers
• Broader agricultural organisations and staff

In this process, attention is focused upon:

The feed regulatory environment

• Feed legislation
• Feed regulations
• Feed guidelines
• Related feed and food legislation and regulations
• Accepted international manufacturing practices
• Self-regulation of industry practices
• Third-party auditing of members

The research and technical environment

• Keeping abreast of latest changes and developments
• Third-party auditing of members

The research and technical environment

• Keeping abreast of latest changes and developments
• Codes of practice
• Generally accepted industry standards
• Information gathering and technical monitoring
• Identifying threats and opportunities

The commodity trading environment

• Trade legislation and policies
• Trade agreements
• Import duties
• Commodity trends
• Crop estimates
• Supply and demand estimates
• Industry investigations
• Industry statistics

Communication to members and the wider industry via,

• AFMA website
• AFMA Feed Registration website
• *AFMA Matrix: industry magazine* (quarterly publication)
• AFMA latest news
• AFMA Person of the Year Award
• Barney van Niekerk/AFMA Technical Person of the Year Award
• Koos van der Merwe/AFMA Student of the Year Award
• *AFMA MatrixResearch Article of the Year Award*
• AFMA Best Student Nutrition Poster Award
• AFMA Annual General Meeting (AGM)
• AFMA Forum (a triennial event)
• AFMA Annual Symposium
• AFMA Annual Golf Day
• AFMA student symposia (min. of two per annum at different universities)
- AFMA Forum (a triennial event)
- AFMA Annual Symposium
- AFMA Annual Golf Day
- AFMA student symposia (min. of two per annum at different universities)
- AFMA training courses
- AFMA workshop for non-feed production members
- Ad hoc workshops

SA National Feed Sales (Tonnes) [TABLE]

**Domestic Market Conditions**

The period under review literally experienced the flipside of the coin, moving from a number of years of experiencing the El Niño effects as reported during the 2015/16 year to more normal weather and even tending towards La Niña conditions of excellent summer rainfall in most of the grain production areas, giving way to significant increases in grains and oilseed production.

Although all crops have seen notable increased production from 2016 onwards, maize and soybean harvests reached record levels. White and yellow maize production reached levels of 9.92 million and 6.90 million tons, respectively. In total, producing a record level of 16.82 million tons, from 7.78 million tons in 2016, and well above an average total production of 12.5 million tons. Soybean production is estimated at 1.31 million tons, which is an 81% annual increase, while Sunflower seed production increased to 874 000 tons, an 16% increase.

Consequently, prices moved to export parity levels and South African maize prices aligned with low global price trends. The white maize surplus has required deep sea exports to assist in moving some of the surplus. The result has been a drop of white maize prices to below yellow maize prices since March 2017.

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**SOUTH AFRICAN MAIZE PRODUCTION (TONNES)**
South Africa’s Grain Trade

South Africa’s cereal exports increased by 19% from US$ 488 million in 2016 to US$ 580 million in 2017. Maize exports increased by 29% from US$ 330
South Africa’s Grain Trade

South Africa’s cereal exports increased by 19% from US$ 488 million in 2016 to US$ 580 million in 2017. maize exports increased by 28% from US$ 330 million in 2016 to US$ 580 million in 2017. The bulk of the exports was destined for southern African countries with the largest importer being Kenya.

South African Imports of Soy, Sunflower & Sorghum (Tonnes)

Following the record maize crop of 16.8 million tons for the 2017/18 marketing season, exports of maize to Asian countries such as Japan, South Korea, and Taiwan increased from US$ 10.7 million in 2016 to US$ 180 million in 2017.

Wheat exports, mainly to neighbouring countries increased from US$ 20 million in 2016 to US$ 31 million in 2017 but is still below the five-year average of US$ 55 million. It was estimated that exports will decline even further with only 70,000 tons of wheat predicted for exports during the 2017/18 season. Following the drought that was experienced in the Western Cape, projections are that South Africa will need to import 1.93 million tons in the 2017/18 marketing season to meet domestic requirements.

South Africa’s Oilseed Trade

Imports of oilseeds decreased from US$ 285 million in 2016 to US$ 135 million in 2017, a decrease of 52%. The main decrease was in imports of soya beans, from US$ 110 million in 2016 to US$ 3 million in 2017, a reduction of 98%.

Source: South Africa AFMA
South Africa’s Oilseed Trade

Imports of oilseeds decreased from US$ 285 million in 2016 to US$ 135 million in 2017, a decrease of 52%. The main decrease was in imports of soya beans, down from US$ 113 million in 2016 to US$ 9 million in 2017, making up 69% of the total decrease in imports. This was due to increased soya bean production that saw the first one-million-ton mark, passed in the 2016/17 production season.

SOUTH AFRICAN MAIZE TRADE (TONNES)

Source: South Africa AFMA

South Africa’s Animal Feed and Raw Materials

The value of imported animal feed raw materials decreased by 23%, from US$ 473 million in 2016 to US$ 412 million in 2017. Overall, the trade balance remained negative.

Soy oilcake remained a major import component of animal feed raw materials, accounting for 53% of the tonnage (553 000 tons) and 45% of the value at US$ 188 million of imports during 2017. Argentina remains the primary source of soybean oilcake for South Africa.

Sunflower oilcake makes up a relatively smaller share of total animal feed and raw material imports, accounting for 3.6% of volumes (37 975 tons), and 1.7% of value (US$ 7 million) in 2017. Between 2016 and 2017, sunflower oilcake imports decreased by 60% by volume and 50% by value. Argentina remains the main source of sunflower oil cake for South Africa.
ASSOCIATION ACTIVITIES:

Technical & Regulatory
Animal Feed Forum (AFF)

AFMA is one of the key and strategic stakeholders and partners of Government regarding Regulatory Affairs.

Five official liaison meetings were held between AFMA and the Directorate of Agricultural Inputs Control (D:AIC) this year, with primary focus on the draft Feeds and Pet Food Bill and farm feed registrations. The reporting period kicked off amidst a regressing registration status of eight months (compared to four months) for a new registration approval.

With the appointment of one technical advisor and two assistant technical advisors at the AIC Farm Feeds division at the beginning of the reporting period, the full technical staff compliment was increased to five people – the largest recorded in more than 10 years.

It is expected that the new officials will require some time to become fully skilled in the technical assessment of all types of farm feed and registration services; an immediate improvement to the registration backlog is, therefore, not expected. By the end of the reporting year, and after a rigorous training phase, the tempo and efficiency of technical assessment at AIC has increased measurably. It is expected that the registration backlog will be visibly reduced in the coming year. The improvement is, however, dependent on sufficient administrative support staff being available to receive, record and finalise documentation associated with registration applications.

Unfortunately, two vacant administration positions within the Farm Feeds section will not be filled due to budget cuts. The Registrar will be forced to improve administrative efficiencies across sections within the Inputs Control Division if service delivery is to be improved in the coming year.

AFMA continued to actively participate in the Registration Working Group, together with representatives from the PFI, in reporting on accurate and reliable farm feed registration statistics. Feedback on progress throughout the year is provided to AFMA members at the quarterly Regulatory Committee meetings.

Remaining actions from the previous year’s Intervention Task Team (ITT) were put on hold to avail capacity at the Registrars’ office for the feeds and pet food bill actions. The Bill required substantial additional input for successful submission to Cabinet.
The first two priorities of the ITT action list were implemented successfully. This included:

- The fast-tracking of recruitment of technical staff at AIC; and the rejection principle for “on-hold” applications.
- The ITT commitment to re-assessing the remaining priorities for intervention on an ongoing basis and making recommendations to the Registrar, based on the balance of impact of any one action on the current situation. The intent is to reduce the regulatory burden without increasing risk, and to adjust the high demand for pre-market registration approval to something more in-line with the current service provision capacity.

Other matters addressed at the AFF included the Feeds and Pet Food Bill; the amendment to the farm feed regulations; the revision of the registration guidelines; good manufacturing practice standards at facilities and rendering plant operations and licensing.

**Act 36 Regulations and Guidelines**

The amendment to the farm feed regulations was not published during the reporting 16 Chairman’s Report 2017/2018 year. The amendment has now taken more than two years to be processed and signed off by the Minister of Agriculture for public comment. The new regulation on undesirable substances has been similarly delayed and is yet to be published for public comment. The AFMA Technical Committee will provide widely consulted comments on the proposed regulation of carry-over of active substances and mycotoxin contamination levels in animal feed once it is published; thereby further increasing its influence in the sphere of agricultural sector legislation.

**Feeds and Pet Food Bill**

A final draft Bill was submitted to the Minister towards the end of 2017, marking the start of the modernisation of feed law in South Africa. The Bill is based on the principles and objectives of ensuring ‘safe feed for safe food’ and is inclusive of all agricultural inputs within the food chain.

For all new proposed legislation, the government is required to complete and submit a socio-economic impact assessment study (SEIAS). The study was done by the Registrars’ office and a phase two report was submitted for approval to the Monitoring and Evaluation Department at Treasury. During the reporting period many man-hours were spent between DAFF and Treasury to review, correct and assess the SEIAS, which is expected to be certified before the end of 2018.
the end of 2018.

Once the SEIAS is approved, a certificate will be issued, and the Bill can be progressed to the Cabinet and published for public comment. The Registrar has committed to a public consultation process once the Bill is published. AFMA will continue its active participation and support of this process throughout the next period.

**Feed Safety Forum (FSF)**

Five Feed Safety Forum liaison meetings between AFMA and the Directorate of Animal Health and Veterinary Public Health (VPH) were held during the year. Matters pertaining to the import, export and traceability of processed animal proteins were addressed on a regular basis in this Forum, as well as exemption for the use of ruminant blood meal in poultry feeds, ZA number approvals, and permits and health certificates. Feedback on FSF actions throughout the year is provided to AFMA members at the quarterly Regulatory Committee meetings.

For AFMA members a particular focus is placed on the exemption for the use of ruminant blood meal in poultry feed. This will enable feed manufacturers, which meet the traceability and control measures as outlined in the VPN, to include blood meal in their poultry formulations under controlled conditions.

The Director of Animal Health initiated a working group to develop the VPN and assist in its implementation. During this reporting period the working group visited all three Chairman’s Report 2017/2018 17 pilot sites (abattoir, rendering plant & feed mill) with independent auditors. The audit checklist and traceability reconciliation procedures were revised, application forms designed and the VPN requirements for traceability were also revised.

Towards the end of this period, the working group will invite provincial state veterinarians to test the requirements and ease of use of the VPN by doing facility inspections at each of the three facilities. Implementation of the VPN will be concluded once the Director of Animal Health is satisfied that the traceability process and participating facilities are managed properly by the responsible parties.

**Inspection Compliance Forum (ICF)**

The Inspection Compliance Forum (ICF) convenes quarterly and provides a platform to discuss general trends of non-compliance across all agricultural input control disciplines. AFMA, PFI, RSA, FERTASA & AVCASA are members of the ICF.

Illegal importation of unregistered pesticides and other agricultural remedies
Illegal importation of unregistered pesticides and other agricultural remedies during the reporting period remain a concern. The illegal repackaging of farm feed, pet food and fertiliser, as well as the decanting of agricultural remedies into smaller containers, were also identified as a concern on the ICF agenda this year.

For the coming year, facility requirements for licensing and registration under the new Feeds Bill will receive focus and are expected to be based on Good Manufacturing Practice (GMP) standards. Industry self-regulation systems can also contribute to improved risk assessment and more efficient identification of risk areas.

The Act 36 inspectorate, together with AFMA and other industry stakeholders, will actively participate in the SABS Scientific Committee discussions about GMP standards for feed manufacturing facilities.

**AFMA Code of Conduct**

The AFMA Code of Conduct (COC) entered its tenth year of existence in 2018, with more than 30 facilities being audited against the COC. The revision of the code of conduct processes and requirements was approved as a project at the previous AGM and commenced during 2017. A consultant was appointed to compile an updated audit checklist and revised code of conduct process manual. The updated audit requirements are based on the FSSC 22000 and to be benchmarked against the GMP and Feed Scope of the retail sectors’ global supplier requirements.

The revised AFMA Code of Conduct audit system will be relaunched as the ‘Code of Conduct Plus’ in the coming year. The audit criteria for the various types of manufacturing facilities have been workshopped and accepted by an AFMA Technical sub-committee during the reporting period. An audit scoring system is being finalised and is to be trialled during the phase-in period early next year.

The outcome of the project will enable AFMA to appoint more than one approved, independent auditor for the Code of Conduct Plus facility audits and aligning the requirements with those of facility licensing under the new Feeds and Pet Food Bill. The unique, self-regulating mechanism ensures a high level of compliance by all AFMA members to feed regulatory and safety measures.

**AFMA Feed Registration Service (FRS)**
AFMA Feed Registration Service (FRS)

The feed registration service of AFMA was terminated as of 30 June 2018, after three years of registration service to AFMA members. A total of 42 clients and approximately 1 600 registration submissions were handled by the FRS, but it was not sufficient to make the project financially sustainable. Lack of additional assistance with technical evaluation and compilation of registration application dossiers, prevented further growth in the FRS. The registration administrator position was subsequently also declared redundant due to the termination of the service. AFMA will remain involved in the registration status working group of Act 36 in the coming year to keep abreast of developments in farm feed registrations and to monitor and report on progress made within D:AIC.

Trade Environment

Genetically modified organisms (GMOs)

The registration of GMO events in traditional maize exporting countries (Argentina, Brazil and the USA) is constantly monitored by SACOTA in order to prevent the situation that existed following the drought of 2015/16 when certain events were not registered in South Africa for commodity clearance purposes. South Africa is currently in sync with the traditional maize exporting countries.

There is currently good co-operation between AFMA, SACOTA and the local seed companies regarding timeous applications of new GMO events for commodity clearance.

Maize export programme

An all-time record maize harvest of 16.820 million tons was realised for the 2016/17 maize production season. The Supply and Demand Estimates Committee (S&DEC) of the National Agricultural Marketing Council projected total maize exports for the 2017/18 marketing season of 2.245 million tons (white maize: 765 000 tons and yellow maize: 1 480 000 tons). According to SAGIS (South African Grain Information System) 2 288 834 tons were exported during 2017/18.

For the 2017/18 production season the total maize crop is estimated at above 13 million tons. According to the S&DEC, at a stock-to-use ratio of 45 days, there is a potential of 4.3 million tons being available for exports during the 2018/19 marketing season.

Currently Iran, Italy, Japan, Malaysia, the Philippines, South Korea, Spain, Thailand, Vietnam and China are among the major customers of South African maize.
Currently Iran, Italy, Japan, Malaysia, the Philippines, South Korea, Spain, Taiwan, Vietnam and Venezuela are open for exports of South African maize. Other countries that are currently being focused on as potential export markets for yellow maize are Middle East countries, due to South Africa’s freight cost advantage when compared to traditional exporting countries like Argentina, Brazil and the USA.

The biggest challenge for South African regulators and the industry is to open new potential markets for the export of South African GMO maize. In this regard, the South African Cereals and Oilseeds Trade Association (SACOTA) and its members are in close contact with the office of the GMO Registrar to address this matter. The Maize Forum Steering Committee approved a request from SACOTA to fund visits by an industry expert accompanied by an officer of the GMO Registrar’s office to identified countries to obtain authorisation from their competent authorities for imports of South African GMO maize.

There is a difference of opinion between SACOTA and DAFF regarding the provisions of the GMO Act and the implementation of the Act’s regulations, as well as a difference of opinion on the interpretation of the Cartagena Protocol. SACOTA subsequently decided to obtain legal opinion on the GMO Act, its regulations as well as on the interpretation of the Cartagena Protocol. The legal opinion was presented to DAFF and feedback is being awaited on the process going forward.

Without opening new export markets, South Africa will carry over maize surpluses into the 2018/19 marketing year, complicating matters even further. Opening the target markets, combined with the smaller crop expected for the 2018/19 marketing year, could have a positive spin-off for producers.

**NAMC: Statutory reporting of imports and exports**

The current statutory measure applicable to maize weekly imports and exports was amended on 18 May 2018 to compel importers and exporters to keep records of intended maize imports and exports and to submit returns in this regard to SAGIS (South African Grain Information Service).

In the case of imports, the quantity of maize to be imported is to be declared eight weeks prior to the date on which the vessel transporting the maize to be imported is expected to arrive in South Africa; and in the case of exports, the quantity of maize to be exported is to be declared eight weeks prior to the date on which the vessel transporting the maize to be exported is expected to depart from South Africa.
The first report on the intended imports and exports of maize was published on 28 June 2018 by SAGIS. Subsequent reports will be published on Thursdays by 12:00.

**Legal opinion on mycotoxins and pesticide residues**

SACOTA has obtained a legal opinion on the Liability Regarding Prescribed Levels of Mycotoxins and Pesticide Residues.

The conclusion of the legal opinion is that SACOTA members may be held criminally liable for contravention of the Foodstuffs, Cosmetics and Disinfectants Act if mycotoxin and pesticide residues exceed the prescribed tolerances found in the products that they sell.

The recommendation is that SACOTA members require the silos and other persons they purchase from to provide guarantees that fully comply with the requirements of the Foodstuffs, Cosmetic and Disinfectant Act. In turn, those persons should require the same from the producers or other persons they purchase from, in order to ensure compliance to the law by each link within the value chain.

The matter was discussed at a meeting of the Maize Forum Steering Committee on 1 September 2017. It was decided that industry role-players are to discuss and find solutions to the current risk associated with mycotoxin and pesticide residues in maize. It was also decided that AFMA as end-user should take the lead in addressing these matters.

A sub-committee of the AFMA Technical Committee is currently looking at maximum guideline levels for mycotoxins for raw materials destined for the manufacturing of animal feeds. Once this process has been finalised, AFMA will address the risks associated with mycotoxins through the Trade Group of the Maize Forum Steering Committee.

**AFMA Transport Protocol**

There are currently 18 transport providers that comply with the AFMA Transport Protocol. A list of compliant transport companies is available on AFMA’s website.

**Leaf Services**

Leaf Services has been appointed by the Department of Agriculture, Forestry and Fisheries (DAFF) as an assignee to inspect local grains and grain products derived therefrom as well as imported grains.

AFMA has convinced the DAFF that the manufacturing of animal feeds is
derived therefrom as well as imported grains.

AFMA has convinced the DAFF that the manufacturing of animal feeds is governed by the Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies Act and requested that AFMA members be exempted from inspections by Leaf Services. DAFF has provided special dispensation to AFMA and animal feed manufacturers exempting them from inspection of grains, oilseeds and grain products destined for the manufacturing of animal feeds.

Dispute resolution process

A document has been drafted by SACOTA and AFMA setting out a standardised dispute resolution process for use when grain is out loaded by the silo owner which does not conform to contracted quality specifications. Agbiz Grain has been requested to comment on the document. Agbiz Grain has forwarded the draft document to the Grain Handling Organisation of Southern Africa (GOSA) for comment.

Standardised handling and storage contract for grains and oilseeds

The SAGOS-contract (Contract for the Purchase and Sale of Grain, Pulses and Oilseeds and its by-products) has been developed by the grains and oilseeds industries as a standardised contract for the trading of grains and oilseeds in South Africa.

The contract is fair and impartial to both parties entering into a buyer’s and seller’s contract, making use of standardised trade terms and conditions. More importantly, the contract includes a clause relating to disputes and dispute resolution as well as the rules that will apply. Any disputes arising from the use of the SAGOS contract are currently administrated by AFSA (Arbitration Foundation of SA). The SAGOS-contract is currently the operative contract in the trading of grains and oilseeds.

During 2014, SACOTA requested that Agbiz Grain (previously Grain Silo Industry) discuss the merits of a standardised handling and storage contract for grains and oilseeds to be introduced to the industry. It was proposed that once the terms and conditions of the contract were agreed and finalised, that the contract should also be introduced as a formal SAGOS-type contract under the custodianship of SAGAS (as is currently the case with the trading and the transport contract).

Agbiz Grain subsequently indicated that they would entertain such a proposal and requested SACOTA to develop a draft contract in this regard. The final draft was submitted to Agbiz Grain on 22 August 2016 for comments.
Agbiz Grain subsequently indicated that they would entertain such a proposal and requested SACOTA to develop a draft contract in this regard. The final draft was submitted to Agbiz Grain on 22 August 2016 for comments.

Agbiz Grain responded that the standardised document regarding handling and storage was circulated amongst Agbiz Grain members in 2016, but members’ feedback indicated that:

- The Agbiz Grain members felt that they had their own individual requirements; and
- Therefore, preferred their own customised documentation for handling and storage.

SACOTA has again engaged with Agbiz Grain on the introduction of a standardised handling and storage contract. Agbiz Grain gave the undertaking that it will again engage with its members in this regard. Feedback is awaited.

**Soya oilcake import duty review**

One of the recommendations of the poultry sector task team is that cheaper feed is made available for the poultry industry in order to make the industry more competitive. The import duty on soya oilcake was identified as one of the options to be addressed for cheaper inputs for poultry feed. This matter was discussed at several meetings of the Trade Committee and it was decided that not only the import duty on soya oilcake, but also the import duties on soya beans, sunflower seed and sunflower seed oilcake, should be abolished. AFMA will be taking the lead in addressing this matter, but it will be with the cooperation of a party such as SAPA.

**SAFEX Soya Meal and Sunflower Oilcake Contract**

A meeting took place on 8 February 2018 between AFMA, the Johannesburg Stock Exchange (JSE) and Oil Crushers where the following matters and recommendations emerged. It was decided that:

- The listing of SAFEX contract for soya meal and sunflower oilcake needs to be investigated.
- AFMA was tasked to propose minimum quality specifications for physical delivery on SAFEX.
- The crushers were requested to make recommendations on storage for physical deliveries.
- An independent laboratory needed to be commissioned to adjudicate quality.
physical deliveries.

- An independent laboratory needed to be commissioned to adjudicate quality disputes.
- Crushing plants that register for physical delivery will be at the same reference value.
- Discussions will be conducted with the JSE to assess if the contracts be settled with cash.

AFMA and oilseeds crushers subsequently met on 18 July 2018 and the minimum quality specifications for soya meal and sunflower oilcake for physical delivery on SAFEX futures contracts were agreed on.

**JSE Securities Exchange matters**

The JSE has launched a web-based system where loading constraints being experienced at silos can be listed. Any owner of stock in silos can also report such information to the JSE. This measure is currently only applicable to SAFEX certificates.

After receiving objections from the market concerning registration of storage locations during a marketing season, it was decided to introduce a fixed registration period for storage locations of two months prior to the start of a marketing season.

The JSE has met with the Financial Services Board (FSB) to investigate the introduction of a Commitment of Traders report similar to the report published by the U.S. Commodity Futures Trading Commission (CFTC). There was support from both parties for additional information (JSE clients are obliged to report their “reporting position”) and to improve transparency. The FSB will provide the regulatory framework for this process, whilst the JSE will assist in collecting and publishing of the information. The JSE is currently awaiting feedback from the FSB.

**Maize grading regulations**

A meeting arranged by Agbiz Grain took place on 18 April 2018 to discuss proposed changes to the yellow maize grading regulations. The proposal was that the maximum permissible deviations of defective kernels (above and below the sieve) for yellow maize be combined to only below the sieve as is the case of white maize. This proposal was not accepted by the meeting.

A meeting of the Trade Group of the MFSC will be organised to specifically address the definition of defective kernels in the maize grading regulations, maximum levels for mycotoxin as well as poisonous seeds.
Southern African Feed Manufacturers Association (SAFMA)

The Tanzanian Feed Manufacturers Association (TAFMA) has now been functioning for over four years since it was revived during March 2014. TAFMA currently has 35 members and the Association is progressing well. It is AFMA’s viewpoint that the TAFMA blueprint be used to establish feed manufacturers associations in other SADC countries. A launch meeting has been set for 26 September 2018 with Zambian feed manufacturers where AFMA will make a presentation on the benefits of a feed industry association and the success story of TAFMA.

AFMA has decided to make a copy of the web-based feed sales system available to TAFMA. The hosting of the feed sales system needs to be addressed before the system can be delivered to TAFMA. AFMA will also provide training to the TAFMA secretariat on the use of the system.

Skills Development and Training

Feed Miller Qualification

The Feed Miller Qualification developed by AFMA was submitted by the QCTO (Quality Council for Trades and Occupations to SAQA (South African Qualifications Authority) and approved by the SAQA Quality Council at their meeting of 14 June 2018. The qualification has received final approval at the SAQA Board meeting held on 26 July 2018.

Assessment Quality Partner (AQP)

AFMA is in the process of establishing the AQP function and will shortly apply for recognition to the QCTO. AFMA, as AQP will be responsible for the total assessment function, including developing assessment instruments, maintaining a database of learners, statement of results, and other functions. A Feed Milling AQP Quality Management System has been developed and includes a quality management system governance policy and assessment policy, assessment procedures and standard documentation.

The service provider appointed by AFMA has been requested by the QCTO to use the AFMA AQP model as a blueprint to develop an AQP standardised document to be prescribed by the QCTO to other AQP’s.

Research and capacity building project

AFMA applied for funding from the AgriSETA to conduct research and capacity building related to the implementation of a learning model that integrates the delivery of learning between an industry, an established training and development academy, feed milling technical experts, feed
The service provider appointed by AFMA has been requested by the QCTO to use the AFMA AQP model as a blueprint to develop an AQP standardised document to be prescribed by the QCTO to other AQP’s.

**Research and capacity building project**

AFMA applied for funding from the AgriSETA to conduct research and capacity building related to the implementation of a learning model that integrates the delivery of learning between an industry, an established training and development academy, feed milling technical experts, feed milling workplaces and AFMA by means of an e-learning system.

The project specifically aims to achieve the following:

- Clarifying and defining the roles of all stakeholders in the delivery of the occupational qualification.
- Identifying capacity building needs aligned with specific roles and establish resources required to address these and developing the capacity of the various stakeholders in the delivery of the learning programme.
- Identifying, packaging and sequencing specific learning modules that are aligned with the components of an appropriate occupational curriculum. Refining and aligning current learning and assessment resources to the delivery design.
- Establishing an e-learning platform that will allow for the flexible delivery of learning, respond to the dynamics of a work-based learning approach, and meet the requirements of the QCTO quality assurance model.
- Having an e-platform platform that is used to address learner administration, management and reporting requirements of all stakeholders. AFMA is awaiting feedback from the AgriSETA on the funding application.

*For more information please visit: www.afma.co.za.*
Founded in 1909, the American Feed Industry Association (AFIA) is the world’s largest organization devoted exclusively to representing the business, legislative and regulatory interests of the U.S. animal food industry and its suppliers. With more than 680 domestic and international members, AFIA represents more than 75% of the feed and 70% of the non-grain ingredients manufactured in the U.S.

In 2018, AFIA made great strides in quantifying the U.S. animal food industry’s output to the country’s economy, helping its members reach compliance with sweeping new federal regulations and staying the course on several heated trade policy developments. Looking ahead to 2019, the association is feverishly working with committed partners throughout North America to keep African swine fever (ASF) at bay, address the growing divide between the U.S. and China, and usher a renegotiated free trade agreement with Canada and Mexico across the finish line.

2018 Year in Review
U.S. Animal Food Industry is Strong and Thriving

For AFIA, 2018 started with the release of new data on the U.S. animal feed and pet food manufacturing industry’s economic contribution. The research, commissioned by AFIA’s public charity the Institute for Feed Education and Research (IFEEDER), found that in 2016, the country’s more than 6,200 animal food manufacturing facilities generated over $297 billion in sales.
food manufacturing facilities generated over $297 billion in sales.

U.S. ANIMAL FOOD MANUFACTURING INDUSTRY DRIVES AGRICULTURE, ECONOMY

For the first time, this proved to the nation’s leaders that the industry is not only an integral part of the U.S. agricultural economy, but that it is also providing hundreds of thousands of jobs and generating billions in taxes and revenue to support local and state communities.

IFEEDER also released new data that provided the most comprehensive analysis ever seen of the ingredients used and amount consumed by the top nine livestock, poultry and aquaculture species in the U.S. Working with roughly 25 industry and university subject matter experts, this research examined diets fed to animals at all stages of their lives.

TOTAL AMOUNT OF ANIMAL FEED CONSUMED IN 2016 BY SPECIES (IN MILLION TONNES) IN THE U.S.
Food Safety Modernization Act Is Now a Reality for U.S. Animal Food Manufacturers

Signed in January 2011, the Food Safety Modernization Act (FSMA) fundamentally changed the way animal food is produced in the U.S. Since then, the U.S. animal food industry has spent more than a billion dollars retrofitting facilities, training employees and carrying out many of the new recordkeeping requirements, and 2019 will be a pivotal test to see how well manufacturers meet the U.S. Food and Drug Administration’s (FDA) stringent standards.

In particular, in 2019, all facilities must be in compliance with FSMA’s Current Good Manufacturing Practice regulations and all may start to receive their first inspections. Inspections for large-sized facilities began in 2018, small-sized facility inspections will begin October 2019. Large- and small-sized facilities (i.e., those that sell more than $2.5 million in animal food sales) must also be in compliance with the hazard analysis and risk-based preventive controls portions of the regulations.

AFIA has been gathering early data from the FDA to learn where the agency is conducting inspections to ensure diversity in geography, product type and firm size. Already, early findings have proven that these inspections are often coupled with other inspections, spanning several days, and the industry is
AFIA has been gathering early data from the FDA to learn where the agency is conducting inspections to ensure diversity in geography, product type and firm size. Already, early findings have proven that these inspections are often coupled with other inspections, spanning several days, and the industry is balancing being patient with federal and state inspectors as they learn how to carry out inspections while also needing to continue daily operations.

**U.S. Trade – Challenging the Status Quo**

Like many industries, much of the U.S. animal food industry’s growth will come through the export of feed, pet food, ingredients and technology. In 2018, AFIA took an active stance in calling upon the Donald Trump administration to “do no harm” to the North American Free Trade Agreement (with the modern agreement in progress now called the U.S.-Mexico-Canada Agreement, or USMCA), settle disagreements with China and move forward with plans to negotiate new trade agreements with other important markets, such as Japan.

Progress on the USMCA ratification was not seen until late spring 2019, when all three North American countries finally launched procedural motions in their legislative bodies to introduce the agreement. AFIA will continue to impress upon policymakers to pass this crucial and modernized agreement.

Given the back and forth trade war with China, tensions have run high within the U.S. animal food industry in not only maintaining market access, but also in addressing unscientific regulatory barriers China has in place that restrict U.S. goods. The agriculture industry is feeling the pain; for example, the retaliatory tariffs China imposed on U.S. animal food imports resulted in a 5.9% decrease in exports in 2018. AFIA continues to [communicate to the Trump administration that its tariff war is counterproductive](https://www.fda.gov/news-events/fda-focus/afia-continues-communicate-trump-administration-tariff-war-counterproductive) – allowing competitors the opportunity to fill the void, while turning the attention away from addressing real market access issues that restrict some of the safest and highest quality animal food products from reaching Chinese end-users and pet owners.

**Looking Ahead to 2019**

**Protecting the U.S. Swine Industry from African Swine Fever**

Aside from continuing work on important trade strides in 2019, AFIA is engaged in a [multi-pronged action plan](https://www.fda.gov/news-events/fda-focus/afia-multi-pronged-action-plan) on African swine fever that includes research, enhancing facility biosecurity and close coordination and communication with the U.S. swine industry, government leaders and stakeholders across North America.
In early 2019, AFIA updated its biosecurity practices for industry and is now working on ways to further educate members on how they can take preemptive actions to keep ASF out of the country or prevent its spread, should it cross the Pacific or Atlantic Oceans.

In partnership with the U.S. Swine Health Information Center (SHIC), Institute for Feed Education and Research and the swine industry recently released the results of research that looked at the holding times for feed ingredients, which are considered a risk for carrying and spreading the ASF virus. This research validated shorter holding times for most ingredients evaluated and will help ingredient suppliers keep inventories moving and ensure they maintain a source of safe ingredients for animal food. Many U.S. ingredient suppliers are voluntarily implementing these holding times for pork industry customers.

**HOLDING TIMES FOR FEED INGREDIENTS**

<table>
<thead>
<tr>
<th>MEAN HOLDING TIME FOR 99.9% DEGRADATION</th>
<th>DAYS AT 4°C (39.6°F)</th>
<th>DAYS AT 15°C (59°F)</th>
<th>DAYS AT 30°C (86°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONVENTIONAL SBM</td>
<td>143</td>
<td>52</td>
<td>26</td>
</tr>
<tr>
<td>DDGS</td>
<td>494</td>
<td>182</td>
<td>26</td>
</tr>
<tr>
<td>VITAMIN D</td>
<td>39</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>LYSINE</td>
<td>78</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

*Source: Pork Checkoff website.*

IFFEEDER is now embarking on a second study with SHIC to help the industry better understand how a virus can impact a feed manufacturing facility and most importantly, what steps need to be taken to get a contaminated facility back online while maintaining customers’ confidence in the products.

AFIA is also engaged in a U.S. feed risk task force to evaluate the risks of introducing pathogens into the U.S. feed supply via imported feed ingredients. The group, which consists of representatives from throughout the swine industry and U.S. federal agencies, will also identify research gaps and recommend science-based actions or regulations that could be taken to protect the U.S. from a foreign animal disease while minimizing trade disruptions.
IFIF is made up of national and regional feed associations from Africa, Asia Pacific, Europe, North and South America and the Middle East, as well feed related organizations and corporate members from around the globe.

IFIF members represent over 80% of total compound animal feed production worldwide.

National and Regional Associations

[Logos of various national and regional feed associations]
National and Regional Associations

Corporate Members
Corporate Members

ab agri
ADISSEO Nutrition, health, performance ...naturally
AJINOMOTO
AJINOMOTO ANIMAL NUTRITION GROUP
ARASCO
BASF We create chemistry
Bayer
Biomin
CALYSTA
Cargill
Delacon performing nature
Diamond V
The Trusted Experts In Nutrition & Health
DuPont
Elanco
Evonik Industries
ew nutrition
Impextraco Expert in optimizing ingredients
Kaesler Animal Nutrition
LALLEMAND
LALLEMAND ANIMAL NUTRITION
MSD Animal Health
MONSANTO
Novozymes
Rethink Tomorrow
NOVUS
Pancosma makes sense
Phibro Animal Health Corporation
Phileo Lesaffre Animal Care
PotashCorp
royal agrifirm group
SUMITOMO CHEMICAL

Feed Related Organisations
Feed Related Organisations
IFIF LEADERSHIP 2018 – 2019

Under its Articles of Association, held in Luxembourg, IFIF is managed by the Executive Director and overseen by an elected Chairman and Board of Directors drawn from the membership. Board Members serve two-year terms and are elected at the IFIF General Assembly.

IFIF Executive Committee 2018 – 2019

Dr. Daniel Bercovici  
Chairman, International Feed Industry Federation, France

Alexandra de Athayde  
Executive Director, International Feed Industry Federation, Germany

Chuck Warta  
President, Cargill Premix & Nutrition, USA

De Wet Boshoff  
Executive Director, Animal Feed Manufacturers Association, South Africa

Joel Newman  
President & CEO, American Feed Industry Association

Nick Major  
President, European Feed Manufacturers’ Federation, Belgium

Dr. Reinder Sijtsma  
Director Government Relations & Regulatory Affairs, Nutreco & Treasurer, International Feed Industry Federation, Netherlands
President, European Feed Manufacturers’ Federation, Belgium

Dr. Reinder Sijtsma
Director Government Relations & Regulatory Affairs, Nutreco & Treasurer, International Feed Industry Federation, Netherlands

Roberto Betancourt
President, Brazilian Feed Industry Association, Brazil

Yang Zhenhai
Secretary General, China Feed Industry Association, China

IFIF Board Members 2018 — 2019

Dr. Daniel Bercovici
Chairman, International Feed Industry Federation, France

Joel G. Newman
President & CEO, American Feed Industry Association (AFIA)

Dr. Colm Moran
Director European Regulatory Affairs, Alltech, France

Alexandra de Athayde
Executive Director, International Feed Industry Federation, Germany

Dr. Bruno Kaesler
Managing Director, Kaesler Nutrition GmbH, Germany

Dr. Christopher Rieker
VP Business Management Animal Nutrition, BASF SE, Germany

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David Bray
President, Stock Feed Manufacturers’ Council of Australia, Australia

De Wet Boshoff
Executive Director, Animal Feed Manufactures Association, South Africa

Enzo Trimigliozzi
Vice President Business Transformation, DSM, Switzerland
Enzo Trimigliozi
Vice President Business Transformation, DSM, Switzerland

Dr. Frank Chmitelin
Executive VP Sales, Adisseo, France

Jesse J. Sevcik
Senior Director Global Government Affairs, Elanco Animal Health, USA

Joerg Seifert
Secretary General, EU Association of Specialty Feed Ingredients and their Mixtures, Belgium

Masao Hisamitsu
Chairman, Japan Feed Manufacturers Association, Japan

Melissa Dumont
Executive Director, Animal Nutrition Association of Canada, Canada

Dr. Michael Binder
Director Sustainability Development, Evonik Industries AG, Germany

Michael Goble
Global Managing Director, Diamond V, USA

Nick Major
President, European Feed Manufacturers’ Federation, Belgium

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Government Relations & Regulatory Affairs Director, Nutreco & Treasurer, International Feed Industry Federation, Netherlands

Roberto Betancourt
President, Brazilian Feed Industry Association, Brazil

Ruud Tijssens
Group Director Public & Cooperative Affairs, Royal Agrifirm Group, Netherlands

Yang Zhenhai
Secretary General, China Feed Industry Association, China

IFIF Structure
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IFIF Structure

IFIF is registered as a non-profit organization in Luxembourg and was founded on December 1, 1987.
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Secretary General, China Feed Industry Association, China

IFIF Structure

IFIF is registered as a non-profit organization in Luxembourg and was founded on December 1, 1987.
EXPERT COMMITTEES 2018 – 2019

Experts from member companies and national associations participate in IFIF’s expert and technical committees. These consider key industry issues and help develop global feed and food industry standards.

IFIF Regulatory Committee

Members 2018 – 2019
Chair: Dr. Karine Tanan, Global Regulatory Lead, Cargill

- Alexandra de Athayde, Executive Director, IFIF
- Andressa Kobylanski Maçaneiro Caliman, Product Stewardship & Regulatory Senior Manager – LATAM, DuPont
- Antje Holthausen, Patents & Registration, Delacon
- Arivaldo Zani, CEO, Sindirações
- Arnaud Bouxin, Deputy Secretary General, FEFAC
- Bernadette Okeke, Global Director & Senior Adviser Regulatory Affairs and Compliance, Lallemand
- Bruno Caputi, Regulatory / Quality Coordinator, Sindirações
- Chandrika Venkatesh, Executive Director, CLFMA of India
- Claire Launay, Research & Development Direction, Neovia
- Colm Moran, Director European Regulatory Affairs, Alltech
- Dr. Ruth Hayler, Director Regulatory Affairs & Quality Compliance, BASF SE
- Duncan Rowland, Executive Director, SFMCA & FIAAA
- Fiona Bi, Division of International Cooperation, CFIA
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- Igor Smoly, Director, Global Regulatory Affairs, Fluka Chemie
• Gerald Schultheis, Head of Quality and Regulatory Affairs, BIOMIN Holding GmbH
• Jesse Sevcik, Sr. Director, Global Government Affairs, Elanco
• Joel Newman, President & CEO, AFIA
• Joerg Seifert, Secretary General, FEFANA
• Karine Tanan, Global Regulatory Lead, Cargill
• Leah Wilkinson, Vice President, Public Policy and Education, AFIA
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• Loretta Hunter, NORAM Regulatory Manager, Novus
• Manolis Geneiatakis, Secretary General, FAMi-QS
• Monica Fanti, Global Regulatory Affairs Manager, Alltech
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• Patricia Vecino, Executive Director, Feedlatina
• Philippe Guion, Regulatory Affairs Director, Ajinomoto Animal Nutrition Europe
• Reinder Sijtsma, Quality Director, Nutreco
• Richard Coulter, Senior Vice President, Phibro Animal Health Corporation
• Ruud Tijssens, Director Corporate Affairs, Royal Agrifirm Group
• Sabine Van Cauwenberghe, Regulatory Affairs Manager, DSM
• Sébastien Oguey, Regulatory Affairs & Quality Manager, Pancosma
• Séverine Deschandellières, Head of Global Regulatory Affairs, Adisseo
• Sophie von Alvensleben, Regulatory Project Manager Bio Amino Acids, Evonik
• Tomas Belloso, Vice President of Global Regulatory Affairs, CALYSTA, Inc.

**IFIF Sustainability Steering Group**

**Members 2018 – 2019**

Chair: Ruud Tijssens, Group Director Public & Cooperative Affairs, Royal Agrifirm Group

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• Alexandra de Athayde, Executive Director, IFIF
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• David Bray, President, SFMCA
• Greg Downing, Sustainability Director, Climate, Cargill
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• Michael Binder, Director Sustainability Development, Evonik
• Mike Goble, Global Managing Director, Diamond V
• Nick Major, President, FEFA
• Nicolas Martin, Sustainability Director, Ajinomoto Animal Nutrition Europe
• Roberto Betancourt, President, Sindirações
• Nicolas Martin, Sustainability Director, Ajinomoto Animal Nutrition Europe
• Roberto Betancourt, President, Sindirações
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• Sebastian Csaki, Senior Advisor, IFIF
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**IFIF Working Group on Nutritional Innovation to Promote Animal Health**

**Members 2018 – 2019**

Chair: Reinder Sijtsma, Regulatory Affairs Director, Nutreco

• Alexandra Blanchard, Head of Research, Pancosma
• Alexandra de Athayde, Executive Director, IFIF
• Armin Towhidi, Member of technical advisory team, IFIA
• Arnaud Bouxin, Deputy Secretary General, FEFAC
• Bernadette Okeke, Global Director, Government and Trade Affairs and Senior Adviser, Regulatory Affairs and Compliance, Lallemand Animal Nutrition
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• Duncan Rowland, Executive Director, FIAAA
• Etienne Corrent, Director of Innovation, Ajinomoto Animal Nutrition Europe
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• Franz Wixenecker, Development and Innovation Director, Biomin
• Gary Reznik, Director, Global New Product Discovery and Development, Novus International
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• Johanne Tournie, Global Registration Coordinator, Cargill
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• Mads Mourier, Senior Department Manager, Novozymes
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• Predrag Persak, Chairman of the Animal Nutrition Committee, FEFAC
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• Sabine Van Cauwenberghe, Regulatory Affairs Manager, DSM
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IFIF GHS Project Working Group

Members 2018 – 2019
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• Alexandra de Athayde, Executive Director, IFIF
• Bernadette Okeke, Director, Regulatory Affairs and Compliance, Lallemand
• Bruno Caputi, Regulatory / Quality Coordinator, Sindirações
• Claire Launay, Director Scientific and Regulatory Affairs, Neovia
• Gary Huddleston, Director of Feed Manufacturing and Regulatory Affairs, AFIA
• Grit Monse, Member of the FEFAC Premix & Mineral Feed and the Animal Nutrition Committees, FEFAC
• Jess McCluer, Vice President, Safety and Regulatory Affairs, NGFA
• Karine Tanan, Global Regulatory Lead, Cargill
• Kellie Weilbrenner, Director, Regulatory Affairs, Diamond V
• Luca Capodieci, Technical and Regulatory Manager. FEFANA
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• My-Lien Bosch, Director Technical Services, ANAC
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IFIF Contaminants Project Working Group

Members 2018 – 2019
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• Arnaud Bouxin, Deputy Secretary General, FEFAC
• Aurore Potel, Regulatory Affairs Manager, Phileo
• Bernadette Okeke, Director, Regulatory Affairs and Compliance, Lallemand
• Bruno Caputi, Regulatory / Quality Coordinator, Sindirações
• Claire Launay, Director Scientific and Regulatory Affairs, Neovia
• Cristina Navarro, Head of Quality Assurance – Europe, Middle East & Africa, Novus
• Diego Bonilha, Quality Management and Regulatory Affairs, BASF
• Eleanor Tredway, Member of FEFANA Expert Groups, FEFANA
• Henrique Anselmo, Regulatory Affairs Manager, Nutreco
• John Aird, Executive Manager, FIAAA
IFIF Contaminants Project Working Group

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- Tomas Beloso, Vice President of Global Regulatory Affairs, CALYSTA, Inc.

- Diego Bonilha, Quality Management and Regulatory Affairs, BASF
- Eleanor Tredway, Member of FEFANA Expert Groups, FEFANA
- Henrique Anselmo, Regulatory Affairs Manager, Nutreco
- John Aird, Executive Manager, FIAAA
- Karine Tanan, Global Regulatory Lead, Cargill
- Lori Flugum, Director, Quality & Compliance, Diamond V
- Melissa Dumont, Executive Director, ANAC
- Richard Sellers, Sr. Vice President, Public Policy and Education, AFIA
- Ruth Hayler, Director Regulatory Affairs & Quality Compliance, BASF SE
- Stephan Bornemann, Quality Manager, Kaesler Nutrition
The page below breaks down some common terms and definitions used throughout this online report.

Definitions

Feed (Feeding Stuff)
Any single or multiple materials, whether processed, semi-processed or raw, which is intended to be fed directly to food-producing animals.

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, including feed additives. Ingredients are 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 or animal products. Micro-organisms, enzymes, acidity regulators, trace elements, vitamins and other products fall within the scope of this definition depending on the purpose of use and method of administration.

Medicated Feed
Any feed which contains veterinary drugs as defined in the Codex Alimentarius Commission Procedural Manual.

Terms

Complete Feed
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 or animal products. Micro-organisms, enzymes, acidity regulators, trace elements, vitamins and other products fall within the scope of this definition depending on the purpose of use and method of administration.

Medicated Feed
Any feed which contains veterinary drugs as defined in the Codex Alimentarius Commission Procedural Manual.

Terms

Complete Feed
A nutritionally adequate feed compounded by a specific formula to be fed as the sole ration and capable of maintaining life and/or promoting production without any additional substance except water.

Concentrate
A feed used with another to improve the nutritive balance of the total and intended to be diluted or mixed to produce a supplement or a complete feed; may be unsafe if fed free choice or alone as a supplement.

Micro-ingredients
Vitamins, minerals, antibiotics, drugs/medicines, and other materials usually required in feeds in small amounts as feed additives.

Premix
A uniform mixture of one or more microingredients/ additives with a diluent and/or carrier to facilitate their even distribution in a larger mix.

Primary feed
A feed formulated from single ingredients, sometimes containing a premix (less than less than 45.5 kg per tonne or 100 pounds per tonne).

Trace Minerals
Mineral nutrients required by animals in micro amounts (measured in units of grams per kg or smaller).
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