



International  
Feed  
Industry  
Federation  
Annual Report  
2014/15



# International Feed Industry Federation

ANNUAL REPORT 2014/15

Start



# Welcome

**In 2050 there will be 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**



# Welcome

**In the last two years the International Feed Industry Federation (IFIF) has grown from strength to strength thanks to the engagement of our members from around the world and a sharp focus on our vision and mission as the one voice for the global feed industry.**

**We invite you to explore the 2014/15 IFIF Annual Report and see for yourself.**



**Welcome Letters**







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We have to be open towards innovation and technology, which will be the basis of producing more and better food over the next 40 years.

**MARIO SERGIO CUTAIT**  
CHAIRMAN IFIF 2014/15

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“



IFIF believes that only by working together with all stakeholders can we continue to ensure feed and food safety, while meeting the global demands for food.

**ALEXANDRA DE ATHAYDE**  
EXECUTIVE DIRECTOR IFIF

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[Our Vision](#)







## Letter from the Chairman

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MARIO SERGIO CUTAIT, IFIF CHAIRMAN, 2014/15

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**Dear IFIF Members, dear friends and colleagues,**

The agricultural chain, including the feed industry, is at the heart of one of the 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.

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.

As you will see in this IFIF Annual report 2014/15, 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 2014 and 2015 our Federation has grown from strength to strength. Together with the IFIF Board of Directors we successfully developed our new IFIF strategy, as well as refined our vision and mission, and positioned IFIF to effectively address the important opportunities and challenges facing the feed industry in the future.

IFIF further strengthened its existing relationships with key international organizations, including with the United Nations Food and Agriculture Organization (FAO), the Codex Alimentarius Commission, The World Health Organization (WHO) and the World Organization for Animal Health (OIE).

IFIF and the FAO have a strong collaborative relationship dating back many years, and our relationship continues to strengthen each year. The success of our joint International Feed Regulators Meetings (IFRMs), as well as our long-standing partnership on capacity development in feed safety and spreading of good feed manufacturing practices are just two highlights.

IFIF is also an active participant 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

Our cooperation agreement with the OIE further strengthens our relationships with regulators at the international level and this links us even closer to our partners along the feed and food chain.

Over the last four years, our Federation almost doubled its membership and increased its geographical reach, including in important regions such as Africa, the Middle East and Asia, and I want to again welcome all our new Members to the IFIF family!

I am very pleased that IFIF supported the launch of the first ASEAN Feed Summit, organized by Victam International, which is an important step for the ASEAN region to come together on critical feed and food issues.

Looking ahead, as many of you know well, demand for livestock products will continue to intensify over the decades to come. Estimates show that between 2010 to 2050 animal protein production is expected to grow by around 1.7 % per year, with meat production projected to rise by nearly 58%, aquaculture by 90% and dairy by 55%.

In meeting these future demands, I believe sustainability – produce more, using less, at an affordable cost to the consumer – and animal welfare are not optional, and I know this reflects many consumers concerns and wishes. At the same time, we have to be open towards innovation and technology, fair trade and regulatory convergence, which will be the basis of producing more and better food over the next 40 years.

Many of these critical issues will be addressed our upcoming 5th Global Feed & Food Congress in Turkey under the theme 'Equity and Prosperity for All' which will bring together leaders and experts from the global feed & food chain in Antalya in April 2016.

All 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.

I also take this opportunity to again congratulate Joel Newman on his election as IFIF Chairman for 2016-2017. Joel is well placed to lead the Federation in the next years to contribute to the growth of a sustainable feed industry worldwide and I wish him much success.

Driving our accomplishments is our Executive Director, Alexandra de Athayde, and I want to thank her and her team for all their continued excellent work and dedication to IFIF.

It has been an honor and a pleasure to serve as your Chairman over the last four years and to lead the organization in such exciting times. 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,

A handwritten signature in black ink, appearing to read 'M. Cutait', written in a cursive style.

**Mario Sergio Cutait**  
**Chairman 2012 - 2015**  
**International Feed Industry Federation**



## Letter from the Executive Director

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ALEXANDRA DE ATHAYDE, EXECUTIVE DIRECTOR, IFIF

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### Dear Members,

The last two years IFIF has grown even stronger and I am pleased to report that in 2014 and 2015 our Federation initiated and participated in a number of important activities, while strengthening our relationship with key stakeholders across the chain, and solidifying IFIF's position as the voice for our industry globally.

In 2014 IFIF undertook a strategic review of its vision, mission and core activities based on a survey of IFIF member priorities and an assessment of our industry future direction. I am pleased that the IFIF General Assembly unanimously endorsed this new strategy last year. IFIF's mission and vision is now refined, while our work is centred on three strategic pillars, which reflect the key priorities of IFIF to support our industry on the road to the future.

This 2014-2015 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.

I want to thank our dedicated 2014-2015 expert Committee Chairs Joel Newman (Policy), Dr. Daniel Bercovici (Education), and Alexander Döring (Technology), as well as all the Members of our expert Committees for their support and expertise, which underpin IFIF's accomplishments.

Finally this report provides an accounting of our organisation's structure, our membership, as well as our Board of Directors and Executive Committee. I want to thank our Chairman for 2014-15, Mario Sergio Cutait, for his outstanding leadership and dedication to IFIF, as well as our entire Board of Directors for their 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.

IFIF provides leadership and expert input to multi-stakeholder efforts to the FAO-led sustainability initiatives, including the Global Agenda for Sustainable Livestock and the Partnership on Livestock Environmental Assessment and Performance (LEAP), which in April 2015 launched groundbreaking global LCA Guidelines, an essential step to help reduce the impact of livestock products on the environment.

In 2015 IFIF became a founding member of the Global Feed LCA Institute (GFLI), which will use 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 finalised 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.

### **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 7th and 8th Annual 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.

IFIF also joined global regulators at annual Sessions of the Codex Alimentarius Commission, where together with the FAO, we supported a series of side events on feed safety, including in July 2015, when IFIF joined the FAO and the World Health Organisation (WHO) to discuss the initial outcomes of the FAO WHO Expert Meeting on Hazards Associated with Animal Feed.

In 2014 IFIF, together with FEFANA, launched the global Convergence Project with the overall long-term objective to enable the convergence of the technical requirements for the safety assessment of feed ingredients between jurisdictions globally.

IFIF presented at the World Organisation for Animal Health (OIE) 82nd 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.

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

To further strengthen the sustainability of the feed and food chain, IFIF supports producers and regulators around the world with a good practices manual and training workshops.

In 2014 and 2015 IFIF completed the translations of the FAO/IFIF Manual of Good Practices for the Feed Industry in to all official FAO languages. The Feed Manual has now been distributed to regulators and industry globally and is available in Arabic, Chinese, English, French and Spanish language.

Following this, in 2015 IFIF launched the IFIF Global Animal Nutrition Programme 'Train the Trainer' Pilot Project to develop and train the capacities of the relevant compound feed production stakeholders in Nigeria using the FAO/IFIF feed manual based on the Codex Code of Practice on Good Animal Feeding in order to contribute to the production and supply of safe feed.

The preparations for our 5th Global Feed & Food Congress in Antalya, Turkey, on 18-20 April 2016 are in full swing and the Congress will bring together over 1,200 global leaders and experts from the feed and food chain. Registration is now open at [www.gffc2016.com](http://www.gffc2016.com) and it my pleasure to invite you to join us for this important event.

### Looking ahead 2016

2016 promises to be an important and exciting year for our Federation under the leadership of our newly elected IFIF Chairman for 2016-2017 Joel Newman.

In January we will kick-off the Global Feed LCA Institute (GFLI) to bring the major feed producing regions together with the aim to become the golden global standard for assessing and benchmarking feed industry impact and improvement in LCA calculations.

Following the successful Pilot Project in Nigeria of the IFIF Global Animal Nutrition Programme 'Train the Trainer' we will work to roll this initiative out to other world regions.

The 5th GFFC in April will be directly followed by our 9th annual IFRM, also in Antalya, which will once again bring together feed regulators from around the world with IFIF members.

In 2016 we will continue our efforts to reach out to potential new members and support the building of national and regional feed associations, particularly in the Middle East and North Africa, as well as Asia-Pacific. In 2014 IFIF supported the launch of the ASEAN Feed Summit in Bangkok and I am pleased to report this important initiative has borne fruit. In March 2016 IFIF will join the next ASEAN Feed Summit as we continue to support their efforts to build a regional feed association.

I look forward to working with all of you to drive forward IFIF 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 for IFIF.



**Alexandra de Athayde**  
**Executive Director**  
**International Feed Industry Federation**



## Our Vision

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.



One Voice





# — One Voice —

## Who we are

ONE VOICE FOR THE INDUSTRY



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## What we do

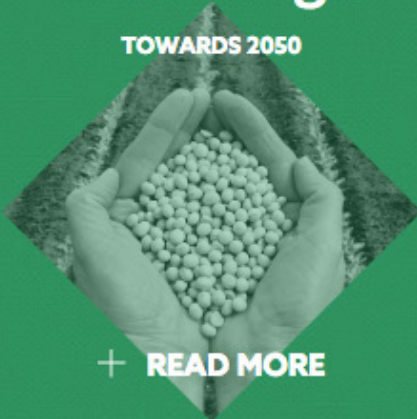
OUR MISSION



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## Challenge

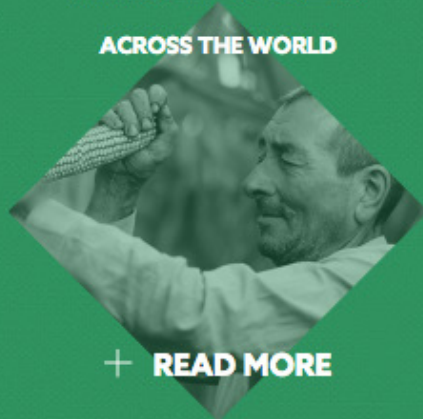
TOWARDS 2050



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## Members

ACROSS THE WORLD



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Partnerships







## Who we are

The International Feed Industry Federation (IFIF) represents and promotes 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 the years 2014-2015, IFIF has undertaken a number of projects to meet this challenge and has continued to develop stronger relationships with international stakeholders, while welcoming a range of new Members to IFIF.

In addition, IFIF reviewed and refocused its strategy and strategic work plan in order the Federation on continued solid footing for the next five years.

To support our industry on the road to the future, IFIF's work with its Members and stakeholders is centred on three strategic pillars, including **sustainability, regulatory & international standards**, and supporting **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 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.





## Challenge

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

In 2015 compound feed production will likely reach close to 1 billion tonnes worldwide. This numerical milestone is a marker, not only for the achievements of our industry, but also for the opportunities as well as for the challenges we all face in the future.

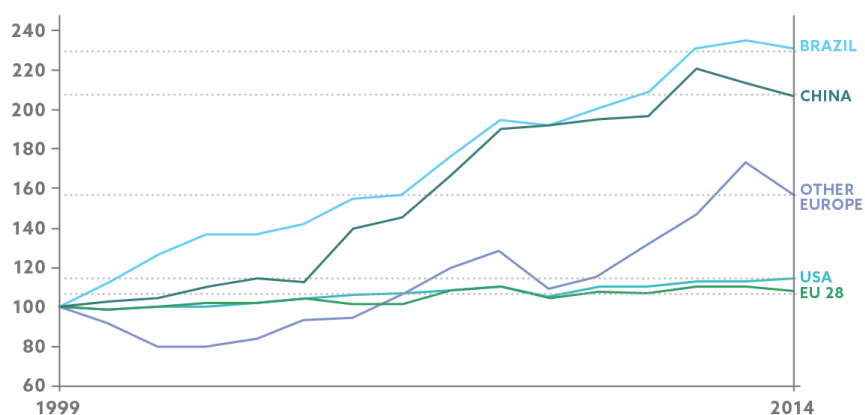
The United Nations Food and Agriculture Organization (FAO) estimates that by 2050 the demand for food will grow by 60% and that between 2010 and 2050 production of animal proteins is expected to grow by around 1.7% per year, with meat production projected to rise by nearly 58%, aquaculture by 90% and 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 challenges are 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.

To support our industry on the road to the future and meet the challenges, in 2014/15 IFIF's work with its Members and stakeholders centered on three strategic pillars, including sustainability, regulatory & international standards, and supporting education & sharing of best practices.

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






## INDICATIVE COMPOUND FEED PRODUCTION GROWTH RATES








Source: IFIF / FEFAC

## WORLD PROTEIN PRODUCTION 2014 / 2015

Million metric tons

PROTEIN TYPE	2014	2015*	VAR.
 BOVINE	67.8	67.9	0.2%
 POULTRY	110.2	111.8	1.4%
 PIGS	117.2	119.4	1.9%
 AQUA	74.3	78.0	5.0%
 MILK	788.5	804.5	2.0%
<b>TOTAL</b>	<b>1159.0</b>	<b>1181.6</b>	<b>1.9%</b>

Source: FAO Global Source Outlook May 2015/\*2015 FAO forecast

PROTEIN TYPE	2010	2050	% CHANGE
 BOVINE	66.7	107.5	62%
 POULTRY	98.9	201.9	104%
 PIGS	109.3	150.3	38%
 AQUA	59.9	113.7	90%
 MILK	722.9	1119.7	55%
<b>TOTAL</b>	<b>1057.7</b>	<b>1693.1</b>	<b>60%</b>

Source: FAO Global Food Outlook November 2012/FAO World agriculture towards 2030/2050 - 2012 Rev/OECD FAO Ag Outlook 2013





## Our Mission

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 the years 2014-2015, IFIF reviewed and refocused its strategy and mission in order to place the Federation on continued solid footing for the next five years.

In order to fulfil its vision, IFIF's mission is to:

- 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.

## 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, nutritious and affordable food for a growing world population.



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 joined the Federation in 2014 and 2015. They are all key players in their field and IFIF is extremely pleased to have them on board contributing their time and expertise.





# Partnerships

In 2014/15 IFIF strengthened its work with key stakeholders, including international organisations and partners along the feed and food chain, to support feed and food safety, while meeting the demands of 60% more food for 9 billion people by 2050 – and to do so sustainably.



+ CLICK ON THE LOGOS BELOW TO LEARN MORE



**C O D E X**  
ALIMENTARIUS  
International Feed Standards

**Oie**

World  
Organisation  
for Animal  
Health

**AGRI CHAIN PARTNERS**

Our Pillars





## IFIF's partnership with the Food and Agriculture Organization of the United Nations (FAO)

In 2014 and 2015 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.

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 Feed and Food Congress series, which includes representatives from the whole feed and food chain, as well as government, academia, other intergovernmental organizations and NGOs.

The 5th Global Feed & Food Congress (GFFC) will be held in Antalya,

Turkey, on 18-20 April 2016. For more information please visit [gffc2016.com](http://gffc2016.com).



A second key area of collaboration is capacity development in feed safety and spreading of good feed manufacturing practices. 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 is a Codex recognized NGO and follows and input into in the work of the relevant Committees and works to keep feed safety issues on the Codex agenda.

In 2014 and 2015 IFIF joined global regulators at the annual Sessions of the Codex Alimentarius Commission, where together with the FAO, we supported a series of side events on feed safety, including in July 2015, when IFIF joined the FAO and the World Health Organisation (WHO) to discuss the initial outcomes of the FAO WHO Expert Meeting on Hazards Associated with Animal Feed.

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.


At the Side Event in July 2015 IFIF, together with the FAO, WHO, Codex presented their response to the recommendations of the FAO/WHO Expert Meeting on Hazards Associated with Animal Feed held in May 2015. The extensive discussion during the side event highlighted the need to continue information and knowledge sharing among the parties, as well as to make a step forward and discuss a common action plan for feed safety that would give direction and increase the commitment of the

“feed community” to work together towards a common goal.

In 2014, IFIF together with the FAO and other international bodies, including the Joint FAO/WHO Expert Committee on Food Additives (JECFA) and the Government of the Netherlands held a successful side event on Feed Safety during the 8th session of the Codex Committee on Contaminants in Food (CCCF) in The Hague, Netherlands.

The side event addressed themes of interest such as risk assessment on contaminants in feed, the feed industry initiatives to ensure feed safety, the need of the food industry for safe supply, the role of capacity development. The discussions reinforced the importance of ensuring participation of feed experts in Codex work to provide information and data relevant to the animal feed sector.

These events supports IFIF’s on-going efforts to keep feed safety issues on the Codex agenda following the completion of the work of the Codex Task Force on Animal Feeding (TF AF) in 2013.



## IFIF continues to strengthen its cooperation with the World Organisation for Animal Health (OIE)

**IFIF holds an official Cooperation Agreement with the World Organisation for Animal Health (OIE), based in Paris, France.**

In 2014 and 2015 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.

In 2014 IFIF presented at the OIE 82nd General Session, 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.





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 2014 and 2015 IFIF through its expert Policy Committee provided comments on the OIE Terrestrial Animal Health Code draft Chapter 6.X. on prevention, detection and control of Salmonella in pigs (currently being reviewed by an OIE working group). In addition the IFIF Policy Committee reviewed the new draft Chapter 6.X. on the prevention, detection and control of Salmonella in cattle.



## 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:

Health for Animals

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 2014, IFIF joined key livestock sector partners to welcome the call for action to end malnutrition and sustainably feed the world by UN FAO Director-General José Graziano da Silva at the 2nd International Conference on Nutrition (ICN2) organized jointly by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO).

IFIF, together with the International Meat Secretariat (IMS), the International Dairy Federation (IDF), the International Poultry Council (IPC) and the International Egg Commission (IEC) pledged their support to end malnutrition and continue efforts to sustainably feed a growing world population, highlighting the important role of livestock in nutrition security.

Dr. Graziano da Silva, welcomed the livestock sector and other private sector representatives ahead of ICN2, and highlighted the importance of





## Our Pillars

To support our industry on the road to the future, in 2014/15 IFIF centred its work on three strategic pillars: sustainability, regulatory & international standards and education & sharing of best practices.



The Pillars





1

## Sustainability

IFIF supports and encourages the sustainable development of animal production.

+ READ MORE

> VIEW PROJECTS

2

## Regulatory and International Feed 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.

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> VIEW PROJECTS

3

## Education and Best Practices

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

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National and Regional Updates





## 1 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 we work with our members and chain partners to measure and improve the environmental performance of the livestock production chain.

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, and in order to support this, IFIF is working with its Members and other stakeholders, including the agri-food chain partners and international organisations, such as the FAO on a number of projects.

IFIF provides leadership and expert input to multi-stakeholder efforts to the FAO-led sustainability initiatives, including the Global Agenda for Sustainable Livestock and the Partnership on Livestock Environmental Assessment and Performance (LEAP).



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 will use 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.





## 1 Sustainability

### — SUSTAINABILITY PROJECTS

#### **The Specialty Feed Ingredients Sustainability Project (SFIS)ed Ingredients Sustainability Project (SFIS)**

In 2014 IFIF, together with the EU Association of Specialty Feed Ingredients and their Mixtures (FEFANA) and a consortium of international companies and associations, finalized the Specialty Feed Ingredients Sustainability Project (SFIS) to measure and establish the role of specialty feed ingredients (SFIs) on the environmental impact of livestock production.

The study undertook a life cycle assessment (LCA) in conformity with the ISO 14040/44 standards in order to analyze the cradle-to-farm gate environmental performance of pig and broiler production with and without specialty feed ingredients supplementation and to provide credible scientific evidence for informed decision making in areas related to the environmental impact of specialty feed ingredients.



It became clear that the use of SFIs in animal nutrition provides concrete benefits to the environmental impact of animal production

The SFIS analysis examined the use of low protein diets (Nitrogen) and phytase (P) in pigs and poultry. The overall results of the study demonstrate that the use of 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 (GWP), as well as the eutrophication and acidification potential during livestock production.

It became clear that the use of these SFIs in animal nutrition provides concrete benefits to the environmental impact of animal production, for example reducing the excretion of certain nutrients, such as nitrogen and phosphorus, improving the performance of the animals, and reducing the feed consumption or allowing the use of locally based or unusual feed materials.



This study should have a direct positive impact on the future environmental footprint of the feed and food chain.

In 2014/2015 the results of the study were validated by an independent Scientific Council made up of global experts in the fields of LCA methodology and animal nutrition to ensure scientifically robust inputs in the analysis and prepare the ground for a peer reviewed publication of the project, which will be published in late 2015. This study should have a direct positive impact on the future environmental footprint of the feed and food chain. In addition to the positive results, the study also points towards future developments, such as improved feed conversion driven by advancing technologies in animal feeding through using SFIs.

**SFIS Scientific Council Members Prof. Dr. Matthias Finkbeiner (Chair),  
Technical University Berlin, Germany**

- Prof. Dr. Kees de Lange, University of Guelph, Canada
- Prof. Dr. Jean-Yves Dourmad, INRA Agrocampus Ouest, France
- Prof. Dr. Ermias Kebreab, University of California, Davis, USA
- Prof. Dr. Gustavo Julio Mello Monteiro de Lima, Centro Nacional de Pesquisa de Suínos e Aves, Brazil
- Prof. Dr. John Pluske, Murdoch University, Australia

**SFIS Consortium Partners**

**Association Members:**

IFIF, FEFANA, AFIA, JFMA, SINDIRAÇÕES

**Full Members:**

AB Vista, Adisseo, ADM, Ajinomoto, BASF, DSM, Dupont Industrial, Evonik Industries AG, Novus

**Observers:**

Alltech, InVivo, Nutreco, Taminco

## 1 Sustainability

### — SUSTAINABILITY PROJECTS

#### Global Feed LCA Institute (GFLI)

In 2015 IFIF together with AFIA and FEFAC set up the Global Feed LCA Institute (GFLI), 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.

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 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.

Following the official publication of the LEAP Global Feed LCA Guidelines methodology in April 2015, IFIF together with AFIA and FEFAC set up the Global Feed LCA Institute (GFLI). Over the next three years, the GFLI will work to implement the internationally recognized FAO/LEAP methodology by developing a high quality globally recognized and

harmonized public database to support meaningful LCAs of livestock products.

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 aim 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.





## 1 Sustainability

### — SUSTAINABILITY PROJECTS

#### **Partnership on Livestock Environmental Assessment and Performance (LEAP)**

In 2015, the LEAP partners finalized the development of a ground-breaking LCA methodology to assess the environmental performance of feed supply chains.

IFIF together with the American Feed Industry Association (AFIA) and the European Compound Feed Manufacturers' Federation (FEFAC) is a founding member of the Livestock Environmental Assessment and Performance Partnership (LEAP), which aims to improve how the environmental impacts of the livestock industry are measured and assessed, an important step to reduce the impact of livestock products on the environment.

In 2015, the LEAP partners finalized the development of a ground-breaking global LCA Guidelines that introduces 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.



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.

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.

As a next step, in 2015 IFIF, together with AFIA and FEFAC, set up a Global Feed LCA Institute (GFLI), an independent body with the vision, with the continued support and participation of FAO, to develop an LCA database and tool, which together with the underlying methodology would become the golden global standard for assessing and benchmarking feed industry impact and improvement in LCA calculations.



## 1 Sustainability

### — SUSTAINABILITY PROJECTS

## Global Agenda for Sustainable Livestock

Throughout 2014 and 2015 IFIF has been closely 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.

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:

- Focus area Closing the efficiency gap: This aims to stimulate the application of existing but not widely used technologies by the bulk of the world's producers whose use of natural resources is often greatly inefficient. Agenda partners will develop public-private and other forms of partnership to transfer and adapt resource use efficient technologies.
- Focus area Restoring value to grassland: This pursues a better management of grazing land, which can contribute to carbon sequestration, protection of water and biodiversity but also enhanced productivity and livelihoods. Agenda partners will explore and promote the financial and institutional innovations required for the delivery of grassland-related ecosystem services.
- Focus area Waste to worth: This aims at recovering and recycling nutrients and energy contained in animal manure, particularly from intensive and confined livestock production operations. Agenda

partners will develop planning tools and regulatory and incentive frameworks to support viable manure management and create opportunities for recycling.

You can find out more details about the Global Agenda of Action by visiting <http://www.livestockdialogue.org/>.





## ② Regulatory and International Feed Standards

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.

“

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.

## ② Regulatory and International Feed Standards

### — REGULATORY AND INTERNATIONAL FEED STANDARDS PROJECTS

#### **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.

The **7th and 8th Annual International Feed Regulators Meeting (IFRM)** organized by the IFIF in cooperation with the Food and Agriculture Organization of the United Nations (FAO) 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 in Atlanta, USA in 2014 and 2015 prior to the International Production & Processing Expo (IPPE).





All world regions and key regulatory bodies were represented at the IFRMs and the meetings yet again proved an important opportunity for the global feed industry and feed regulators to discuss key issues for the feed and food chain, such as feed safety management, product registration and capacity development for feed safety to implement the Codex requirements.

Other topics covered in the last two included a discussion of feed legislations in South Africa, Australia and Latin America, as well as a discussion of feed related work in the Codex Alimentarius Commission and the implementation of the Codex Ad Hoc Intergovernmental Task Force on Animal Feeding (TF AF) terms of reference documents at national level

In addition, discussion focussed on best practices in new feed regulations in Canada and the US, as well as the presentation of the global Regulatory Convergence Project of feed ingredients and their mixtures, which builds on the 2013 IFIF 'Comparison of Approval Process and Risk-Assessment procedure for Feed Ingredients' report.

Save the Date:

9th International Feed Regulators Meeting (IFRM) - 21 April 2016.

The **9th International Feed Regulators Meeting (IFRM)** will be held in Antalya, Turkey, on 21 April 2016 directly following the 5th Global Feed & Food Congress (GFFC). IFIF is delighted to invite regulators from around the world to Antalya, Turkey, a country that is at the heart of a fast growing region for the feed and food sector.

Government feed regulators may attend this event at no fee and participation at the IFRM is by invitation only. Should you be interested in joining the IFRM please contact [info@ifif.org](mailto:info@ifif.org).

All feed and food industry professional are invited to join the 5th Global Feed and Food Congress (GFFC) on 18-20 April 2015. For more information and registration for the GFFC please visit [www.gffc2016.com](http://www.gffc2016.com).

## ② Regulatory and International Feed Standards

### — REGULATORY AND INTERNATIONAL FEED STANDARDS PROJECTS

#### Regulatory Convergence Project

In 2014 IFIF, together with FEFANA, launched the global Convergence Project with the overall long term objective of the project is to enable the convergence of the technical requirements for the safety assessment of feed ingredients between jurisdictions globally.

Initially focused on Canada, EU and the USA, the enabling capabilities should support the development of science-based technical guidance documents, and should facilitate in a lean but sustainable and transparent way the dialogue and the exchange of information between the authorities and the industry experts.

This set of documents would serve as a foundation for the mutual recognition of the safety assessment outcome between the different jurisdictions.

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The collaboration should lead to the publication of an efficient and harmonized set of documents dealing with risk assessment of feed ingredients.

The Convergence Project is the concrete next step from the 2013 IFIF "Comparison of Regulatory Management of Authorized Ingredients, Approval Processes, and Risk-Assessment Procedures for Feed Ingredients" report that covers Brazil, Canada, China, European Union, Japan, South Africa, and United States. This study was drafted based on expert input and support by government feed regulators and feed and feed ingredients associations in the 7 regions covered.

The objective of the report was to address similarities and differences among 7 regulatory jurisdictions on the regulatory management of authorized (existing) feed ingredients, the approval process, and risk management assessment for feed ingredients. The tool can assist in global marketing as well as supporting in the harmonization/convergence efforts in identifying areas of dissimilarity, which ultimately should ease of trade of feed and ingredients among these regions.



## ② Regulatory and International Feed Standards

### — REGULATORY AND INTERNATIONAL FEED STANDARDS PROJECTS

#### **CODEX work relevant to animal feeding**

IFIF is a Codex Alimentarius recognised NGO and has been actively involved in keeping feed safety on the agenda of the Codex as part of food safety.

In 2014 and 2015 IFIF joined global regulators at the annual Sessions of the Codex Alimentarius Commission, where together with the FAO, we supported a series of side events on feed safety, including in July 2015, when IFIF joined the FAO and the World Health Organisation (WHO) to discuss the initial outcomes of the FAO WHO Expert Meeting on Hazards Associated with Animal Feed.

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).

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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.

At the Side Event in July 2015 IFIF, together with the FAO, WHO, Codex presented their response to the recommendations of the FAO/WHO Expert Meeting on Hazards Associated with Animal Feed held in May 2015. The extensive discussion during the side event highlighted the need to continue information and knowledge sharing among the parties, as well

as to make a step forward and discuss a common action plan for feed safety that would give direction and increase the commitment of the “feed community” to work together towards a common goal.

In 2014, IFIF together with the FAO and other international bodies, including the Joint FAO/WHO Expert Committee on Food Additives (JECFA) and the Government of the Netherlands held a successful side event on Feed Safety during the 8th session of the Codex Committee on Contaminants in Food (CCCF) in The Hague, Netherlands.

The side event addressed themes of interest such as risk assessment on contaminants in feed, the feed industry initiatives to ensure feed safety, the need of the food industry for safe supply, the role of capacity development. The discussions reinforced the importance of ensuring participation of feed experts in Codex work to provide information and data relevant to the animal feed sector.

These events supports IFIF's on-going efforts to keep feed safety issues on the Codex agenda following the completion of the work of the Codex Task Force on Animal Feeding (TF AF) in 2013.

## ② Regulatory and International Feed Standards

### — REGULATORY AND INTERNATIONAL FEED STANDARDS PROJECTS

#### **Feed Benchmarking Project – Feed Schemes Observatory (FSO)**

In 2014 IFIF joined as a partner in the Feed Schemes Observatory (FSO), a global initiative between the feed industry, Feed Assurance Schemes, as well as the International Trade Center (ITC), which aims to create an independent, transparent and impartial benchmark system for feed safety assurance schemes.

IFIF is pleased to be able to contribute to creating a benchmark system for feed safety assurance schemes for the global feed chain, as well as to build bridges of communication within the value chain and with regulators.

The work continues in 2015 and beyond and the benchmarking scheme should improve the comparability of the main principles and requirements that concern feed safety assurance schemes and reduce technical barriers to trade in the feed chain. The project also aims to transfer knowledge and capacity building and raise awareness of the importance of the auditing and certification for safety in the feed sector.

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IFIF is pleased to be able to contribute to creating a benchmark system for feed safety assurance schemes for the global feed chain, as well as to build bridges of communication within the value chain and with regulators.



The FSO is an international platform of cooperation and project partners include the Agricultural Industries Confederation (AIC), the Brazilian Feed Industry Association (Sindirações), DSM, Evonik Industries, FAMI-QS, the EU Association of Specialty Feed Ingredients and their Mixtures (FEFANA), GMP+ International, HSL Certification Service (China), the International Feed Industry Federation (IFIF), the International Trade Centre (ITC), Nutreco and SGS Nederland B.V. For more information please visit <http://www.feed-benchmark.org/>.

## ③ Education and Best Practices

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

In 2015 IFIF developed the Global Animal Nutrition Programme 'Train the Trainer' designed to raise capacities for feed safety in developing regions by training key individuals who can then act as trainers on site within a country.

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.

In 2014 and 2015, IFIF finalised the translation of the IFIF FAO 'Feed Manual of Good Practices' for the Feed Industry based on the Codex Code of Practice on Good Animal Feeding. 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.

In 2015 IFIF laid the groundwork for the 5th Global Feed & Food Congress (GFFC), which will be held in Antalya, Turkey on 18-20 April 2016. The 5th GFFC will bring together food and feed experts from around the world, representing public sector, civil society, industry and academia.

We invite you already to mark the 5th GFFC in your calendar and hope you will all be able to join us for this important event – to register please visit [www.gffc2016.com](http://www.gffc2016.com).





## ③ Education and Best Practices

### — EDUCATION AND BEST PRACTICES PROJECTS

#### **IFIF/FAO Feed Manual**

In 2014 and 2015 IFIF completed the translations of the feed manual in to all official FAO languages. The Feed Manual has now been distributed to regulators and Industry globally and is available in Arabic, Chinese, English, French and Spanish language.

The publication of 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.

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.



IFIF believes the Manual is a very relevant document to help support better standards, particular in developing economies.

This manual is targeted at the commercial feed industries and farm-based feed mixers in developing countries and emerging economies in their endeavor to meet the rising quality and safety requirements of both the export and domestic markets, with the increasing participation of large-

scale retailers everywhere. It is also of value to officers engaged in feed inspection, with their supervisory roles in feed safety.

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.

## ③ Education and Best Practices

### — EDUCATION AND BEST PRACTICES PROJECTS

#### 5th Global Feed & Food Congress (GFFC)

The 5th Global Feed & Food Congress (GFFC) will be held in Antalya, Turkey, on 18-20 April 2016. For more information and to register for the 5th GFFC please visit [gffc2016.com](http://gffc2016.com).

The 5th GFFC is organized by the International Feed Industry Federation (IFIF) in cooperation with the European Feed Manufacturers' Federation (FEFAC) and hosted by the Turkish Feed Manufacturers' Federation (TURKIYEM BIR), with technical support provided by the Food and Agriculture Organization of the United Nations (FAO).



Over 1,200 delegates from around the world will join sessions covering the whole feed manufacturing and food processing value chain including Sustainability, Markets & Trade, Feed & Food Safety, Regulations & Standards, Animal Nutrition and Innovation and R&D.

The Congress theme “Equity and Prosperity for All” links to the global challenge to provide safe, affordable and sustainable animal protein sources to feed 9 billion people by 2050. Over 1,200 delegates from around the world will join sessions covering the whole feed manufacturing and food processing value chain including Sustainability, Markets & Trade, Feed & Food Safety, Regulations & Standards, Animal Nutrition and Innovation and R&D.

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 Sun City, South Africa, in April 2013.



**THE 5TH GLOBAL FEED & FOOD CONGRESS**  
ANTALYA, TURKEY, 18 - 20 APRIL 2016

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EVENT ORGANISER



EVENT CO-ORGANISER



HOST



TECHNICAL SUPPORT



## ③ Education and Best Practices

### — EDUCATION AND BEST PRACTICES PROJECTS

#### **IFIF Global Animal Nutrition Programme 'Train the Trainer'**

In 2015 IFIF launched the IFIF Global Animal Nutrition Programme 'Train the Trainer' to support Capacity Development for feed safety in developing regions.

Capacity Development for feed safety is one of the key priorities of IFIF and links closely to FAO initiatives in this area.

In 2015 IFIF launched the IFIF Global Animal Nutrition Programme 'Train the Trainer' pilot project to develop and train the capacities of the relevant compound feed production stakeholders in Nigeria using the FAO/IFIF Manual of Good Practices for the Feed Industry based on the Codex Code of Practice on Good Animal Feeding.

The aim of the programme is to raise capacities for feed safety in developing regions by training key individuals who can then act as trainers on site within a country. 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.

The 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.



'Train the Trainer' is designed to improve the safety of feed, and thus will contribute to enhanced food safety, animal health and welfare and food security.

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 aim was 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 objectives of the Pilot Project in Nigeria are 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.

The Pilot project "Train the trainer" in Nigeria is focussing on Implementation of IFIF/FAO Manual on Good Practices for the Feed Industry including:

- 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

As a next step, IFIF will monitor the outcomes and evaluate the learnings from the pilot programme in Nigeria, and based on that see how to take the programme to other parts of the world to support, train and develop local feed industry to raise feed and food safety standards globally.







## 3 Education and Best Practices

### — EDUCATION AND BEST PRACTICES PROJECTS

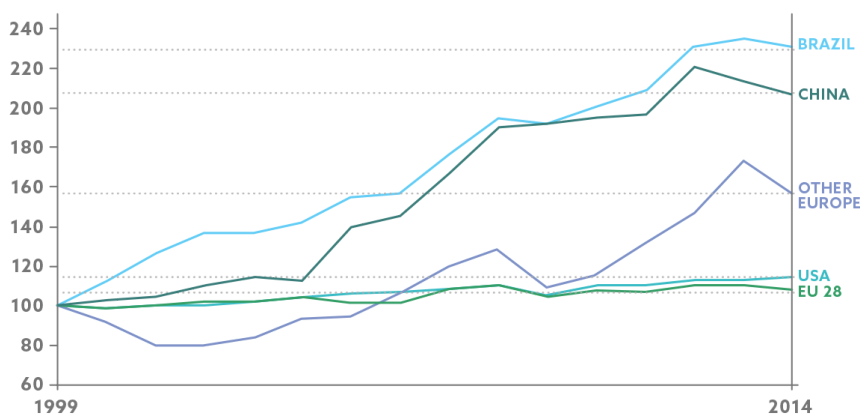
### Global Feed Statistics

World compound feed production is fast approaching an estimated 1 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.

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 see the regional updates section of this report.

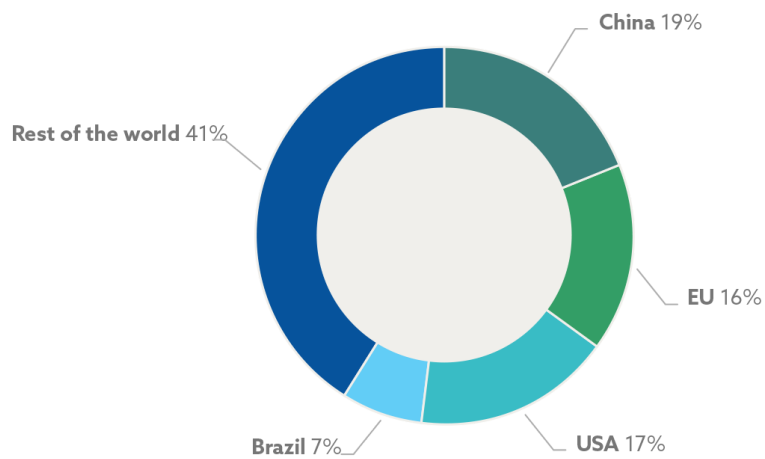
#### INDICATIVE COMPOUND FEED PRODUCTION GROWTH RATES



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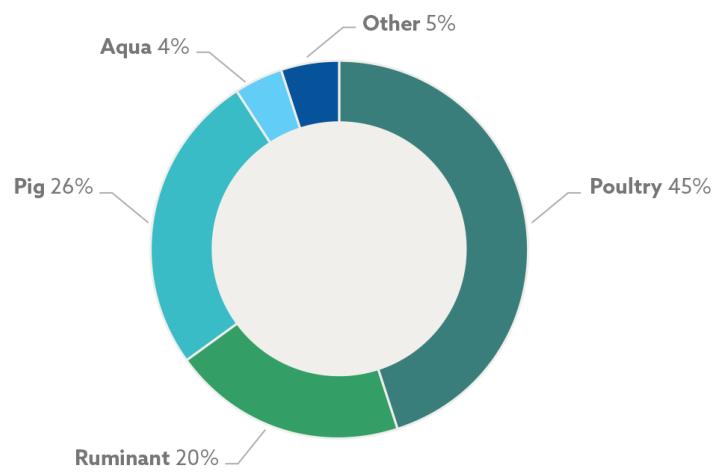
## FOUR COUNTRIES PRODUCE OVER 60% OF COMPOUND FEED GLOBALLY

### THE TOP FOUR AS A PERCENTAGE OF THE GLOBAL FEED PRODUCTION TOTAL








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### THE GLOBAL FEED MARKET AS A PERCENTAGE BY SPECIES



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Source: 2014 IFIF estimates / National and Regional Associations

PROTEIN TYPE	2014	2015*	VAR.
 BOVINE	67.8	67.9	0.2%
 POULTRY	110.2	111.8	1.4%
 PIGS	117.2	119.4	1.9%
 AQUA	74.3	78.0	5.0%
 MILK	788.5	804.5	2.0%
<b>TOTAL</b>	<b>1159.0</b>	<b>1181.6</b>	<b>1.9%</b>

Source: FAO Global Source Outlook May 2015/\*2015 FAO forecast






**67%**

Meat consumption is projected to rise nearly 73 percent by 2050

**55%**

Whilst dairy consumption will grow 58 percent over current levels



PROTEIN TYPE	2010	2050	% CHANGE
 BOVINE	66.7	107.5	62%
 POULTRY	98.9	201.9	104%
 PIGS	109.3	150.3	38%
 AQUA	59.9	113.7	90%
 MILK	722.9	1119.7	55%
<b>TOTAL</b>	<b>1057.7</b>	<b>1693.1</b>	<b>60%</b>

Source: FAO Global Food Outlook November 2012/FAO World agriculture towards 2030/2050 - 2012 Rev/OECD FAO Ag Outlook 2013

# National and Regional Updates

**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' 2014/15 updates on their particular region, including feed production figures.**



**Regions**



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**Australia**  
FIAAA

**Australia**  
SFMCA

**Brazil**  
SINDIRAÇÕES

**Canada**  
ANAC

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**China**  
CFIA

**Europe**  
FEFAC

**Europe**  
FEFANA

**India**  
CLFMA

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**Israel**  
IFA

**Japan**  
JFMA

**Latin America  
& Caribbean**  
FEEDLATINA

**New Zealand**  
NZFMA

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**South Africa**  
AFMA

**United States**  
AFIA



Australia

FIAAA



The Feed Ingredients and Additives Association of Australia was formed in 2011 in response to a need for our feed and petfood industry customers and other stakeholders to be confident of the quality and integrity of feed ingredients and additives being used in Australia.

FIAAA's aspirations include advocating and promoting the safe use of feed ingredients and the interests of the members of the association and to cooperate with other stakeholders in the interest of the industry. This includes initiating moves for the alteration of, addition to, or improvement in legislation for the benefit of our industry.

We have since formation established and managed a Code of Practice for use by Feed Ingredients & Additives suppliers. We have currently 20 members certified to our Code and have commenced a program to promote its acceptance by our customer groups in their own quality programs.

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FIAAA's aspirations include advocating and promoting the safe use of feed ingredients and the interests of the members of the association and to cooperate with other stakeholders in the interest of the industry.

A key anomaly of Australian Veterinary Medicine regulation was the inappropriate inclusion of many feed additives in their registration system, imposing the same rules as for veterinary medicines and pharmaceuticals. Following consistent lobbying with government a new deregulated system has now been launched which 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. The regulatory approach was presented by the Australian Government to the IFIF/FAO meeting in January 2015.

FIAAA has an active website with membership details, information on its Code of Practice and auditing at [www.fiaaa.com.au](http://www.fiaaa.com.au).

FIAAA is proud to have been accepted as a new IFIF member in early 2015.

*For more information please visit: [www.fiaaa.com.au](http://www.fiaaa.com.au).*

Australia

SFMCA



The Stock Feed Manufacturers' Council of Australia was established in 1961 and is the national industry association, representing corporate and individual manufacturers of stock feed located throughout Australia. The organisation operates with five state based branches where members meeting to address issues. From the Associations 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.

SFMCA operates FeedSafe as the industries national quality accreditation program for stockfeed manufacturers. The first mills gained FeedSafe accreditation in 2003. FeedSafe covers all feed, supplement and premix manufacturers, being based on a Code of GMP with all sites undergoing annual on-site audits by independent food safety auditors. Over time the FeedSafe minimum requirements have been increased with the emphasis on mills demonstrating continuous improvement.

A close liaison is maintained with federal department of agriculture regulators covering veterinary chemical products, ruminant feed ban, import quarantine controls and animal health issues. State regulators control stock feed regulations including feed labelling and feed standards, with SFMCA working with relevant state jurisdictions.

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SFMCA operates FeedSafe as the industries national quality accreditation program for stockfeed manufacturers. The first mills gained FeedSafe accreditation in 2003. FeedSafe covers all feed,

supplement and premix manufacturers, being based on a Code of GMP with all sites undergoing annual on-site audits by independent food safety auditors.

Our industry retains close working relationships with other supply chain partners including the grains, vegetable protein, animal protein and feed additive supply industries.

**Industry training has been an area of additional focus across two aspects:**

Basic training – provision of online interactive training in FeedSafe and mill hygiene. Further basic training units are to be progressively developed.

Advanced Mill Training – a pilot project is being completed writing resource training materials for feed pelleting. The next step is to implement online training delivery for SFMCA members. The intent is to add other training topics once the pelleting course is operational.

The last year has seen continuing dry conditions across much of northern Australia and record numbers of cattle moving through beef feedlots. The dairy industry has seen growth in milk volumes with concentrate feeding rates continuing to increase. The chicken meat and egg industries have seen further expansion due to population growth and higher consumption rates for poultry products. The pig industry is stable and competing with imported pig meats.

Raw material prices have been high due to dry grain growing conditions and higher grain demand. Growth in domestic grain demand in the eastern Australian states is seeing increased market volatility and greater potential for grain prices to rise above export parity pricing.

**Feed Statistics**

**COMMERCIAL PRODUCTION - COMPLETE FEED EQUIVALENT (MILLIONS METRIC TONNES)**

FEED TYPE	2010	2011	2012	2013	2014 Frctst
Dairy	1,368,775	1,450,075	1,516,608	1,341,184	1,785,877
Beef cattle	347,974	369,527	380,000	416,490	406,980
Goats	10000	10000	10000	10000	10000
Sheep	286,625	243,578	175,200	162,309	161,285
Swine	1,028,519	1,064,842	1,075,397	1,012,135	1,008,181
Layers	581,907	593,392	614,065	616,018	594,098
Broilers	2,307,913	2,808,791	2,850,300	2,870,895	2,850,300
Turkeys	45,000	45,000	45,000	45,000	45,000
Aquaculture	93,243	96,127	99,100	107,606	106,934
Other (includes)	271,463	261,400	297,492	294,948	294,567
<b>TOTAL (MMT)</b>	<b>6,341,419</b>	<b>6,942,732</b>	<b>7,063,162</b>	<b>6,876,585</b>	<b>7,263,222</b>

Source: Stock Feed Manufacturers' Council of Australia

## AUSTRALIAN LIVESTOCK INVENTORY (MILLIONS)

ANIMAL TYPE	2010	2011	2012	2013	2014 Frcst
Dairy	1.6	1.6	1.6	1.6	1.6
Beef cattle	26.5	26.5	26.5	26.5	25.5
Goats	1	1	1	1	1
Sheep	76	76	76	75.6	75
Swine	2.1	2.1	2.1	2.1	2.1*
Layers	15	15	15	14.6	15.1
Broilers	81	82	83	84	86
Turkeys	0.2	0.2	0.2	0.2	0.2
Other	NA	NA	NA	NA	0.8**
<b>TOTAL (MILLIONS)</b>	<b>203.4</b>	<b>204.4</b>	<b>205.4</b>	<b>205.6</b>	<b>205.2</b>

Source: Stock Feed Manufacturers' Council of Australia

\* 225,000 sows

\*\* 800,000 horses

## AUSTRALIAN MEAT, MILK AND EGG PRODUCTION

TYPE	UNITS	2010	2011	2012	2013	2014 Frcst
Milk	Billion litres	9	9.1	9.5	9.1	9.1
Beef	Tonnes meat	2,034,288	2,083,104	2,092,029		2,764,763
Lamb	Tonnes meat	582,885	520,493	525,757	627,023	700,374
Pork	Tonnes meat	331,261	342,098	350,511	355,824	360,686
Eggs	Million dozen	357	392	397	400	380
Chicken	Tonnes meat	834,409	1,014,978	1,030,131	1,046,169	1,089,275
Fish	Aquaculture	70,000	73,000	75,000	77,000	78,000

Source: Stock Feed Manufacturers' Council of Australia

For more information please visit: [www.sfmca.com.au](http://www.sfmca.com.au).



## Brazil

## SINDIRAÇÕES



Brazil is one of the protagonists in food production, as well as, leading exporter of animal protein, not by chance, but on the innovation and continuous improvements implemented by the private sector to ensure the credibility of its livestock products.

In 2014, exports of beef, pork and chicken reached more than U\$ 17 billion, and employed one million workers, promoted local economic development, contributed decisively to decrease the deficit of the trade balance and shipped large portion of its goods globally.

For this reason, every link in the animal protein chain seeks to implement technological solutions to ensure sustainable production combined with modern creation model. It aims to reduce most the animal staying into the production cycle, reduce costs, increase yielding and reduce the environmental impact.

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In 2014, exports of beef, pork and chicken reached more than U\$ 17 billion, and employed one million workers. In 2014, exports of beef, pork and chicken reached more than U\$ 17 billion, and employed one million workers.

In summary, the effort has focused to produce more with less at the affordable price to the consumer's capacity (currently the Brazilian consumer spends an average of 16% on food, while four decades ago it used to spend 40%). Therefore, productivity advance has been the prerequisite for production successful and considered the cornerstone in order to assure better life style and environmental preservation.

In fact, since the 70s (when Brazil was a larger importer of food), its agribusiness increased almost 200%. As an example, the beef production

increased from 1979 to 2009 at 5.42% CAGR, pork at 4.66% CAGR, and poultry at 8.45% CAGR.

Nevertheless, Brazilian entrepreneurs continue making efforts to keep the attributes conquered and move forward with their agricultural surplus (about 30% of local production) beyond the current 180 markets around the world.

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Since the 70s, Brazil's agribusiness increased almost 200%. As an example, the beef production increased from 1979 to 2009 at 5.42% CAGR, pork at 4.66% CAGR, and poultry at 8.45% CAGR.

The strength is such that GDP of its agribusiness reached over US\$ 300 billion (over 21% of Brazilian overall GDP), even pushed down by the hulking "Brazil cost", which decreased the profitability and undermined the competitiveness of entrepreneurs. Consumer as well as supplier of industry inputs, a provider of capital for manufacturing expansion and resources for imports of non-agricultural sector, in addition to producing food and generating employment for the domestic population, the Brazilian agribusiness has been successful and surpassed records, despite the weakly public counterpart.

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GDP of its agribusiness reached over US\$ 300 billion (over 21% of Brazilian overall GDP).

Placed in this complex supply chain, the Brazilian feed industry also ends up facing the growing radical movement that dangerously rejects the influence of the natural sciences and disdains the real dangers that affect some more than others, and that makes apology to contradictory precautionary principle. These apocalyptic visionaries blame the animal nutrition model and contemporary menu, the myth of higher health risk factors to the human beings survival, including the addition of GMOs in the meal and nanotechnology, amongst others.

Despite the depressed confidence level of entrepreneurs and consumers, higher industry inventories, rise on domestic interest rate, slowdown of wages and the consciousness obstacles of radical activism, the feed industry remains responding to the production chain demand, as well as, it's expected to produce nearly 70 million tons of feed and supplements during 2015.

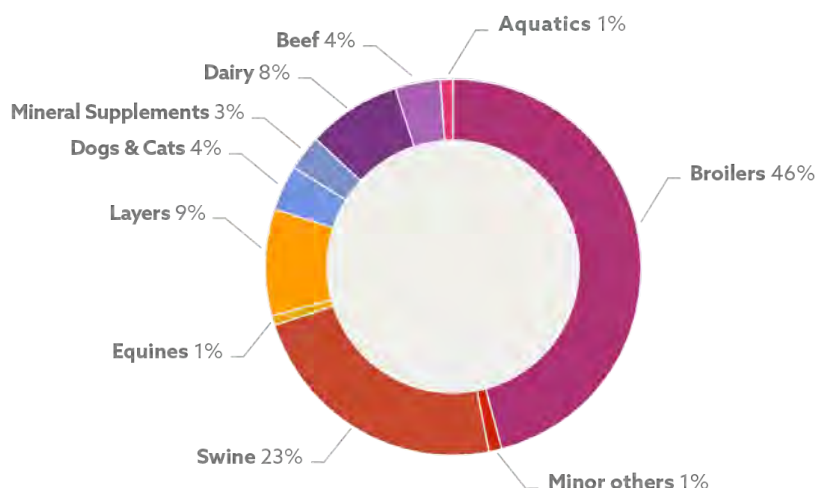
### **Feed Statistics**

## BRAZILIAN FEED (MILLION METRIC TONNES)

FEED TYPE	2014 <sup>*</sup>	2015 <sup>**</sup>	% CHANGE
<b>Poultry</b>	<b>37.0</b>	<b>38.3</b>	<b>3.4</b>
→ Broiler	31.3	32.3	3.1
→ Layer	5.8	6.1	4.9
<b>Swine</b>	<b>15.2</b>	<b>15.4</b>	<b>1.0</b>
<b>Cattle</b>	<b>8.0</b>	<b>8.5</b>	<b>5.3</b>
→ Dairy	5.4	5.6	5.0
→ Beef	2.67	2.83	6.1
<b>Dogs and Cats</b>	<b>2.49</b>	<b>2.62</b>	<b>5.0</b>
<b>Equine</b>	<b>0.60</b>	<b>0.63</b>	<b>4.9</b>
<b>Aquaculture</b>	<b>0.806</b>	<b>0.88</b>	<b>9.4</b>
→ Fish	0.723	0.80	10.0
→ Shrimp	0.083	0.09	5.0
<b>Others</b>	<b>0.83</b>	<b>0.85</b>	<b>2.3</b>
<b>TOTAL FEED</b>	<b>65.0</b>	<b>67.1</b>	<b>3.2</b>
<b>MINERAL SUPPLEMENTS</b>	<b>2.37</b>	<b>2.61</b>	<b>10</b>
<b>OVERALL</b>	<b>65.0</b>	<b>67.1</b>	<b>3.4</b>

Source: Brazilian Feed Industry Association/Sindirações  
 \* Estimate \*\* Forecast

## BRAZILIAN FEED INDUSTRY BREAKDOWN (%)



Source: Brazilian Feed Industry Association/Sindirações

### Poultry Feed

In 2014, the lower cost of poultry feed resulted in profitability for the raiser and the activity demanded 31.3 million MT of feed, with chicks housing staying stable, while poultry meat production increased slightly.

### Layer Feed

The production of feed for laying hens, totaled 5.8 million MT during 2014, a growth of 4.6% compared to 2013, while the export of eggs decreased,

as the prices paid to egg producers were not encouraging.

### **Beef Feed**

The scarce supply of calves, as well as not finished bulls, both fairly valued all year long, jeopardized the herd reposition of finished ones. This scenario may last even longer, until the reversal of the livestock cycle, needed to rearrange the supply chain balance. Moreover, the atypical weather influenced differently the quality of pastures in different producing regions, favored mineral supplementation and feed consumption, which accounted for 2.4 million and 2.7 million MT, respectively.

### **Dairy Feed**

Climatic factors greatly affected pastures in some dairy regions, while in others the excessive rain damaged the milk collection. However, solid prices paid to milk producers allowed greater investment in on farm feed, also stimulated by the relief price on corn and soybean meal added to feed concentrates provided by ordinary players. Feed demand reached 5.4 million MT and totaled 6.4% more, despite the weakening trend in dairy prices and high inventories at the wholesale and retail.

### **Swine Feed**

Despite lower cost of corn and soybean meal and good prices paid to swine producers, the supply of hogs for slaughter remained aligned to demand, mainly because the limitation of the breeders herd and piglets produced. In turn, the production stimulus of pork, triggered by the expansion opportunities across foreign markets (because PED virus in China and United States, geopolitical conflict in Ukraine, among others) fueled the activity and resulted in demand of 15.2 million MT in 2014, a recovery of about 2.2% over 2013.

### **Fish and Shrimp Feed**

The aquaculture production chain estimated a modest growth, in the order of about 9% at just over 800 thousand MT throughout 2014. The activity remained under pressure from shrimp health challenges and other factors, such as advancing imports from Asian countries, influence of climate changes, and the lack of water capacity needed to raise fish. The rainfall shortage in the Southeast and Northeast regions, while excess rains in the North region inhibited the pace of demand for fish and shrimp feed which reached only 723 thousand and 83 thousand MT, respectively in 2014.

### **Dog and Cat Food**

Despite the slowdown in the growth pace of retail, both dog and cat food added almost 2.5 million MT during 2014, still driven by the anthropomorphization phenomenon and increasing exercise of responsible ownership, as well.

*For more information please visit: <http://sindiracoes.org.br>.*



Canada

ANAC

The Animal Nutrition Association of Canada (ANAC) is the national trade association of the livestock and poultry feed industry. Our 170 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.

#### **Regulatory Modernization**

ANAC has submitted formal comments to CFIA on the three major components of the new regulations: feed ingredient classification and authorization, labelling, and hazard identification and preventive controls. We are now working to resolve a number of outstanding issues, including removal of obstacles still present in the proposed labelling rules, improvement of ingredient categorization, clarification of the drug-nutrient interface including removal of regulatory overlap, and clarification of facility licensing conditions. We are also identifying any adjustments that might be needed in ANAC's proprietary FeedAssure HACCP program in order for it to qualify as a preventive control program for regulatory purposes.

The feed industry, livestock producers and regulators have all agreed from the start that the new regulations should focus on safety, market access and consumer protection, and should be outcome-based rather than prescriptive. These are worthwhile objectives, and while not easily achieved, have guided industry-government dialogue aimed at the completion of a comprehensive regulatory framework in the first half of 2016.

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The feed industry, livestock producers and regulators

have all agreed from the start that the new regulations should focus on safety, market access and consumer protection, and should be outcome-based rather than prescriptive.

### **Antimicrobial Use and Resistance**

For several years, ANAC has been working with poultry and livestock producer organisations on the issue of antimicrobial drug use in animal agriculture. Specifically, we have been evaluating the potential impact on the feed industry—and investigating the role our industry might play—as governments in North America implement measures to promote the prudent use of medically important antimicrobial drugs in food animal production.

Efforts are being directed toward the removal of growth promotion and/or production claims from product labels, and ANAC is now working with the Veterinary Drugs Directorate of Health Canada along with our colleagues on an industry-government task group on animal health product regulation. The process being followed in Canada is intended to align with similar measures in the United States, which are expected to be completed by December 2016. Porcine Epidemic Diarrhea (PED) Virus

When the PED virus first appeared in Canada in January 2014, industry and governments at both the federal and provincial levels launched a cooperative program to investigate the source of the virus, promote biosecurity throughout the pork supply chain and ensure that communications to stakeholders were complete, timely and focused on facts rather than speculation. In early February 2014, news emerged of a possible link to feed in Ontario, and specifically there were concerns that contaminated porcine plasma had found its way into the feed in question.

While scientific investigations and the expansion of biosecurity measures continued in Canada and the US, the Paris-based World Organization for Animal Health (OIE) in May assembled a group of experts on PED. Stemming from those discussions, the International Feed Industry Federation, of which ANAC is a member, was invited to submit information on the effectiveness of feed processing controls, and recommended industry production practices that could serve to prevent cross-contamination of feeds.

While some sources have cited feed and feed ingredients as a vector for the spread of the disease, OIE issued a statement in October discounting the likelihood of such a connection: "...contrary to earlier reports, pig blood products such as dried plasma are not a likely source of infectious porcine epidemic diarrhoea virus provided that good manufacturing practices and biosecurity standards are followed."

### **Proposed Canadian Import Restrictions on US-Origin Grain**

In 2012, CFIA published a draft directive aimed at preventing the entry of plant pests—especially weed seeds—into Canada. This directive, known as D-12-05, sought to impose phytosanitary restrictions on imports of US-origin grains and oilseeds by requiring either an import permit coupled with a CFIA compliance agreement, or a phytosanitary certificate issued

by the US department of Agriculture.

For over two years, ANAC campaigned against the introduction of import restrictions in the form proposed. We argued that any risks presented by the entry of the specified pests did not justify such pervasive controls imposed at the border. We also questioned whether the measures proposed in D-12-05 would be effective in preventing weed seeds from entering Canada, given the fact that pests could be carried across the border by wild animals, birds or even the wind. ANAC was joined in its advocacy efforts by a number of Canadian stakeholders, as well as US grain exporters.

In late summer 2014, CFIA released a position paper and an amended draft of D-12-05, which proposed the complete exemption of corn grain to be used in feed manufacturing from all phytosanitary import restrictions. ANAC staff and its advisory group of members involved in grain imports reviewed the details of the draft directive, and subsequently provided feedback to CFIA.

The amended directive has now been sent for review by US government and industry stakeholders, who may suggest alternatives to the phytosanitary certificate required under the original D-12-05. Assuming any changes recommended by the US satisfy Canadian plant protection requirements, the next version of the directive should be ready for full public consultation and eventual WTO notification some time in the first half of 2016.

### **Feed Statistics**

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## CANADIAN LIVESTOCK AND POULTRY INDUSTRY PRODUCTION ESTIMATES

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INDUSTRY TYPE	DEMAND (MMT)
Broiler chickens (including hatching egg feed requirement) based on breeder	3.00
Table egg production (as for broilers)	1.18
Turkey meat (as for broilers)	0.69
Pork production, including breeding stock feed intake and 120kg market	9.40
<b>TOTAL (MONOGASTRICS COMPLETE FEED)</b>	<b>14.27</b>

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Source: Animal Nutrition Association of Canada

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## CANADIAN RUMINANTS (EXPRESSED AS DRY MATTER INTAKE (DMI/ YR) OF CONCENTRATE (I.E., GRAIN, PREMIX, PROTEIN) AND TOTAL [INCLUDING FORAGE, SILAGE, ETC.]

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INDUSTRY TYPE	CONC
Beef / bulls (5% of dairy and beef numbers)	0.07
Beef / cows (31%)	2.64
Beef heifers and steers marketed for meat (19%)	2.79
Calves / dairy and beef (32.9%)	2.01
Replacement heifers / beef (5%)	0.46
Replacement heifers / dairy (3%)	0.27
Dairy cows (7%)	3.74
<b>TOTAL (BEEF &amp; DAIRY)</b>	<b>11.98</b>
<b>TOTAL (MANUFACTURED FEED OR GRAIN CONCENTRATE)</b>	<b>26.25</b>

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Source: Animal Nutrition Association of Canada

For more information please visit: [www.anacan.org](http://www.anacan.org).



China

CFIA



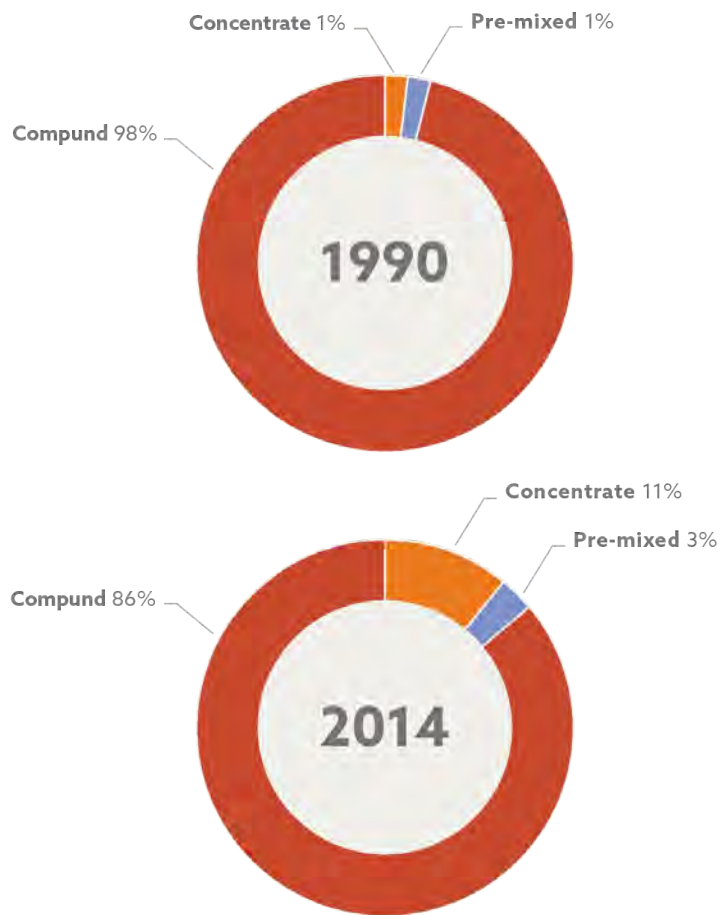
The China feed Industry started in the late 1970s. After more than 30 years, it is now the largest feed producer in the world, characterized by establishing modern feed industry system including feed processing, feed ingredients, feed additives, feed machinery manufacturing, feed science and education, quality safety management and information and statistical service.

**The China feed industry development had three stages:**

- The first stage was from 1980 to 1990, called start-up and fast growing period, in which annual increase of feed, production was 40.1%;
- The second stage was from 1991 to 2000, regarded as structural adjustment period, in which annual increase of total feed production was 8.4%, with annual increase of compound feed 6.0%, concentrate 40.4% and pre-mixed 26.8% respectively;
- The third stage is from 2001 until now, deemed as integrating and upgrading period, in which annual increase of total feed production 7.4%, with annual increase of compound feed 8.2%, concentrate 3.3% and pre-mixed 6.0%.

**Manufacture of Different Feed Products**

Compound feed, in all different stages, has been a major product, however, the percentage is different. In the early 1990s, compound feed was 98% of the total feed production, With increasing use of more concentrate and pre-mixed feed, quantity of compound production declined, dropped in 2005 to 72%, the lowest amount in the history. However, with the subsequent development of large-scale animal farming and rise of prices of feed ingredients, compound feed began to increase again to 86% in 2014. Now, in China major feed products are pig and poultry feed. Feed for the ruminant is increasing and has big potential.



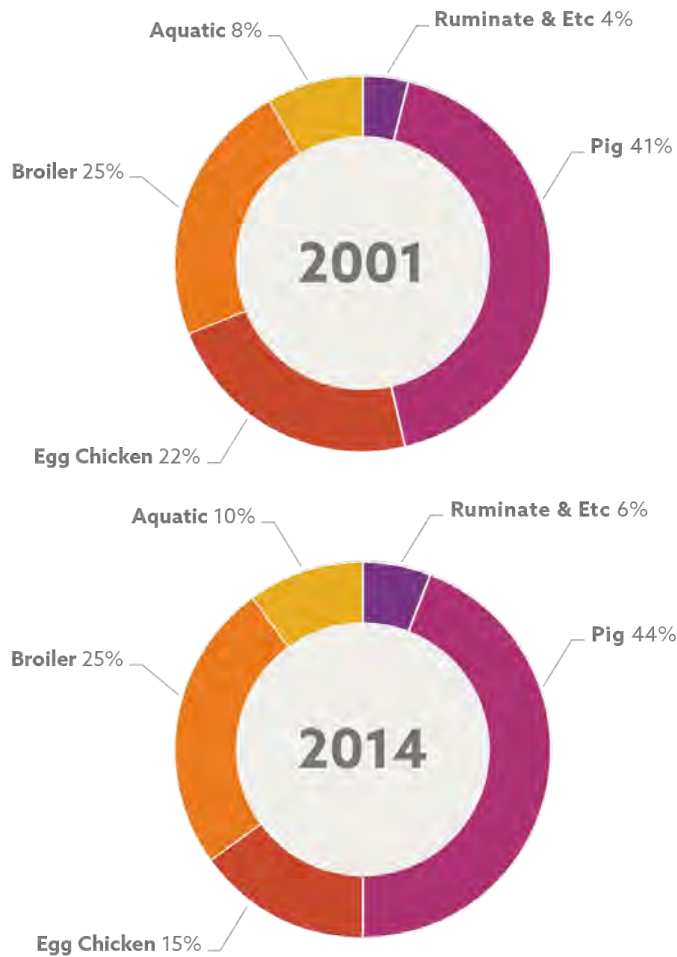
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Source: China Feed Industry Association

### **Total Quantity of Feed Production**

In 1980, total feed production was 1.1 million tons, 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 tons.

## CHINESE PERCENTAGE OF DIFFERENT FEEDSTUFF 2001 - 2014

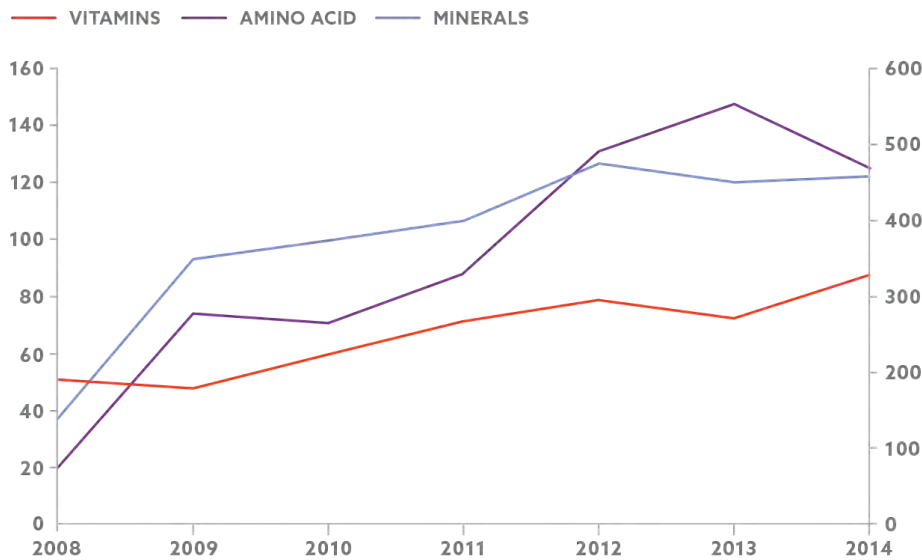


Source: China Feed Industry Association

### 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.

## CHINESE FEED ADDITIVES PRODUCTION (TEN THOUSAND TONNES)



Source: China Feed Industry Association

### 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 tons/year, while in 2014, there were 500 manufacturers with production capacity of 100 thousand tons/year. Now there are 31 feed enterprises with annual production capacity of 1 million tons.

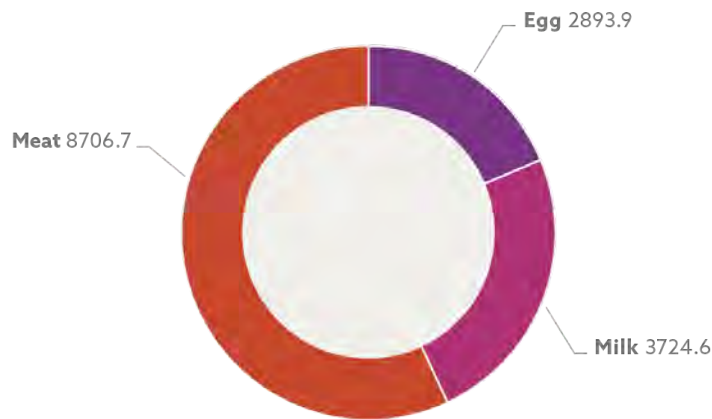
### The Development of Feed industry Has Promoted Development of Animal Husbandry

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 tons, 28.76 million tons and 35.31 million tons, with average per caput of meat, egg and milk was 62.9 kgs, 21.2 kgs and 26.1 kgs.





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Source: China Feed Industry Association

### **The Development Focuses On Large-scale Animal Farming**

In 2014, pig farms with off take rate of more than 500 is 41.8% of the total, farms with dairy animals more than 100 on hand is 68.8%, poultry farms with more than 2000 chickens is 45.2% of the total.

The Development Goal, Trend and Resources Demand. In the next "five-year plan", which is called "the National Thirteen's Five-year-Plan, the goal of livestock products will be set, with production of meat, egg and milk by the year 2020 of 92.20 million tons, 30.50 million tons and 40.80 million tons respectively, compared with that of 2014, increase of 5.8%, 5.6%, 9.5%. It is expected that, in this period of time, feed incremental demand each year will be about 5 million tons, which will cause the increasing demand of ingredients. Energy ingredients consumption will be 230 million tons, and 67.50 million tons of protein ingredients will be needed.

In recent years, the import of feed ingredients, particularly the protein ingredients increased each year. In 2014, import of soybeans increased to 71.40 million tons, 60.98 million tons more than that of 2003. In addition, rapeseed 5.08 million tons, soybean cake 1.19 million tons and fish meal 1.04 million tons was imported. From an overall point of view, protein resources import dependence is now more than 80%, and this trend will remain almost at this level for the next 5 years.

From now on, China feed industry will enter into long-term steady development period, the incremental speed will be slowing down, the number of enterprises will be decreased further. Product optimization will be achieved with upgrading of science and technology level and technical regulations systems will be improved. In this process, we will give more attention to international co-operations on resources use and protection of environment. (2015/10/8)

For more information please visit: [www.chinafeed.org.cn](http://www.chinafeed.org.cn).

Europe

FEFAC



FEFAC



FEFAC, the European Compound Feed Manufacturers' Federation, represents 25 national Associations in 24 EU Member States as well as Associations in Switzerland, Turkey, Norway, Croatia, Serbia and Russia with observer/associate member status. The European compound feed industry employs over 110,000 persons at approximately 4,000 production sites often in rural areas, which offer few other employment opportunities.

#### Key Market Developments

The compound feed production in the EU-28 in 2014 reached an estimated level of 153.4 mio. t, i.e. 0.5% less than in 2013, according to data provided by FEFAC members.

While pig feed and cattle feed production dropped by 1.2%, poultry feed has seen its volume of production grow by +0.3%. As a consequence, poultry feed consolidated its position of leading segment of EU compound feed production now well ahead of pig feed.

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The compound feed production in the EU-28 in 2014 reached an estimated level of 153.4 mio. t, i.e. 0.5% less than in 2013.

The most important factor having impacted feed production in 2014 is certainly the Russian ban on imports of EU livestock products that started already in February 2014 as far as pigmeat is concerned, and put additional pressure on farmers, especially pig and dairy farmers. The good availability of forages due to favourable weather conditions and the sharp drop in dairy prices affected significantly the demand for compound feed for dairy cows, which did not benefit at all from the 5% increase in milk deliveries in 2014.

Poland has been among the only well performing countries among the largest producing countries, with annual growth close to 7%. Germany recorded also a significant increase (+2.3%) while all other major producers, France, Spain, Italy, UK and The Netherlands, saw their production fall by -0.3 to -4.5%.

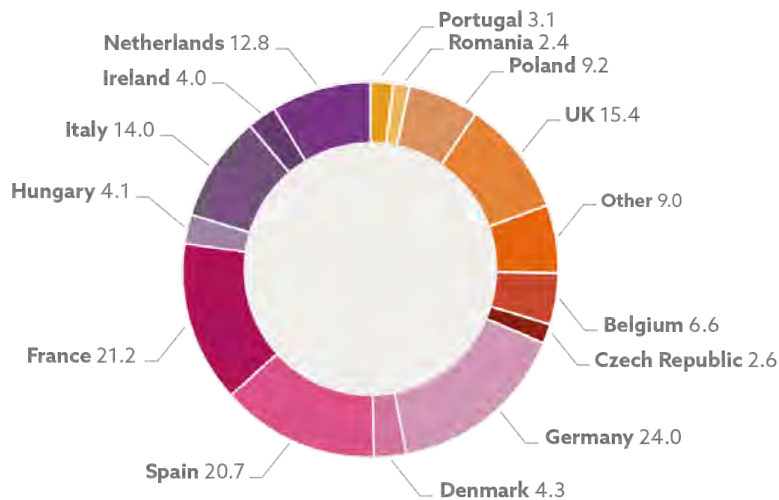


FEFAC market experts foresee a 0.7% decrease in compound feed production in 2015 vs. 2014.

Germany strengthened its position as leading EU country in terms of total compound feed production before France and Spain shoulder to shoulder.

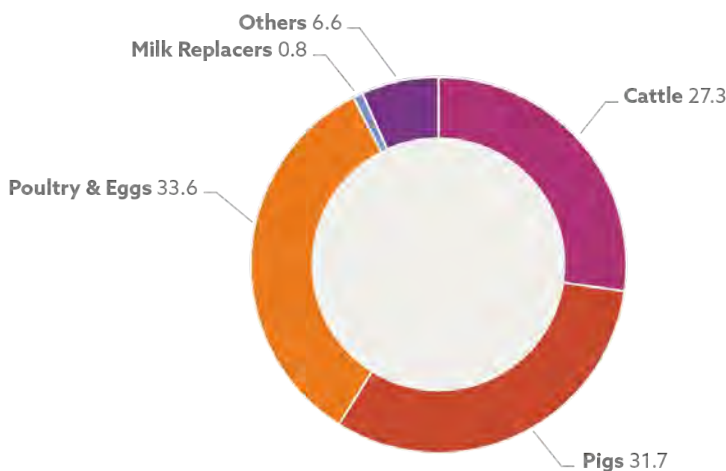
FEFAC market experts foresee a slight increase in poultry feed production (+0.5%) and a further -1.5% reduction in pig and cattle feed production, in case the dairy market does not recover quickly. Overall, this would lead to a 0.7% decrease in compound feed production in 2015 vs. 2014.

**INDUSTRIAL COMPOUND FEED PRODUCTION PER COUNTRY  
153.4 MIO. T IN 2014 IN THE EU-28**



Source: The European Feed Manufacturers' Federation (FEFAC)

**INDUSTRIAL COMPOUND FEED PRODUCTION IN THE EU-28 IN 2014  
153.4 MIO. T (PER CATEGORY)**



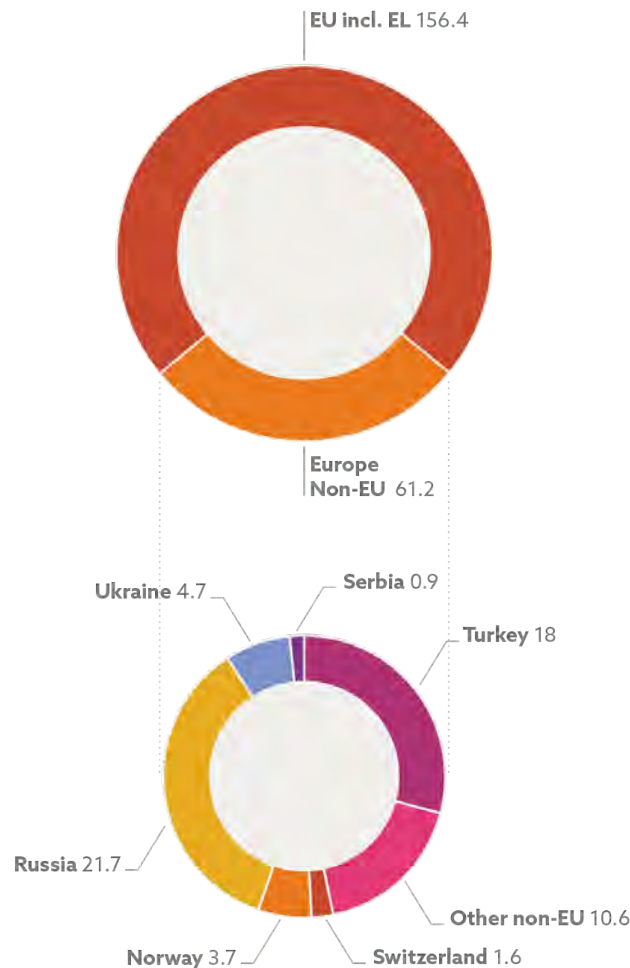
Source: The European Feed Manufacturers' Federation (FEFAC)

A number of CAP & trade policy measures may impact performance of the feed market in 2015: the entry into application of the CAP, with the application of the greening measures that may affect the supply of grains and oilseeds, but also the end of the milk quota system.

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### COMPOUND FEED PRODUCTION IN THE EU-28 AND OTHER EUROPEAN COUNTRIES IN 2014 (IN MIO. T)

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Source: The European Feed Manufacturers' Federation (FEFAC)

### Key Regulatory & Policy Developments

#### Antimicrobial resistance and medicated feed

It is a well-established scientific fact that a balanced animal diet is a key component of a successful prevention strategy to reduce the need for antibiotics in livestock production. Providing safe and nutritionally balanced feed meeting requirements of farm animals preserves their animal health status while delivering best performance. The recently published legislation proposal on medicated feed suggests that imposing stricter rules to the production of medicated feed is the right way of tackling the excessive use of antibiotics in animal husbandry. It is important to highlight, however, that medicated feed is only one of many distribution routes of antibiotics prescribed by veterinarians to treat sick animals. Increasing the regulatory burden on one distribution route may only make veterinarians favour the other routes, which are less burdensome and less controlled.



FEFAC reminds that producing medicated feed holds no commercial interest for feed manufacturers, as it is in fact a very demanding service provided to livestock farmers. When it comes to fighting antimicrobial resistance, the feed industry is thus very much part of the solution rather than part of the problem. FEFAC, therefore, recommends to the legislator to stimulate innovation on the effect of nutrition on the immune system and gut health, and better training of livestock farmers, which in turn can facilitate the use of modern feed solutions and thereby help reducing the need for antibiotics.



Producing medicated feed holds no commercial interest for feed manufacturers. When it comes to fighting antimicrobial resistance, the feed industry is thus very much part of the solution.

#### **Reduction of food waste**

The feed industry has extensive experience in providing effective solutions with regard to achieving the EU policy goals of reducing food waste. It gives value to 90 mio. t of co-products from the food industry like sugar beet pulp, wheat bran or soybean meal, which are unsuitable for food consumption and would otherwise have to be discarded. FEFAC, therefore, asks for a revision of the definition of food waste explicitly excluding food losses destined to animal feed, which still have a potential high value in animal nutrition and whose traceability and safety can be guaranteed. FEFAC, therefore, also supports the efforts taken by DG SANTE to facilitate the integration of former foodstuffs into the feed chain, which currently account for approximately 3.5 mio. t of high-value feed materials and potentially could reach 6 mio. t for the entire EU. The EU Catalogue of feed materials is the most appropriate regulatory tool for former foodstuffs to provide further clarification and transparency for the important legal borderline between feed and waste in order to preserve the integrity of the feed chain.



The feed industry has extensive experience in providing effective solutions with regard to achieving the EU policy goals of reducing food waste. FEFAC, asks for a revision of the definition of food waste explicitly excluding food losses destined to animal feed.

#### **Renationalisation of GM feed and food policy**

Compound feed manufacturing in Europe is inherently linked to sourcing feed materials available on the global market. Farmers in key exporting countries, supplying the world market with critical feed materials such as soy and maize, have practically all switched to the cultivation of GM varieties motivated by individual agricultural benefits. For European feed manufacturer and its trade partners, GM-derived feed materials and the low level presence thereof are a reality of commodity trade they have to

deal with. On the global market for feed materials, such as soy, the EU no longer holds a dominant position, therefore exporting countries no longer take EU-driven precautions before bringing a new GM variety onto the global market. Minute traces of GM varieties still awaiting EU approval can appear in consignments in any European harbour, thereby potentially blocking trade by non-compliance. EU decision makers need to realise that it is impossible for the EU to enforce on third countries what kind of crop breeding technique they can and cannot use, especially while the EU is so import-dependent and not dominant.

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FEFAC and other EU organisations are committed to put all their energy to convince decision makers of the risks for the EU agriculture and EU economic growth of a renationalisation of GM feed and food policy.

To overcome the political stalemate that resulted in a virtual moratorium on authorisation of GMOs, the EU Commission proposed in April 2015 to allow EU Member States to restrict or ban, in all or part of their territory, the use of “GMOs and GM food and feed” that have been authorized at EU level. This is not only a breach in the internal market but is also a source of market disturbance and legal uncertainty for all operators, whether importers, feed manufacturers and farmers and a license left to national authorities to kill their livestock sector. FEFAC and other EU organisations are committed to put all their energy to convince decision makers of the risks for the EU agriculture and EU economic growth of a renationalisation of GM feed and food policy.

#### **Feed Safety Management**

FEFAC supports the idea of an integrated feed and food chain policy, placing the responsibility for the safety of the products placed on the market on feed and food business operators. Communication of information on contamination levels throughout the chain is a significant element to optimise monitoring plans at feed company levels. In particular, the most cost-effective way to control chemical contamination in the feed chain is preferably at the “top of the pyramid”, i.e. at the level of suppliers of feed materials upstream in the feed chain.

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More than half the incidents in the sector of feed for farmed animals in the EU that trigger a notification to the Rapid Alert System for Food and Feed result from own checks performed by feed business operators. The proportion of own-check based notifications to the RASFF has grown steadily from 22% in 2007 to reach 54% in 2014, showing a high degree of maturity in the feed chain, and placing operators and authorities on an

equal footing as regards the effectiveness of their controls. This should pave the way for a greater recognition of the value of auto-controls by authorities. This is why FEFAC upgraded its vision on feed safety management structured on three pillars: capacity building, optimisation of risk management along the chain and cooperation with control authorities.



More than half the incidents in the sector of feed for farmed animals in the EU that trigger a notification to the Rapid Alert System for Food and Feed result from own checks performed by feed business operators, showing a high degree of maturity in the feed chain.

### **Environmental footprint**

The feed industry is conscious of its share to the environmental footprint of consumer goods produced with livestock farming. The Feed Product Environmental Footprint is one of the approved pilots under the European Commission's Environmental Footprint initiative, which aims to develop a horizontal methodology that allows to measure and communicate the lifecycle environmental performance of consumer products in a harmonized way. The technical secretariat for the Feed PEF is coordinated by FEFAC and comprises several of its members (AIC, NEVEDI, SNIA, DAKOFO, ASSALZOO, FHL). The project is currently in the phase of conducting its first screening study. In April 2015 the FAO-led Livestock Environmental Assessment and Performance Partnership (LEAP) released the Global Feed LCA Guidelines, which have been developed with a strong input of IFIF, AFIA and FEFAC. It is FEFAC's objective to maintain consistency and alignment between the global and European methodological rules.



The Feed Product Environmental Footprint is one of the approved pilots under the European Commission's Environmental Footprint initiative, which aims to developed a horizontal methodology that allows to measure and communicate the lifecycle environmental performance of consumer products in a harmonized way.

A next step will be the establishment of a Global Feed LCA Institute which aims to make a credible and transparent attempt at creating a publicly available environmental footprint assessment database and tool, supported on different continents.

### **Responsible Soy**

European feed manufacturers interested in purchasing responsible soy are faced with many different private schemes, though very similar in most aspects. To bolster the mainstream supply of responsibly produced soy to

Europe, FEFAC published Soy Sourcing Guidelines in March 2015, which consist of a set of minimum criteria on legal compliance, responsible working conditions, environmental responsibility, good agricultural practices, respect of land rights and the protection of community relations.



To bolster the mainstream supply of responsibly produced soy to Europe, FEFAC published Soy Sourcing Guidelines in March 2015. With the publication of the guidelines, FEFAC has shown its commitment to the topic of responsible soy production ever since it started to engage with the Round Table of Responsible Soy in 2006.

Responsible soy scheme owners can benchmark their programme against the FEFAC Guidelines online, allowing feed manufacturers with the overview of which available programmes meet the feed industry's minimum requirements. The guidelines have so far been positively received by the key trade partners, as well as some environmental NGO's. With the publication of the guidelines, FEFAC has shown its commitment to the topic of responsible soy production ever since it started to engage with the Round Table of Responsible Soy in 2006.

### Feed Statistics

#### EU 28 - INDUSTRIAL COMPOUND FEED PRODUCTION (1000 TONNES)

FEED TYPE	2013	2014
Cattle	42346	41841
Pigs	49196	48620
Poultry	51400	51533
Milk replacers	1289	1267
Dry pet food	2455	2548
Other	7497	7552
<b>TOTAL (1000 TONNES)</b>	<b>154183</b>	<b>153361</b>

Source: The European Feed Manufacturers' Federation (FEFAC)

For more information please visit: [www.fefac.eu](http://www.fefac.eu).



Europe

FEFANA



FEFANA is the EU Association of Specialty Feed Ingredients (SFIs) and their Mixtures. FEFANA is a no-profit organization representing approximately 100 companies - multinational companies and Small and Medium Enterprises - from the 28 EU countries, whether manufacturers, traders and/or importers of feed additives, functional feed ingredients, premixtures and other mixtures of specialty ingredients, produced in the EU or imported from third countries.

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 the Competent Authorities of the Member States. All over the years, 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. Though being a European organisation, FEFANA has an implicit International responsibility and it has been engaged more and more in projects and platforms at international level.

FEFANA is a well-recognized IFIF full member, playing a significant role in the feed & food chain, sharing a common responsibility with the compound feed industry. IFIF is the interface to certain key international organisations, such as Codex and FAO, and the ideal platform to meet with other actors of the feed chain, as well as the right place where to run FEFANA international projects, such as the SFIS Project on sustainability and the Convergence Project on common regulatory principles, of which an update is provided here below.

#### **FEFANA-IFIF SFIS project**

The Specialty Feed Ingredients Sustainability (SFIS) Project was designed to measure and establish the role of Specialty Feed Ingredients on the environmental impact of livestock production using amino acids and

phytase as pilots. The project brought together for the first time a consortium of international companies and associations dedicated to reducing the environmental impact of livestock through innovative specialty feed ingredients.



The overall results of the study show that the use of Specialty Feed Ingredients in animal diets reduces the consumption of basic feed ingredients.

Due to their functionality, Specialty Feed Ingredients are recognised to have not only the potential to improve animal performance, but also to reduce the environmental impact of animal production and the consumption of resources. By setting up a standard approach to measure this role and delivering a manual of nutritional practice, the project enables Specialty Feed Ingredients to be included in the evaluation of the mitigation measures to reduce the environmental impact of animal production on a global basis.

The overall results of the study show that the use of Specialty Feed Ingredients in animal diets reduces the consumption of basic feed ingredients. Furthermore the study demonstrates that the use of Specialty Feed Ingredients results in clear reductions of the Global Warming Potential, as well as the Eutrophication Potential and Acidification Potential during livestock production due to less nitrogen (N) and phosphorus (P) in manure.

The rigorous SFIS analysis employed life cycle assessment (LCA) to examine the use of low protein diets (Nitrogen) and phytase (P) in pigs and poultry. In addition to the positive results, the study also points towards future developments, such as improved feed conversion driven by advancing technologies in animal feeding through using SFIs.

The results of the study were supported by an independent Scientific Council made up of global experts in the fields of LCA methodology and animal nutrition to ensure scientifically robust feed formulations for the analysis. This prepared the ground for a peer reviewed publication of the study report following the recommendations of ISO 14044:2006. A manuscript for publication in a scientific journal is just submitted. Another outcome of the consortium initiative is the first setup of product category rules (PCR) to give guidance for future applicants for tabling LCAs for SFIs.

The next objective will be now to start a Phase III of the SFIS Project to validate the PCRs for SFIs established in the pilot study comparison of LCAs of other ingredients than amino acids and phytases. This will broaden the ecological database for SFIs which is rather important for future sustainability discussions and environmental mitigation options along the feed to food value chain.

### **FEFANA-IFIF Global Regulatory Convergence Project**

This initiative aims at facilitating access to regulation and enforcement practices in different regions of the world, fostering mutual understanding of the regulatory framework applicable to feed ingredients. In a globalised

world the feed industry feels the need to understand better and to gain access to regulatory and enforcement practices in different regions of the world.

IFIF and FEFANA are joining forces in this respect: the global regulatory convergence project aims at comparing the regulatory systems applicable to feed ingredients in various parts of the world to provide regulators with a basis of convergence. This is in order to avoid as much as possible to lose industry and public resources in repetitive evaluation and authorisation processes and ease global trade while reinforcing food and feed safety. The project is conceived on a stepwise approach that can be applied to groups of countries, allowing working at adapted pace according to the local needs.

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In a globalised world the feed industry feels the need to understand better and to gain access to regulatory and enforcement practices in different regions of the world.

The Convergence Project is the concrete next step from the 2013 IFIF "Comparison of Regulatory Management of Authorized Ingredients, Approval Processes, and Risk-Assessment Procedures for Feed Ingredients" report that covers Brazil, Canada, China, European Union, Japan, South Africa, and United States. This study was drafted based on expert input and support by government feed regulators and feed and feed ingredients associations in the 7 regions covered.

#### **EU Commission Regulation on Additives consisting of Preparations: additional labelling requirements**

In March 2015 the European Commission published Regulation (EU) 2015/327 amending the Regulation on Feed Additives (No 1831/2003) as regards requirements for the placing on the market and conditions of use of additives consisting of preparations. In particular "additional labelling and information requirements for certain additives consisting of preparations and premixtures containing such preparations" are introduced to take into account the use of preparations.

This has been the result of many months of negotiations among FEFANA, the EU Commission and the Competent Authorities of the EU Member States. FEFANA is currently working on guidance for its members regarding the practical implementation of this Regulation. These rules will certainly have an impact on third countries importing into the EU as far as labelling of these products is concerned.

#### **Consortia of feed additives**

Back in 2010 - through the Consortia that FEFANA promoted - 100+ dossiers, covering over 1000 feed additives, were tabled to the EU authorities. These are now progressively being evaluated by European Food Safety Authority (EFSA) for re-authorisation by the European Commission. The evaluation phase of the dossiers submitted by our members through the Consortia is still on-going and its completion might take a few more years. The various dossiers are at different stages in the

re-authorisation process and FEFANA is committed not only in the daily management of the dossiers, but also on the practical implications that each re-authorisation may carry; as this was the case of the Regulation on preparations mentioned above.

### **Booklets**

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. Over the last two years 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 the [FEFANA Virtual Library](#).



“FEFANA has always been committed to the promotion of the benefits and safety of its industry’s products, but has certainly gone a step further with the publication of the booklets’ series that are now shared within the supply chain, the EU and Member Stated authorities and also with the general public.” Marco Bruni, FEFANA President.

### **FAO LEAP Guidelines**

FEFANA contributed to the development of Global Feed Life Cycle Assessment (LCA) guidelines developed by the FAO-led Livestock Environmental Assessment and Performance Partnership (LEAP) led by IFIF and FEFAC.

### **EC PEFCR Pilots linked to feed**

FEFAC and FEFANA also currently participate in the European Commission pilots on the Product Environmental Footprint Category Rule (PEFCR).

*For more information please visit: [www.fefana.org](http://www.fefana.org).*



India

CLFMA



According to CLFMA of India the feed industry is expected to grow by 8 per cent to 40 million tonnes to keep pace with the country's livestock GDP which is growing at a rate of 3.5 per cent.

In the case of broilers, it is estimated that around 10 million MT of feeds was produced in 2013 of which almost 80% is produced by the feed industry in pellet form and the remaining 20% is produced in mash form by the farmers. During 2013, around 48-50 million tonnes of concentrate feed ingredients were available for feeding dairy animals. Out of this, only 7.3 million tonnes were used for compound cattle feed production by cattle feed plants from the dairy cooperatives (3.33 MMT) and private sectors (4 MMT). Total compound cattle feed produced in India is sufficient only to feed about 7% of the total breedable animals. Farmers use compound cattle feed as one of the ingredients of the ration along with several other locally available concentrate feed ingredients. If only compound feed is fed to dairy animals, then requirement will be 70 MMT.

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“Livestock GDP is growing at 3.5 per cent. To support this growing industry, about 28 million tonnes of compound feed was produced in 2014-15 and it is likely to grow to around 40 million tonnes by 2020. Currently, about one third of the total animal feed requirement of 80 million tonne in India is in the form of compound feed and it is growing at about 8 per cent in India.” Amit Saraogi, Chairman, CLFMA.

"Factors like growing urbanization and income growth is contributing to changing food consumption

patterns. In a few years, the growing population is expected to consume almost twice the amount of animal protein than today. To face the challenges in enhancing and sustaining productivity to ensure food and nutritional security, the industry requires research & development in scientific and technological innovation along with the right policy approach”  
Mangesh Wange, Dy. Chairman, CLFMA.

### **Poultry Feed**

India ranks 3rd in egg production and 5th in broiler production in the world. Broiler placements were 59 millions per week (2013) and expected to reach 100 million per week by 2020. State-wise broiler feed requirements per year are given in following table. Broilers are usually grown to 2 kg BW within 40-42 days requiring 3.2-3.6 kg feed with a feed conversion ratio of 1.6 to 1.8. Most of the poultry integrators manufacture their own feeds. Some of them purchase premix, specialty feeds or concentrates. Most of the independent poultry farmers buy feeds from commercial feed millers. Current egg production is around 69 billion eggs (2013) and is anticipated to reach 93 billions by 2020. 85% of the feed required is made by farmers at the farm by using basic feed mill structure (grinders and mixers). 15% of the total feed is sold by commercial feed millers. Poultry feed consists of grains like maize, wheat, sorghum (jowar), pearl millet (bajra), finger millet (ragi) and broken rice; grain byproducts like rice polish, deoiled rice bran and maize gluten meal; oilseed meals from soybeans, mustard, groundnut and sunflower, animal protein sources like fish meal, whole fish, meat & bone meal, blood meal, leather meal, squid meal, poultry by-product meal; vitamins, minerals and various feed additives. In broilers, three types of feeds – pre starter, starter and finisher are used. In layers, chick mash, grower mash and two/three types of layer mash are used. In case of broilers, it is estimated that around 10 million MT of feed was produced in 2013 of which almost 80% is produced by the feed industry in pellet form and the remaining 20% is produced in mash form by the farmers. Commercial broiler and layer feed is distributed through distributors & dealers to small/medium farmers. In few states, feed millers are supplying directly to large farmers.

### **Dairy Feed**

Low productivity of dairy animals could be attributed mainly to improper utilization of available feed resources, imbalanced feeding and shortage of feed resources for feeding growing and non-milking breedable animals. Shortage of feed resources in India has been documented by various organizations but several locally available feed resources used for feeding milk animals are not taken into account. These include industry by-products, horticulture and vegetable wastes, local grasses, tree leaves, weeds and other nonconventional feed resources. Crop residues are abundantly available in India and there is apparently no competition for these resources between other species and dairy animals. Dairy animals convert these crops residues, which otherwise have limited economic value, into milk. Feeding systems in smallholder dairying are primarily

based on grazing of native pastures of low nutritive value. In India, cattle and buffalo are usually fed on wheat, paddy, millet, sugar cane tops and other straws and stovers. These are supplemented with small quantities of grass available from scanty grazing, or cut grass. Generally very little amount of concentrate is fed to the growing, working, pregnant and dry animals. Only lactating animals are given better feeding (home made mix) through supplementation of by-product concentrates such as, oil cakes, brans, and milled pulses, as farmers receives the immediate returns on their investment through saleable milk. The total area of permanent pasture and grasslands is about 6% of the country's geographical area. Forests are another major source of grazing and fodder collection. The grassland based production system is prevalent in the Himalayas where there are several nomadic tribes. Animals are moved to sub-alpine and alpine pastures during summer, while during winter they are grazed on adjoining plains. Small scale mixed crop livestock farming is the common and most dominant form of animal husbandry in India. Peri-urban and urban livestock production systems contribute significantly to milk production, and they are typically located in and around metro cities, where milk is sold, but are facing problems due to expansion of cities, limited space for storing dry fodder and environmental

### **Compound cattle feed for dairy animals**

Compound feed plays important role to exploit the production potential of dairy cattle and buffaloes to its maximum, as it is nutritionally balanced ration, prepared with quality feed ingredients, which enhances consumption without waste and allows high efficiency of feed utilization. Feed quality assurance is one of the keys to higher livestock profitability and productivity. During 2013, around 48–50 million tonnes of concentrate feed ingredients were available for feeding dairy animals. Out of this, only 7.3 million tonnes were used for compound cattle feed production by cattle feed plants from the dairy cooperatives (3.33 MMT) and private sectors (4 MMT). Total compound cattle feed produced in India is sufficient only to feed about 7% of the total breedable animals. Farmers use compound cattle feed as one of the ingredients of the ration along with several other locally available concentrate feed ingredients. If only compound feed is fed to dairy animals, then requirement will be 70 MMT.

### **Aquaculture feed**

Due to rapid changes seen in the shrimp and fish farming sectors, India's ability to produce modern feed has stepped up significantly (Table 6). The country has 26 feed mills that can produce 2.88 million tons of aquaculture feed of which 1.25 million tons and sold in 2013 (43.40% capacity utilization).

### **Feed Statistics**

**1<sup>ST</sup>**  
In milk production  
140 Mn MT

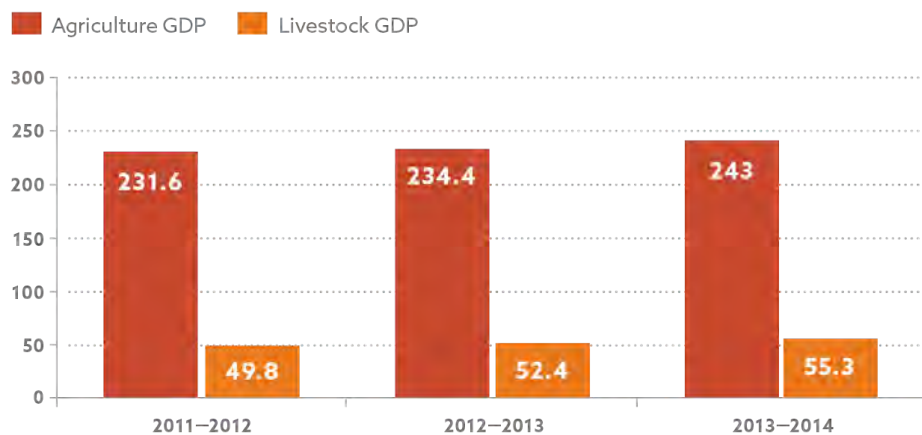
**2<sup>ND</sup>**  
In freshwater  
aquaculture

**3<sup>RD</sup>**  
In egg production  
75Bn eggs

**4<sup>TH</sup>**  
In broiler production  
4.5 Bn Kg

Source: The Compound Feed Manufacturers Association, India

#### INDIAN AGRI GDP VS. LIVESTOCK GDP (IN USD BILLIONS)



Source: MOSPI, NAS 2015 USD/INR=65

For more information please visit: <http://clfmaofindia.org>.



Israel

IFA



The Israeli feed industry is unique since all raw materials used in feed formulation are imported from all over the world. There must be a steady reliable supply that must be evaluated, stored and utilized efficiently. This is the basis for much of IFA's activities.

#### **The Israeli Feedmill Association**

The Israeli Feedmill Association (IFA) represents approximately 75%-80% of the commercial Israeli feed industry. The estimated total annual feed production during 2014 was 3.0 million tons.

IFA partners include 6 feedmills located throughout the country. The Israeli feed industry manufactures broilers, layers, turkeys breeders, dairy cattle, beef cattle, swine and aquaculture.

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The estimated total annual feed production during 2014 was 3.0 million tons.

IFA plays an active role in the Israeli feed industry. Its major objectives include education, regulation, emergency situations.

#### **Education**

Involvement in providing nutritional knowhow within the industry by:

- Encouraging international relations
- Setting up joint trials in IFA experimental facilities
- Providing its workers with feed milling training courses. Local and invited speakers discuss current industry issues. Hands on training courses are organized on an annual basis.

#### **Regulations**

IFA advocates on behalf of the industry with government regulators and

policy makers. In joint cooperation with government policy regulators IFA is working to update an archaic system. Together the goal is to provide reliable mechanisms for assuring feed and food safety. An additional up and coming issue is the Clean Air Legislation at discharging at ports. IFA is motivated to work jointly with regulators to provide appropriate legislations.



The aim of IFA is to provide healthy affordable food to the Israeli market.

### Emergency Protocols

Raw material for the feed industry is imported and therefore adequate supplies must be maintained at all times. IFA plays an important role in establishing an emergency protocol for a grain shortage situation.

The aim of IFA is to provide healthy affordable food to the Israeli market.

### Industry Outlook

During 2014 feed industry showed a decrease in production in several branches mostly due to depressed economic circumstances.

Unfortunately, this seems likely to be the situation within the 2015 fiscal year.

### Issues and Challenges for 2015

- New feed and food regulations, which need clarification in order to be implemented successfully.
- Salmonella monitoring from farm to fork, reducing significantly the current levels.

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#### ISRAELI ANIMAL PRODUCTION IN 2014

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ANIMAL PRODUCTION TYPE	2014
Broilers	480,000 tonnes
Layers	8 million layers
Eggs	2.1 billion
Turkeys	90,000 tonnes
Milk	1.0 billion liters
Swine	18,200 tonnes
Aquaculture	14,000 tonnes

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Source: Israeli Feedmill Association

Japan

JFMA

JFMA

The Japan Feed Manufacturers Association (JFMA) was established in 1957 as a cooperative to contribute to the prosperity of Japanese feed and livestock industry.

Currently, JFMA has 49 member companies and 74 feed mills, which produce formula and mixed feed in Japan. JFMA's total feed production by member companies is approx. 15.7 million tons, which accounts about 65.7% in Japan.

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#### **Overview of Japanese livestock market**

Japan has been relying on imports for most feed grains such as corn, sorghum, barley, wheat -1,332 thousand tons a financial year (decreased by 4.7%) of which most are imported from United States and Brazil, Australia, Argentina.

Japan used to import most corn, which accounts for about 44% of formula and mixed feed, from the United States (more than 80%) but now imports from diversified countries, including Ukraine, Brazil, and Argentina due to the soaring international prices of corn.

Japanese livestock producers have been suffering from high prices for feed, raising prices of feed grains and the effects of currency exchanges (yen depreciation).

Japanese total formula and mixed feed production in 2013 was 23.93 million tons (decreased by 0.6%) which was caused due to decline of number of dairy farms (19,400 decreased by 3.5%), number of heads for



dairy cows 1,423,000 (decreased by 1.8%). Number of beef cattle farms was 61,300 (decreased by 6%), number of heads was 2,642,000 (decreased by 3.0%). Number of pig farms was 5,600 (decreased by 4.6%). Number of pigs was 9,685,000 (decreased by 0.5%). Feeding number of poultry was dropped by 5.7% in 2013 and feeding wings decreased by 5.7%.



Japanese total formula and mixed feed production in 2013 was 23.93 million tons

### **The JFMA's Code of Practice for Safe Feed**

To reduce the influence to feed price, feed business operators in Japan import their feed ingredients from diversified countries, in a viewpoint of feed self-efficiency ratio by increasing usage of eco-feed and feed rice and others.

Feed business operators in Japan have been working with the feed safety management according to the four guidelines stipulated by MAFF, which aims to prevent each hazard.

### **Japan's Four Guidelines**

1. Guidelines on Salmonella Countermeasures in Feed Manufacture.
2. Guidelines for Prevention of Intermixing of Animal Origin Protein in Ruminant Feeds.
3. Enactment of Guidelines on Manufacturing Control and Quality Control for Formula Feed and Feed Additive Formulations Containing Antibiotic Feed Additives.
4. Enactment of Guidelines on the Prevention of Contamination of Feed and Other Materials with Toxic Substances.

The international approach to ensure the safety of food is a shift from the inspection of the end products into implementing good manufacturing practices including GMPs and HACCP at each stage of the food chain.

Prior to governmental efforts to encourage industry to follow GMPs, JFMA established "JFMA's Code of Practice (the practice)" in October 2012. The practice aims to improve the mechanisms for assuring feed safety by incorporating the substance of ISO and HACCP mechanisms into the current four guidelines stipulated by the Ministry of Agriculture, Forestry and Fisheries (MAFF).

### **MAFF's GMP**

At present, MAFF is undertaking procedures which aim to reorganize the four guidelines into the united GMP guideline, taking into account of HACCP principles and international GMP standards (Codex: CAC/RCP 54-2004, EU: Regulation (EC)No183/2005, USA: cGMP, HACCP).

### **Labeling**

The current labeling system requires feed business operators in Japan to renew the labeling whenever composition (proportion) of compound feed has changed, even if it does not compromise safety and quality (nutrition value). This regulation causes difficulties to the feed business operators importing from diversified countries.



MAFF is considering new labeling system in response to the diversification of feed ingredients.

- The new labelling system may allow flexibility in selecting diverse ingredients depending on quality and price.
- The new system also allows quick response to use a new feed ingredients which is requested by livestock farmers as well as reduction in label-changing costs in feed business operators.

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MAFF is considering new labeling system in response to the diversification of feed ingredients.

#### **Standard Setting**

Establishment of new standards of undesirable substances. In addition, MAFF is studying to establish “Maximum Limits” and “Advisory Level” in consideration of “ALARA-principles”.

MAFF will shift its monitoring focus from the end products to feed ingredients and the compliance of GMPs in order to ensure feed safety more effectively through feed chain.

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#### **Project of Feed Rice**

At the end of 2013, the Japanese government released a new agriculture policy and review of rice production adjustment and made rough tentative calculation to expand production of feed rice for livestock feed to 4,530 thousand tons.

In the “Basic Plan for Food, Agriculture and Rural Areas” released in April 2015, the Japanese government announced that Japan aims to raise its feed self-sufficiency ratio to 40% by 2025. The Japanese government tries to make stable livestock business by maintenance feed infrastructures and machine, expanding feed rice production for feed and promoting eco-feed (i.e. feed including industrial food waste as ingredients) usage.

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In the “Basic Plan for Food, Agriculture and Rural Areas” released in April 2015, the Japanese government announced that Japan aims to raise its feed self-sufficiency ratio to 40% by 2025.

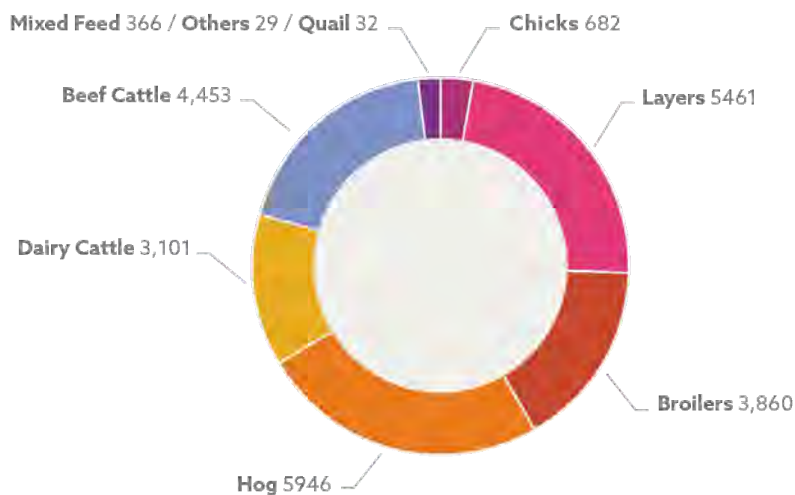
It is an important goal to secure reasonable domestic feed ingredients and stable supply, which are not affected by international market for Japanese feed and livestock industry.

#### **Feed Statistics**

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## PRODUCTION OF FORMULA AND MIXED FEED IN FEED TYPES IN JAPAN (1000 TONNES)

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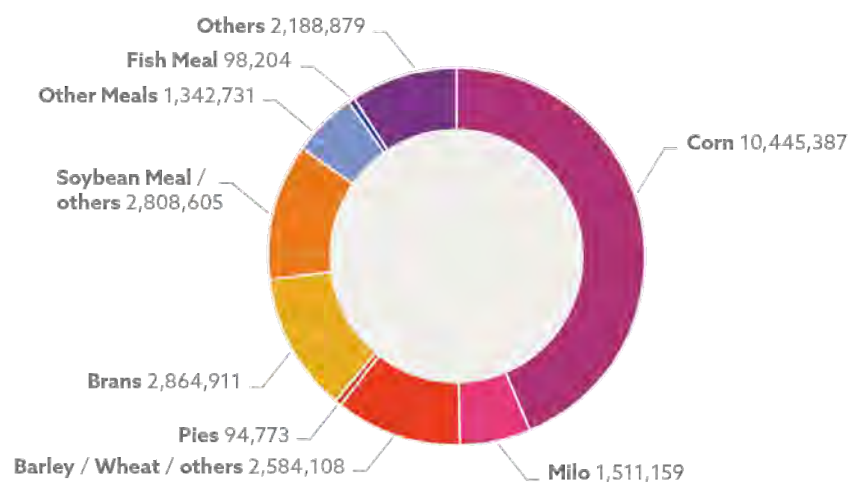


Source: MAFF (Ministry of Agriculture, Forestry and Fisheries)

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## JAPANESE FEED INGREDIENTS USED IN 2013 (TONNES)

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

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

## Latin America & Caribbean

FEEDLATINA

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 feed sector vis-à-vis public and private actors at all levels.

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

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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 works to support a robust, integrated and strong Latin America.

**Our members include:**

AUDINA, CAENA, CAPENA, CONAFAB, SINDIRAÇÕES, UECAN, ADISSEO, AJINOMOTO, ALLTECH, APC, BASF, BIOFARMA, CARGILL, DSM, DUPONT, EVONIK, IMPEXTRACO, MARS, MCASSAB, NOVUS, POLI NUTRI, QUIMTIA.

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**STDF/PG/345: Feed and Food Security Program**

As one of our key priorities, FEEDLATINA is implementing 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 is 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 plant health status and ability to gain or maintain access to markets.

Started in 2013, STDF/PG/345 also has 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, Mexico, Paraguay, Peru, Uruguay in addition to the feed industries and national associations.

The Project is intended to contribute to the harmonization/equivalence of the regulatory framework for the production and commercialization of animal feed, ensuring its safety and access to markets, based on the relevant international organizations, through public-private cooperation, using a value chain approach, boosting regional integration and facilitating trade within Latin American countries.



Harmonized regulations will contribute to strengthening public and private institutions on production and good animal feeding practices, through the development of national coordination mechanisms between the industry and regulatory authorities.

**The multi stakeholder project has three components:**

1. Coordination mechanisms and coordination between public and private actors linked to the animal feed sector
2. Development of tools to promote harmonization of standards and equivalence of measures
3. Capacity building (feed industry and government agencies).

Harmonized regulations will contribute to strengthening public and private institutions on production and good animal feeding practices, through the development of national coordination mechanisms between the industry and regulatory authorities.

Specific instruments/tools to harmonize and strengthen the current regulatory frameworks for animal feed will be developed, based on the regulatory frameworks of some of the participating countries. Technical capacity at the industry and regulatory levels will be enhanced in the region through training on Regulatory Affairs, Good Manufacturing Practices, HACCP and other related topics.

The project also promotes public-private collaboration as it is based on



the development of coordination mechanisms and the sharing of responsibilities between the feed industry and the regulatory authorities in order to promote compliance with technical and commercial regulations, increase intra and inter-regional trade and foster regional integration.

## Feed Statistics

### FEEDLATINA - ESTIMATE OF PRODUCTION OF FINISHED FEED [1.000T] / 2013

COUNTRY	TOTAL	POULTRY	PORK	CATTLE	AQUA
Argentina	16155.556	6885.165	1901.801	6079.825	6.5
Mexico	30063.005	15040.005	4787	8085	171
Brazil	65001	37100	15200	7970	806
Uruguay	610.896	358.580	95.315	157	0
Colombia	6777.700	4554.525	913.664	653.851	202
Bolivia	1439.523	1163.377	276.146	0	0
Chile	6697.447	2323.487	1663.959	700	1200
Costa Rica	588.860	425.206	163.653	0	0
Cuba	1136.607	433.622	702.985	0	0
Ecuador	2699.980	1975.980	208	78	312
El Salvador	468.712	444.714	23.998	0	0
Guatemala	1266.778	1078.846	187.931	0	0
Honduras	587.576	546.677	40.899	0	0
Nicaragua	387.344	363.024	24.320	0	0
Panama	581.510	431.836	149.674	0	0
Paraguay	847.467	313.184	534.283	0	0
Peru	4732.404	4105.472	386.844	80	156
Rep.Dominicana	1469.326	1080.092	389.233	0	0
Venezuela	4792.261	3522.205	738.055	254	62
<b>TOTAL</b>	<b>146303.958</b>	<b>82146.003</b>	<b>28387.766</b>	<b>24057.676</b>	<b>2916</b>

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.

**FEEDLATINA - ESTIMATE OF PRODUCTION OF FINISHED FEED [1.000T] / 2013**

<b>COUNTRY</b>	<b>TOTAL</b>	<b>PET</b>	<b>HORSE</b>	<b>OTHERS</b>
Argentina	16155.556	590.418	9	683
Mexico	30063.005	815	0	1165
Brazil	65001	2490	610	825
Uruguay	610.896	0	0	0
Colombia	6777.700	453.515	0	0
Bolivia	1439.523	0	0	0
Chile	6697.447	412	0	398
Costa Rica	588.860	0	0	0
Cuba	1136.607	0	0	0
Ecuador	2699.980	100	0	26
El Salvador	468.712	0	0	0
Guatemala	1266.778	0	0	0
Honduras	587.576	0	0	0
Nicaragua	387.344	0	0	0
Panama	581.510	0	0	0
Paraguay	847.467	0	0	0
Peru	4732.404	4.087	0	0
Rep.Dominicana	1469.326	0	0	0
Venezuela	4792.261	160	0	56
<b>TOTAL</b>	<b>146303.958</b>	<b>5025.020</b>	<b>619</b>	<b>3153</b>

*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.*

## FEEDLATINA - ESTIMATE OF PRODUCTION OF FINISHED FEED FOR POULTRY [1.000T] / 2013

COUNTRY	TOTAL	BROILERS	LAYERS	BREEDERS	OTHER
Argentina	6885.165	4664.01	2221.155	0	0
Mexico	15040.005	8251.546	6354.558	433.900	0
Brazil	37100	31300	5800	0	0
Uruguay	358.580	220.682	129.898	8	0
Colombia	4554.525	2686.329	1671.779	196.416	0
Bolivia	1163.377	955.911	207.465	0	0
Chile	2323.487	1522.843	505.644	52	243
Costa Rica	425.206	259.327	146.878	19	0
Cuba	433.622	87.555	342.878	3.189	0
Ecuador	1975.980	1404.125	444.204	127.649	0
El Salvador	444.714	274.568	170.145	0	0
Guatemala	1078.846	478.765	583.080	17	0
Honduras	546.677	407.025	124.651	15	0
Nicaragua	363.024	278.590	74.433	10	0
Panama	431.836	349.664	69.172	13	0
Paraguay	313.184	196.784	116.4	0	0
Peru	4105.472	2957.663	847.809	300	0
Rep.Dominicana	1080.092	808.835	244.256	27	0
Venezuela	3522.205	2588.599	683.606	250	0
<b>TOTAL</b>	<b>82146.003</b>	<b>59692.830</b>	<b>20738.018</b>	<b>1472.154</b>	<b>243</b>

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.

## FEEDLATINA - ESTIMATE OF PRODUCTION OF FINISHED FEED FOR CATTLE [1.000T] / 2013

COUNTRY	TOTAL	DAIRY	BEEF
Argentina	6079.825	3374.945	2704.88
Mexico	8085	4686	3399
Brazil	7970	5300	2670
Uruguay	157	65	92
Colombia	653.851	0	0
Chile	700	0	0
Ecuador	78	0	0
Peru	80	100.147	13.284
Venezuela	254	189	65
<b>TOTAL</b>	<b>24057.676</b>	<b>13715.092</b>	<b>8944.164</b>

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.

## New Zealand

## NZFMA

*nzfma*



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 2014/15

The New Zealand Ministry for Primary Industries has completed a wide-ranging review of the NZ animal feed industry. Its preliminary report supports the submissions of the NZFMA and is very complimentary about NZ feed manufacturing practices.

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By 2016, the NZFMA board is proposing to require that all NZFMA feed manufacturers and blenders are FeedSafeNZ-accredited.

The NZFMA has developed a feed quality accreditation scheme called FeedSafeNZ. This scheme is independently audited against the NZFMA Code of Practice. To be eligible to participate in this scheme, you have to be a current member that either manufactures or blends complete stockfeeds. We have seen good uptake of this scheme and over 50% of our feed manufacturing sites are now FeedSafeNZ-accredited, with more waiting to be audited.



By 2016, the NZFMA board is proposing to require that all NZFMA feed manufacturers and blenders are FeedSafeNZ-accredited (this scheme is voluntary at present).

Our feed training course continues to see good uptake and commitment from members.

We are seeing a drop in dairy feeds produced, which coincides with the drop in milk payout. Dairy still remains the second largest contributor (by species) for commercial feed tonnes produced.

## Feed Statistics

### NEW ZEALAND COMMERCIAL PRODUCTION - COMPLETE FEED EQUIVALENT (1000 METRIC TONNES)

FEED TYPE	2011	2012	2013	2014	2015 Frst
Dairy	117	134	171	216	249
Calf Feed	51	70	76	83	94
Beef, Sheep, Deer,	4	6	12	10	12
Swine	180	174	149	142	130
Layers	140	137	133	150	158
Poultry	401	404	406	435	447
Aquaculture	2	1	1	0	0
Horse	9	9	9	11	12
Other	8	7	6	5	4
<b>TOTAL (MMT)</b>	<b>912</b>	<b>943</b>	<b>963</b>	<b>1053</b>	<b>1100</b>

Source: New Zealand Feed Manufacturers Association Annual Feed Statistics Reports

### NEW ZEALAND LIVESTOCK INVENTORY (MILLIONS)

LIVESTOCK	2011	2012	2013	2014	2015 Frst
Dairy	6.4	6.4	6.5	6.7	6.8
Beef cattle	3.8	3.7	3.7	3.6	3.5
Sheep	31.1	31.3	30.8	29.6	29.1
Swine	0.3	0.3	0.3	0.3	0.3
Layers	3.3	3.2	3.3	3.4	3.4
Broilers (chicken)	89.8	93.3	96.1	101.1	104.9
<b>TOTAL (MILLIONS)</b>	<b>134.7</b>	<b>138.2</b>	<b>140.7</b>	<b>144.7</b>	<b>148</b>

Source: New Zealand Feed Manufacturers Association Annual Feed Statistics Reports

For more information please visit: [www.nzfma.org.nz](http://www.nzfma.org.nz).

## South Africa

## AFMA



AFMA is the leading industry association within the Livestock and Animal Feed environment in South and Southern Africa, taking a leading role by specifically assisting the Government and the Feed Regulator on Feed Regulatory and Food Safety matters in a feed context.

Through its membership and positioning within the larger Agricultural environment, AFMA is closely linked to related industries in the feed and food value chain where it plays a major role in strategically directing and aligning the feed industry in the larger agriculture sector.

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The capacity in the AFMA Office over the past decade increased by more than 200% to keep-up with the ever expanding needs of its membership both locally as well as regionally.

The capacity in the AFMA Office over the past decade increased by more than 200% to keep-up with the ever expanding needs of its membership both locally as well as regionally. The AFMA Office also hosts the full secretariat of the South African Cereal and Oilseed Trade Association (SACOTA) and the Southern African Feed Manufacturers Association (SAFMA) established in 2013 at the 4th Global Feed & Food Congress (GFFC), held in Sun City, South Africa.

### Feed Statistics

## SOUTH AFRICAN NATIONAL FEED SALES (TONNES)

TYPE OF FEED	2011	2012	2013	2014
Dairy	1,880,000	1,974,000	1,997,688	2,057,619
Beef & Sheep	3,038,000	3,156,482	3,211,089	3,297,788
Pigs	810,746	851,283	855,539	855,539
Layers	1,130,755	1,182,770	1,187,028	1,223,333
Broilers	3,194,130	3,295,120	3,318,186	3,364,156
Dog Food	297,000	308,880	311,967	318,206
Horses	121,047	130,731	132,100	132,100
Ostrich	180,450	184,059	128,841	127,553
Aquaculture	2,900	2,800	3,800	4,293
<b>TOTAL (TONNES)</b>	<b>10,655,028</b>	<b>11,086,124</b>	<b>11,146,238</b>	<b>11,380,587</b>

Source: Animal Feed Manufacturers Association, South Africa

### General Market Conditions

Growth in the South African agricultural production showed a substantial increase, reaching 5 % in 2013, compared to the 3.1 % in 2012. This was mainly attributed to growth in real income in the sector, as derived from growth in animal products, horticulture and field crops. Real income from animal products during 2013 was mainly made up by poultry meat (40.1 percent), cattle and calves slaughtered (19.7 percent), milk (13.8 percent) and eggs (10.8 percent), constituting 84 percent of this category. Prompted by the projected growth in production and firm domestic prices for chicken, beef and eggs, the real gross income from animal production was expected to increase by 7 percent in 2014.



Growth in the South African agricultural production showed a substantial increase, reaching 5 % in 2013, compared to the 3.1 % in 2012. This was mainly attributed to growth in real income in the sector, as derived from growth in animal products, horticulture and field crops.

While 2013 marked a return to profitability in the global context, local producers did not have the same benefit due to a substantial depreciation in the exchange rate, combined with severe drought conditions in South Africa and its neighbouring countries. While competitively priced imports prevented significant increases in local chicken prices in 2012, it placed extreme pressure on producer margins. However, a substantial depreciation in the exchange rate and higher international prices increased the cost of imported chicken in 2013. Domestic prices followed, yielding an increase of 7.7 % in the weighted average net sales realisation for frozen chicken in 2013. Chicken still remains the most affordable source of protein and although local consumption is projected to increase by only 34 % in the next decade, it continues to dominate the protein

market.

### **Local Commodities Situation**

After three seasons of constant increases in local commodity prices, it showed significant decreases due to positive global conditions and an estimated bumper summer grains and oilseed crop in 2013/14 season (ready for marketing in 2014/15). The combination of the estimated bumper summer grains and oilseed crop and the declining international maize price was expected to drive the local maize price much lower than in 2014. In fact, it was expected that the maize price would have to fall well below export parity levels to secure sufficient levels of exports that can clean out local surpluses resulting from the bumper crop, to enable a better price to producers.

The local maize price thus remained under pressure during 2014, largely as a result of weak international prices. In response to the lower expected maize price, both white and yellow maize plantings were expected to decrease marginally over the medium term until 2016. Local human consumption of white maize is projected to remain relatively constant over the long term, and any significant growth in white maize production will have to be absorbed by the export market or will have to substitute yellow maize in the feed market at a discounted price.

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Feed demand has increased by 42 % over the past decade and it is expected to increase by a further 39 % during the next decade, which implies that more than 7 million tons of maize will be go to animals feeding, compared to human consumption of around 4.7 million tons.

According to the South African Bureau for Food and Agricultural Policy (BFAP), a strong growth is projected for maize from feed demand over the next decade, which will support the local yellow maize price over the long term. Feed demand has increased by 42 % over the past decade and it is expected to increase by a further 39 % during the next decade, which implies that more than 7 million tons of maize will be go to animals feeding, compared to human consumption of around 4.7 million tons.

The current local consumption of Soybean meal (SBM) is estimated at approximately 1.2 million tons, of which local production will provide 50 % of domestic demand, with the balance to be imported to fulfil local market demand.

Consumption is projected to increase to approximately 1.8 million tons in the next decade, with the largest part of local demand to be supplied by local production due to the expansion of local SBM crushing capacity.

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The current local consumption of Soybean meal (SBM) is estimated at approximately 1.2 million tons, of which local production will provide 50 % of domestic



demand, with the balance to be imported to fulfil local market demand.

Despite the increased local production, local SBM prices will remain a function of international prices and the exchange rate until sufficient SBM is produced in the local market to break away from import parity levels.



Domestic consumption of Sunflower meal is projected to increase from approximately 400 000 tons in 2014 to 550 000 tons in the next decade. As local production is expected to remain relatively constant, most of the increase in consumption will have to be provided by imports.

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### **Associations Activities – Agricultural Regulatory and Policy Environment**

#### **Aniam Feeds Forum (AFF) (Act 36 - liaison meeting)**

AFMA as leading livestock and feed association attends bimonthly liaison meetings with the Registrar of Farm Feeds, the Pet Food Industry (PFI) and Renderers Association of South Africa to discuss matters of importance to the feed industry. Through this forum, pertinent issues such as the new Feeds Bill, Regulations, Guidelines and Feed Registrations, Inspection Services, Rendering Facilities, and Trade issues are discussed in an open and transparent manner.

The year 2014 started off with the Registrar appointing an Assistant Technical Advisor to assist with the tremendous volume of feed registrations and to address the ever-increasing backlog of applications that require market approval. Despite this attempt, it was clear that the backlog will remain a critical concern for a sustainable feed industry and that it needs to be addressed as a matter of priority.

As part of the process to assist the Feed Regulator, AFMA facilitated a registration workshop in cooperation with the Feed Regulator on feed additives towards the end of 2013. The workshop was designed to provide the delegates with all the necessary information to successfully register a feed additive as either a farm feed or a stock remedy.

Simultaneously, it aimed at improving the quality of feed additive applications received by the Registrar, and thereby improving the workflow process within the division. The workshop was held over 2 days and was attended by more than 150 people from the animal feed and animal health industries. AFMA will continue to participate in these registration workshops in the coming year in an effort to keep its members equipped with the necessary information to submit accurate registration applications.

During 2014, a working group was formed within the AFF to specifically look at the manner in which the registration status is reported at the meeting and to ensure that relevant and accurate information is available to industry bodies. Historically, it has been a major obstacle for member companies to manage their business and marketing strategies without proper guidance on the expected lead times for registration approvals. The working group is therefore tasked to design a status report that will provide a true reflection of the number of submitted, completed and outstanding applications within the various categories of livestock feed, pet food and feed additives. AFMA is actively participating in this working group and will continue its involvement in the next period.

Following the successful example of the registration-working group, a second working group has recently been formed to look at an Inspection Services Report, which is to be presented at the bimonthly Act 36 liaison meetings. This working group consists of representatives from the industry associations and the Head of Inspection Services in the Agriculture Inputs Control Division. The aim of the report is to provide feedback to industry on general trends of compliance and non-compliance.

### **The Feeds Bill**

In March 2013, the Feeds Bill was tabled before the Parliamentary Portfolio Committee on Agriculture, Forestry and Fisheries, and all industry stakeholders and senior officials of the South African Department of Agriculture, Forestry and Fisheries (DAFF) were given an opportunity to present their comments and concerns in this regard. The Bill was referred back to DAFF to address the major issues raised in terms of the legal framework and to embark on a thorough consultation process that will involve all stakeholders and affected parties in South Africa.

During 2014, however, the consultation process has not progressed much, apart from confirmation that fertilizers will be excluded from the scope of the Bill. AFMA will assist the Feed Regulator in initiating a meeting between all the relevant stakeholders before the end of 2014 in order to convene a workshop where the principles of the Feeds Bill will be discussed and potentially agreed on.

### **Regulations and Guidelines of Act 36**

The proposed regulation amendment of Act 36 was not implemented during 2014. AFMA submitted extensive comments on this legislation, and the Registrar's office was tasked with amending the regulation accordingly. AFMA views this amendment as an interim measure until the Feeds Bill is approved, after which a revised set of regulations will be required. AFMA strongly recommended that the regulations to the Farm Feeds Act (Act 36) be diversified to accommodate the various types of manufacturing facilities and establishments, each with its unique requirements. This will enable the inspectors to customise their facility audits in line with Good Manufacturing Practices at each type of establishment, and to potentially minimise the disputes between industry and government about the interpretation and intention of the law. Progress on the proposed regulation is being discussed as a standing agenda item at the Act 36 liaison meetings, and feedback will be provided to members via the AFMA Technical Committee during the next reporting

period.

The slow progress on the regulation amendment mentioned is an unfortunate consequence of the limited technical resources at the Registrar's office. The Registrar encouraged industry to assist where possible and AFMA envisions that the technical expertise of the Technical Committee will increasingly be utilised in this regard in the coming years.

A draft guideline document on the registration process and requirements was circulated to the Act 36 liaison members at the beginning of the reporting period. This guideline is critical to communicate all requirements and procedures necessary for the successful registration of farm feeds. AFMA provided comprehensive comments on the draft document and it is expected that the final guideline will be published before the end of 2014.

Additional guidelines on specific data requirements such as stability testing, efficiency trials and related matters are planned for the next reporting period. AFMA encourages the effort to provide the public with relevant information that will improve the quality of registration applications. The AFMA Technical Committee will once again avail their technical resources to assist in this matter.

### **GMOs**

Synchronisation of GMO events remains a huge challenge in the South African commodity trade and consequently feed and food environment. The Report of the National Agricultural Marketing Council (NAMC) – "Supply and Demand Estimates Committee Report", indicated stock availability for processing of white maize for 15 days and yellow maize for 22 days at the end of April 2014. Certain GMO events not yet registered for commodity clearance in South Africa prevented imports of maize from traditional exporting countries such as Brazil, Argentina and the USA. Maize could, however, be imported from the Black Sea countries, but at higher prices and freight charges. In order to address the situation, AFMA, SACOTA, the South African National Seed Organisation (SANSOR) and Monsanto met with the GMO Registrar on 25 November 2013.

At the meeting, it was agreed that Monsanto would submit their outstanding application for commodity clearance and that the GMO Registrar would do its utmost to expedite the approval of the application. The Executive Council under the Genetically Modified Organisms Act (Act No. 15 of 1997) approved the Monsanto event at their meeting on 18 March 2014, which cleared the way for maize imports from one of South Africa's traditional trading partners, Argentina.

In order to prevent a similar occurrence in future, AFMA and SACOTA met with SANSOR on 3 April 2014, where it was agreed that technology developers would be requested to synchronise GMO commodity import approvals in South Africa and major exporting countries. A proposal will also be drafted via the Maize Forum Steering Committee to the GMO Registrar to expedite the review of applications for GMO commodity imports, as well as to streamline the approval process for stacked events.

### **Self-Regulation**

#### **AFMA Code of Conduct**

Since its inception and approval by the Annual General Meeting (AGM) in 2008, the AFMA Code of Conduct (AFMA Industry Certification Programme) has entered into its sixth year of implementation. Most of the AFMA members have already entered their third round of the Code of Conduct Compliance audit.

During 2014, the AFMA Technical Committee, as caretaker of the technical content of the Code and its auditing checklist, requested a review of the code and its auditing checklist to keep it up to date with the latest developments in the technical and legal environment, as well as the latest developments that impact on the feed and related industries.

The sub-committee responsible for the technical content has worked on the possible expansion of the Code, as well as on the audit checklist and its content. This sub-committee's goal is to review and set the latest standard for the Code before engaging a second or third auditing and certifying service provider.

### **AFMA Transport Protocol**

The AFMA Transport Protocol (laying down a set of rules on transporting of feed raw materials from the suppliers to the feed manufacturers) has been implemented. Its aim is to provide a mechanism for auditing transport providers against certain criteria in order to adhere to the principles of food safety.

### **Skills Transfer and Training Committee Matters**

#### **Feed Miller curriculum development**

The Feed Miller Curriculum had not yet been approved by the Quality Council for Trades and Occupations (QCTO), which means that the curriculum could not officially be registered with the South African Qualifications Authority (SAQA). AFMA's Training Committee however, decided to proceed with the development process of learning material, despite the fact that the approval and registration process has not yet been finalised. AFMA has subsequently applied for funding from the Maize Trust, the Oilseeds and Protein Development Trust and the Agricultural Sector Education and Training Authority (AgriSETA) to fund the development of the learning material for the Curriculum.

AFMA has also embarked on a process to establish a training feed mill at the University of Pretoria (UP). This project has three objectives, i.e. the practical assessment of learners according to the Feed Miller qualification, feed processing research projects and academic programmes for undergraduate and postgraduate students. It is envisaged that the training feed mill will be financed by grants, sponsors and investments from different groups or a variety of role players currently involved in the South African feed industry. These could include suppliers of equipment and machinery for feed manufacturing, suppliers of IT products used in the feed mill environment, suppliers of software programmes used in the feed manufacturing environment and other input suppliers and service providers to the feed industry.

A joint initiative between AFMA, UP and the Kansas State University (KSU) will be the presentation of specialised short courses for the continuing professional development of the animal feed industry's workforce. Short



courses on feed milling technology will be aimed at current four-year animal science students.

Short courses will be presented by way of a weekly webinar by the faculty at KSU working with a faculty proctor at UP, while learning material will be made available through the distance education (DE) platform at KSU. Practical sessions will be conducted at the training feed mill, once established. Other universities and technical colleges will also be accommodated. Once the total project is up and running, it is envisaged that the initiatives will also be rolled out to feed manufacturers in other countries north of South Africa.

### **AFMA/Bühler/Swiss Institute of Feed Technology (SFT) Training**

The AFMA/Bühler/SFT training course was presented from 6 to 17 October 2014. Other Southern African countries expressed an interest to also attend the training course.

### **AFMA Annual Symposium**

The AFMA Annual Symposium hosting top local and international technical speakers is growing in stature every year it takes place, tabling excellent presentations on the most prominent and relevant topics which keep the South African industry informed on the latest development world-wide. Its prominence has over the years grown to such an extent, that other related industries and activities industries are using the AFMA Symposium as a corner stone event and are arranging other event before or after the Symposium.

*For more information please visit: [www.afma.co.za](http://www.afma.co.za).*



## United States

## AFIA



The American Feed Industry Association (AFIA), based outside Washington, D.C., USA, is the recognized leader on international feed industry issues and developments. Members include more than 600 domestic and international companies and state, regional and national associations. Member companies are livestock feed and pet food manufacturers, integrators, pharmaceutical companies, ingredient suppliers, equipment manufacturers and companies that supply other products, services and supplies to feed manufacturers.

The U.S. feed industry makes a significant contribution to food safety, nutrition and the environment, and plays a critical role in the economical production of healthy, wholesome meat, milk, fish and eggs. More than 75 percent of the commercial feed in the U.S. is manufactured by AFIA members.

AFIA is particularly proud of the Safe Feed/Safe Food Certification Program, an independent, third-party certified program that promotes accountability and leadership at feed facilities. To date, the Safe Feed/Safe Food program has more than 300 certified feed mills and feed-ingredient facilities operated by 147 companies in the U.S. and Canada.

A similar program is the International Safe Feed/Safe Food Certification Program, launched in 2010, when an alliance was formed with FEFANA, the Feed Additives and Premixtures Association of the European Union. FEFANA is the developer of the Feed Additives and Premixtures Quality Systems, or FAMI-QS, program. International Safe Feed/Safe Food is designed to help facilities' trade with European customers by illustrating compliance with the EU's Feed Hygiene Regulation (183/2005). There are 26 facilities with certification. Several other companies are undergoing the process.



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In addition, AFIA proudly offers two certifications that are benchmarked with the Global Food Safety Initiative—FSC32, Manufacturer of Pet Food and FSC34, Manufacturer of Animal Feeds. Both programs are administered by the Safe Quality Food Institute. The pet food program has more than 80 certified facilities from around the world—U.S., Canada, Brazil, China, Australia and Korea. The animal feed program has 27 certified facilities in the U.S., Canada, Australia, Mexico, Japan and Guatemala.

AFIA's staff strives to provide members with the highest level of service and advocacy on a range of complex issues. While much of AFIA's focus is on the federal government, which includes the U.S. Congress, the U.S. Department of Agriculture, the U.S. Food and Drug Administration and the U.S. Environmental Protection Agency, the association also works with agencies and legislatures in individual states.

AFIA tackled a variety of concerns on behalf of its members in 2014. The Food Safety Modernization Act (FSMA), the ingredient approval process, trade-policy related items and the use of animal-health products in livestock and poultry are only a few of the issues the association addressed.

Outreach to FDA officials on a number of issues is a matter of consistent engagement for AFIA. The organization has continued to provide feedback on the FSMA and the use of antibiotics in feed as well as issues surrounding ingredient approvals.



AFIA tackled a variety of concerns on behalf of its members in 2014. The Food Safety Modernization Act (FSMA), the ingredient approval process, trade-policy related items and the use of animal-health products in livestock and poultry are only a few of the issues the association addressed.

In addition, the association has been very active in representing the industry with input on the negotiation of free trade agreements, including the Trans-Pacific Partnership (TPP) and the Transatlantic Trade and Investment Partnership (T-TIP), and opening doors for the feed industry to gain needed assistance with the development of new global trade markets. The U.S. trade offices are much more aware of the feed industry and the opportunities for global feed trade. Trade is an exciting area that

will provide growth opportunities for expansion of the U.S. feed and feed ingredient industries.

Overall, 2014 was a year of mixed results for the U.S. livestock and poultry production industries, which trickles down to the feed industry.

Throughout the year, grain and ingredient prices moderated with positive crop year expectations and the increased grain and soybean stocks resulting from the final harvest. This had the combined effect of lowering market prices for feed ingredients, which led to an improved profitable production scenario for poultry, swine, dairy and beef producers.

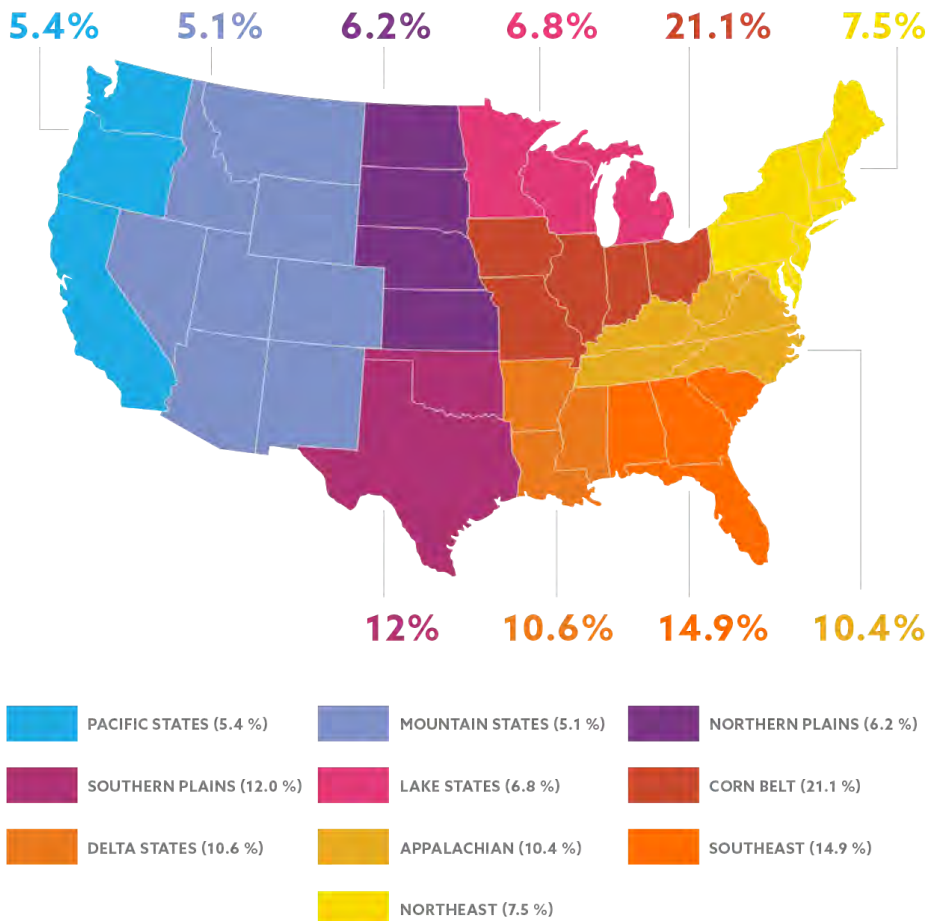
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Overall, 2014 was a year of mixed results for the U.S. livestock and poultry production industries, which trickles down to the feed industry. Throughout the year, grain and ingredient prices moderated with positive crop year expectations and the increased grain and soybean stocks resulting from the final harvest.

Exports helped the dairy industry achieve record prices for milk, but on the other hand, swine producers saw their exports decline. The poultry industry experienced increases across the board in broilers, eggs and turkey production as well as consumption. The beef industry continued to decline in production, but appears now to be closer to turning the corner. Higher retail prices helped all of the production sectors. The pet food industry continues to increase in sales of approximately 5 percent over 2013, with increases in both domestic and export markets.



**U.S. ESTIMATED PRIMARY FEED PRODUCTION REQUIRED TO SUPPORT ANIMAL INVENTORY PERCENT OF TOTAL (2008-2013 BY REGION)**



Source: Feedstuffs, 2014 Reference Issue and Buyers Guide, Sept. 10, 2014, Number 37, Page 6

**A Preview of AFIA’s Key Issues in 2015**

Regulatory and legislative issues, both domestic and international, will continue to be of utmost importance for the association in the coming year. Below is a list of selected issues:

**Food Safety Modernization Act (FSMA)**

Since this massive piece of legislation was signed into law on Jan. 4, 2011, the FDA has released drafts and re-drafts of the rules. AFIA provided feedback in formal comments during the past 18 months and began training programs for the U.S. feed, pet food and ingredient industries. The FDA released the final rule on September 17, 2015.

The centerpiece of the new food safety law is amendments made to Section 418 of the federal Food, Drug and Cosmetic Act. This section mandates FDA to draft rules for hazard identification and preventive control programs at every feed, pet food and ingredient facility. This is an entirely new approach to the regulation of feed, and one requiring a tremendous training program and outreach to the industry.



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AFIA is working with the Food Safety Preventive Controls Alliance to develop guidance documents for the following industry segments: dry feed, liquid feed, pet food, plant products, animal products and vitamins/minerals and micro products. These documents will be used by FDA to train its investigators and provide industry a clear direction in implementing FSMA rules.

**Ingredient Approvals**—Both federal and state laws require all ingredients to be pre-approved prior to use, unless they are the commonly or usually-named, or generally recognized as safe (GRAS) for use in feed. For more than 30 years, the Association of American Feed Control Officials (AAFCO) and FDA have worked in tandem with strong AFIA support to review, approve and list these ingredient definitions in AAFCO's annual Official Publication (OP). Most state feed laws reference this publication as the official list of approved ingredients. However, the Food and Drug Administration Amendments Act of 2007 used the term "ingredient standards," which FDA announced would greatly alter the legal requirements from previous rules. It has resulted in a threat to the AAFCO/FDA system of review. At AFIA's strong urging, FDA and AAFCO recently renewed their memorandum of understanding to allow the current process to continue until Oct. 1, 2017.

In the interim, AFIA is negotiating with the U.S. Congress and FDA to place the AAFCO OP into federal law, so FDA will recognize those feed ingredients listed therein. There have been mutual concessions on all sides and AFIA is hopeful this will be achieved this year.

### **Veterinary Feed Directive and Antibiotic Resistance**

According to FDA, the agency has concluded antibiotics useful in human medicine cannot be judiciously used for growth promotion, feed efficiency or milk production claims in animals. Drug sponsors must change these claims by submitting data for prevention-type therapeutic claims. Moreover, FDA believes such uses should be under the control of a veterinarian via the Veterinary Feed Directive (VFD), an AFIA-led initiative enacted into the Animal Drug Availability Act of 1996.

AFIA believes the VFD rules have had administrative problems in need of repair. In 2012, FDA published a draft proposed rule to amend the VFD rules and make significant changes, such as removal of the amount of medicated feed that needed to be manufactured and removing the veterinarian's license number and state of license, among other changes. AFIA agreed with all the changes, but various issues remain and AFIA will continue to work on these issues in 2015 as the VFD begins its implementation stage.

### **Labeling of Genetically Modified Foods**

Although state-enacted GMO labeling laws and state ballot referenda

have thus far excluded animal food, livestock and poultry feed, as well as pet foods, these may easily get grouped with human food in future efforts. New state labeling proposals are introduced each legislative cycle and often do include animal food. AFIA was founded over 100 years ago to harmonize state feed laws. The association is an active member in the Coalition for Safe Affordable Food, more than 40 groups—from farming to food retailing—working to ensure a federal solution to the GM labeling debate rather than a patchwork of varying state labeling laws.



In 2014, the U.S. exported more than \$10 billion of feed, feed ingredients and pet food, including soybean meal, corn co-products, and other feed additives.

### **Trade Policy**

In 2014, the U.S. exported more than \$10 billion of feed, feed ingredients and pet food, including soybean meal, corn co-products, and other feed additives. International trade offers the greatest potential for the U.S. animal food industry's future growth, both through direct feed and ingredient exports and the increased overseas sale of livestock, poultry and dairy products. Free trade agreements have the potential to open international markets for more U.S. feed, pet food and livestock exports, allowing the U.S. feed/pet food industry to continue to grow.

The U.S. is actively negotiating two important free trade agreements: The Trans-Pacific Partnership (TPP) and the Transatlantic Trade & Investment Partnership (T-TIP). To facilitate finalization of both agreements, the U.S. Congress must pass trade promotion authority (TPA, also called "fast track authority") allowing Congress to set priorities and the president to negotiate trade agreements. While Congress would retain its authority to review and approve or disapprove those trade agreements, it would do so only with an up-or-down vote. AFIA will be very active advocating for TPA as well as TPP and T-TIP.

### **Feed Statistics**

## U.S. LIQUID FEED TONNAGE SURVEY SUMMARY

TYPE	2012	2013
Beef Feedlot	597,548	740,401
Dairy Rations	813,182	826,820
Range Supplementation	324,022	321,703
Feed Mill Blends	365,935	347,284
Poured Blocks	290,064	303,944
<b>TOTAL (TONS MANUFACTURED)</b>	<b>2,390,751</b>	<b>2,540,152</b>

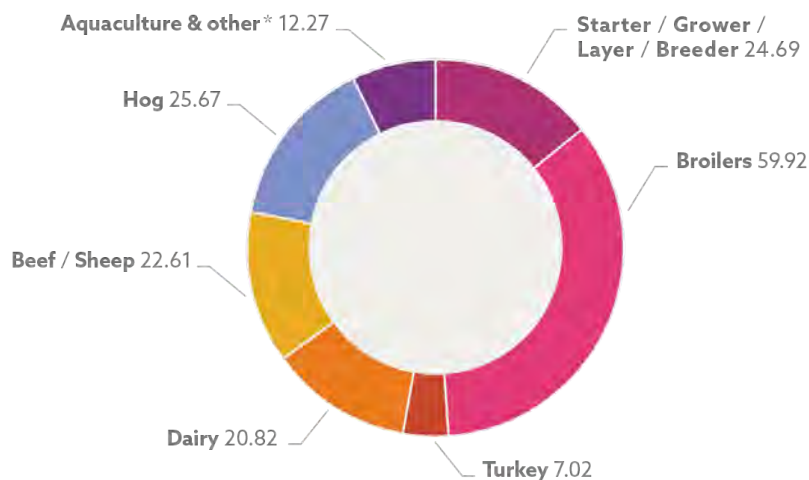
Source: American Feed Industry Association, Annual Tonnage Survey, 2014

## U.S. TOTAL NUMBER OF HEAD

ANIMAL TYPE	2014	SOURCE
Broilers	8.78 billion head	National Chicken Council: April 2015
Layers	361 million head	USDA-NASS, as of April 2015
Market Hogs	60.0 million head	USDA-NASS, as of March 2015
Breeding Hogs	5.89 million head	USDA-NASS, as of March 2015
Dairy Cattle - Cows that calved	9.3 million head	USDA-NASS, as of Jan. 2015
Beef Cattle - Cows that calved	29.7 million head	USDA-NASS, as of Jan. 2015
Cattle on Feed	13.1 million head	USDA-NASS, as of Jan. 2015
Sheep & Lambs	5.28 million head	USDA-NASS, as of Jan. 2015
Turkeys	235 million head	USDA-NASS, as of Sept. 2014

Source: American Feed Industry Association

## U.S. TOTAL FEED PRODUCTION IN 2014 BY ALL IN MILLIONS OF TONNES (173 MILLION TONNES TOTAL)



Source: FDA, USDA and AFIA

\* Does not include dog and cat food



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## RAW MATERIALS USED IN FEEDS IN U.S.

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RAW MATERIAL	2014	SOURCE
Corn	5,036 million bushels (127.9 MMT)	USDA/WASDE Report, April 2015
Wheat	223 million bushels (6.1 MMT)	USDA/WASDE Report, April 2015
Barley	65 million bushels (1.4 MMT)	USDA/WASDE Report, April 2015
Oats	97 million bushels (1.7 MMT)	USDA/WASDE Report, April 2015
Soybean Meal (Domestic)	29,496 thousand short tons	USDA/WASDE Report, April 2015
Sorghum/Milo	92 million bushels (2.3 MMT)	USDA/WASDE Report, April 2015
DDGS	39 million metric tons	RFA, 2015 Annual Report
Total Forage Production	281,810 thousand tons	2013 Summary Report, USDA-NASS
Alfalfa Production	57,581 thousand tons	2013 Summary Report, USDA-NASS
Corn Silage Production	117,851 thousand tons	2013 Summary Report, USDA-NASS
Other Hay Production	78,365 thousand tons	2013 Summary Report, USDA-NASS

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MMT = million metric tons

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Source: American Feed Industry Association

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For more information please visit: [www.afia.org](http://www.afia.org).

## IFIF 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.

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

### National and Regional Associations



## Corporate Members



## Feed Related Organisations







## IFIF Leadership 2014 – 2015

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 Officers 2014 – 2015**

- IFIF Chairman: Mario Sergio Cutait (M.Cassab)
- IFIF Treasurer: Dr. Reinder Sijtsma (Nutreco)
- IFIF Policy Chair: Joel Newman (AFIA)
- IFIF Education Chair: Dr. Daniel Bercovici (Ajinomoto Eurolysine)
- IFIF Technology Chair: Alexander Döring (FEFAC)
- IFIF Executive Director: Alexandra de Athayde

### **IFIF Executive Committee 2014 – 2015**

#### **Alexandra de Athayde**

Executive Director, International Feed Industry Federation, Germany

#### **Joel Newman**

President & CEO, American Feed Industry Association, USA

#### **Julio Flavio Neves**

President, Latin American and Caribbean Feed Industry Association - Feedlatina, Uruguay

#### **Li Xirong**

Secretary General, China Feed Industry Association, China

#### **Mario Sergio Cutait**

Chairman, International Feed Industry Federation, Brazil

#### **Dr. Reinder Sijtsma**

Director, Nutreco & Treasurer, International Feed Industry Federation,



Netherlands

[Roberto Betancourt](#)

President, Brazilian Feed Industry Association, Brazil

[Ruud Tijssens](#)

President, European Feed Manufacturers' Federation, Belgium

### **IFIF Board Members 2014 –2015**

[Aidan Connolly](#)

Vice President, Alltech, Ireland

[Dr. Alexandra Brand](#)

Senior Vice President, BASF SE, Germany

[Alexandra de Athayde](#)

Executive Director, International Feed Industry Federation, Germany

[Dr. Daniel Bercovici](#)

President, Ajinomoto Eurolysine SAS, France

[David Webster](#)

Business Unit Leader, Cargill, USA

[De Wet Boshoff](#)

Executive Director, Animal Feed Manufactures Association, South Africa

[Didier Jans](#)

Secretary General EU Association of Specialty Feed Ingredients and their Mixtures (FEFANA)

[Enzo Trimigliozzi](#)

Vice President Animal Nutrition & Health Strategy, DSM, Switzerland

[Graham Cooper](#)

Executive Director, Animal Nutrition Association of Canada, Canada

[Hubert de Roquefeuil](#)

CEO, InVivo NSA, France Joel Newman President & CEO, American Feed Industry Association, USA

[Julio Flavio Neves](#)

President, Latin American and Caribbean Feed Industry Association - FeedLatina, Uruguay

[Li Xirong](#)

Secretary General, China Feed Industry Association, China

[Luis Azevedo](#)

Executive Director LATAM & Africa, Novus International, Brazil

[Mario Sergio Cutait](#)

Chairman, International Feed Industry Federation, Brazil

[Dr. Olivier Espeisse](#)

Chief Veterinarian, Elanco, France

[Dr. Reinder Sijtsma](#)

Director, Nutreco & Treasurer, International Feed Industry Federation,

Netherlands

[Roberto Betancourt](#)

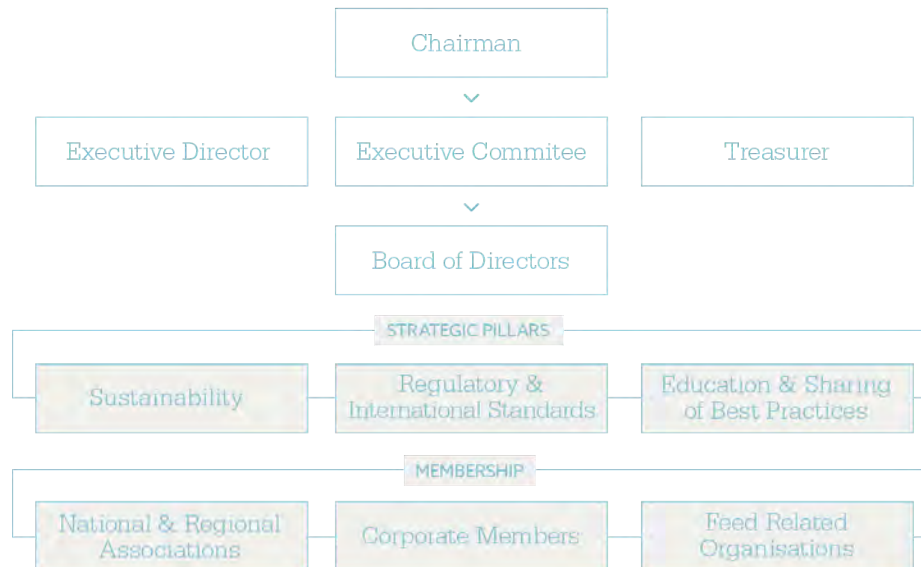
President, Brazilian Feed Industry Association, Brazil

[Ruud Tijssens](#)

President, European Feed Manufacturers' Federation, Belgium

Dr. Steve Auman Director, PotashCorp, USA

### IFIF Structure



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



## Expert Committees 2014 – 2015

In 2014/15 experts from member companies and national associations participated in IFIF's three expert and technical committees: Policy, Education and Technology. These consider key industry issues and help develop global feed and food industry standards.

### **Policy Committee Members 2014 - 2015**

#### Members 2014 - 2015

Chair: Joel Newman, President & CEO, AFIA

1. Alexander Döring, Secretary General, FEFAC
2. Angela Pellegrino Missaglia, Consultant, Sindirações
3. Antonio Rubens Chagas Lima, Regulatory Affairs Coordinator, Feedlatina
4. Arioaldo Zani, CEO, Sindirações
5. Claire Launay, Research & Development Direction, InVivo NSA
6. De Wet Boshoff, Executive Director, AFMA
7. Dr. Didier Jans, Secretary General, FEFANA
8. Flavia de Castro, Executive Director, Feedlatina
9. Graham Cooper, Executive Director, ANAC
10. Hubert de Roquefeuil, CEO, Invivo NSA
11. Johan den Hartog, Managing Director, GMP+
12. John Spragg, Executive Director, SFMCA
13. Judson Vasconcelos, Global Director, Global Ruminants Business Unit, Merck Animal Health
14. Karine Tanan, Global Regulatory Lead, Cargill
15. Liesl Breytenbach, Technical Assistant, AFMA
16. Modesto Moreira, Operations Director, M. Cassab
17. Palma Jordan, Director Global Integrated Livestock, Merck/MSD Animal Health

18. Philippe Becquet, Senior Global Regulatory Affairs Manager, DSM
19. Dr. Reinder Sijtsma, Director, Nutreco
20. Yael Noy, Nutritionist, Israeli Feedmill Association

## **Education Committee**

### **Members 2014 - 2015**

Chair: Dr. Daniel Bercovici, President, Ajinomoto Eurolysine SAS

1. Alexander Döring, Secretary General, FEFAC
2. Ariovaldo Zani, CEO, Sindirações
3. Bruno Caputi, Coordinator Regulatory & Quality, Sindirações
4. De Wet Boshoff, Executive Director, AFMA
5. Flavia de Castro, Executive Director, Feedlatina
6. Luiz Azevedo, Executive Director LATAM & AFRICA, Novus
7. Marcel Louis Joineau, Market Info Coordinator, Feedlatina
8. Modesto Moreira, Operations Director, M. Cassab
9. Dr. Reinder Sijtsma, Director, Nutreco
10. Stephen Woodgate, 1st Vice President, WRO

## **Technology Committee**

### **Members 2014 - 2015**

Chair: Alexander Döring, Secretary General, FEFAC

1. Ariovaldo Zani, CEO, Sindirações
2. Dr. Didier Jans, Secretary General, FEFANA
3. Flavia de Castro, Executive Director, FeedLatina
4. Dr. Jason Shelton, Global Technology Application Director, Cargill
5. Johan den Hartog, Managing Director, GMP+
6. Judson Vasconcelos, Director Scientific Marketing Affairs, Global Ruminants Business Unit, Merck/MSD Animal Health
7. Liesl Breytenbach, Technical Assistant, AFMA
8. Luiz Azevedo, Executive Director LATAM & AFRICA, Novus
9. Michael Binder, Director Sustainability, Evonik Industries
10. Modesto Moreira, Operations Director, M. Cassab
11. Philippe Becquet, Senior Global Regulatory Affairs Manager, DSM
12. Dr. Reinder Sijtsma, Director, Nutreco
13. Stephen Woodgate, 1st Vice President, WRO
14. Dr. Steve Auman, Director, PotashCorp
15. Yael Noy, Nutritionist, Israeli Feedmill Association



## Definitions and Terms

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**

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).



## IFIF Contact

For general enquiries please contact us at [info@ifif.org](mailto:info@ifif.org)

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