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Agri-Food Outlook 2025

Despite Challenges, Feed Production Increased in 2024

Most sectors and regions experienced growth amid disease outbreaks and economic pressures; poultry feed dominated

After a stagnant 2023, **global feed production rebounded in 2024,** according to Alltech's 2025 Agri-Food Outlook, which estimates that feed production expanded by 16.7 million metric tons (mt) in 2024, an increase of 1.2%.

This growth — achieved despite challenges such as highly pathogenic avian influenza (HPAI), climate fluctuations and economic uncertainty — **underscores the resilience and adaptability of the international agriculture industry.**

Now in its 14th year, Alltech's annual feed survey draws on data from 142 countries and 28,230 feed mills. By analyzing compound feed production and prices — collected by Alltech's global sales team and in partnership with feed associations and official data-collecting organizations — the survey provides a comprehensive snapshot of global feed production. These insights serve as a barometer for the overall livestock industry, highlighting key trends across species, regional challenges and opportunities for growth.

Most regions and species displayed modest growth in 2024, with poultry continuing to lead the way, albeit at a slower pace than in years past, likely due to disruptions from HPAI in North America and the Asia-Pacific region.

Ruminant feed production also made surprising gains — but pet continued to blaze a path as the fastest-growing sector thanks to premiumization.

Asia-Pacific stood alone as the only region to experience a decrease in feed production, due in part to a decline in China of 6.5 million mt. Disease outbreaks also played a significant role — with African swine fever (ASF) and HPAI wreaking havoc across the globe.

Nevertheless, the industry's adaptability, efficiency and willingness to meet challenges head-on paved the way for growth. Thanks to increased biosecurity measures and vaccine development, as well as new sustainability regulations and rising incomes in some regions, global feed production was able to hold steady and is projected to continue trending upward.

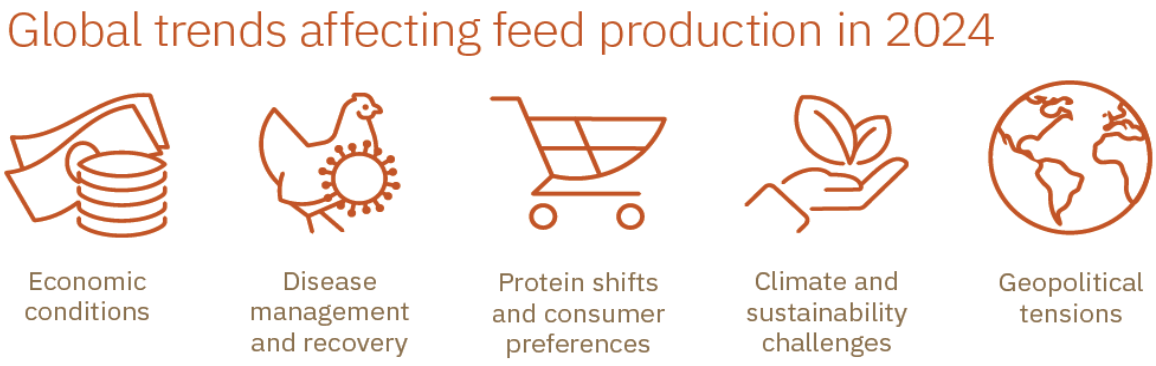
A closer look at the feed production numbers

The 1.2% growth in global feed production — up from 1.380 billion mt in 2023 to 1.396 billion mt in 2024 — was driven largely by the poultry sector, which retained its outsized command of the market share, accounting for 42.7% of all feed tonnage, although the sector's growth slowed somewhat this year due to HPAI. The ruminant (beef: +1.8%; dairy: +3.2%) and pet food (+4.5%) sectors also performed impressively.

From a regional perspective, resilience led to notable growth in Europe (+2.7%), Latin America (+3.6%) and Africa and the Middle East (+5.4%). In Oceania, Australia recorded a record 11% growth in its beef feed volumes.

The overall decline in production seen in Asia-Pacific (-0.8%) stemmed from sharp contrasts amongst species.

Gains in dairy (+2.4%) and pet feeds (+11%), for example, were largely offset by declines in aquaculture (-1.7%) and beef (-6.0%), resulting in a net decrease for the region. The pig feed sector experienced the biggest decline, decreasing by 6.3 million mt (-3.3%).



Major Trends Impacting Global Feed Production

Our 2024 feed survey identified several trends that impacted feed production and demand, including **disease outbreaks, economic factors,** the **environment** and **changing consumer preferences.**

Disease management and recovery

African swine fever (ASF) and avian influenza (HPAI) made headlines around the world in 2024, shaping feed usage for pigs and poultry — and impacting consumer buying patterns. The aquaculture and ruminant sectors also grappled with disease challenges that impacted production and reduced demand, including bluetongue and foot-andmouth disease.

Fortunately, many regions and sectors were able to rebound to end the year positively thanks to increased biosecurity measures, government regulations, and new import and trade opportunities.

The devastating impact of avian influenza

Every region of the world felt the impact of HPAI (also known as H5N1, highly pathogenic avian or bird flu) in 2024, primarily through the decimation of poultry flocks, disruptions in supply chains and subsequent price volatility in the animal protein markets.

• **North America** was significantly impacted, particularly in the egg and turkey sectors.

• **Europe** continues to grapple with the cyclicality of the disease despite innovative responses, including vaccination programs in France.

• In **Asia,** countries like Japan and South Korea have faced repeated outbreaks that challenge their supply stability and necessitate large-scale flock reduction and an increased dependence on imports.

• **Latin America** and **Africa** remain on high alert, with several countries adopting emergency vaccination measures to safeguard their poultry industries.

HPAI impacts more than the broiler, layer and turkey segments. The virus has also affected livestock herds — and while the direct effect on dairy cows has been less striking than for poultry, the heightened biosecurity and monitoring measures producers implemented disrupted typical farming operations, which impacted feed consumption patterns. Perhaps even more alarmingly, the detection of HPAI in humans — including farm workers and even veterinarians with no direct exposure to infected animals — highlights threats posed by the outbreak, which could lead to more stringent controls and slower recovery for the poultry industry.

The economic implications of HPAI have been profound, not only leading to direct costs associated with culling and containment but also influencing global trade dynamics and protein pricing structures. In the U.S., the significant loss of laying hens is expected to increase egg prices by more than 20%, due to the reduced supply. In February 2025, the U.S.

Department of Agriculture announced a $1-billion strategy to curb HPAI, protect the poultry industry and lower egg prices. This includes an additional $500 million for biosecurity measures, $400 million in financial relief for affected farmers, and $100 million for vaccine research, action to reduce regulatory burdens, and exploring temporary import options.

HPAI has been a major test for the global agri-food industry, underscoring the need for:

• More robust biosecurity measures.

• Cooperative international trade policies.

• Proactive crisis management strategies.

HPAI outbreaks cause immediate supply shocks, reshaping trade flows and pushing prices upward. This unpredictability fuels logistical complexity for poultry integrators, feed suppliers, exporters and importing nations. Nevertheless, **global poultry production is still projected to increase in 2025,** with analysts forecasting growth of 2.5–3% globally (Sherrard, 2025). Poultry remains in high demand, and other meats like beef are in shorter supply, so the incentive to expand poultry output is strong. The industry's challenge will be finding ways to maintain this growth while managing the disruptions brought about by disease outbreaks.

Economic impacts of avian influenza

Avian influenza (HPAI) is more than a health crisis — it's a major economic disruptor with ripple effects across global protein markets.

High direct costs

- Mass culling
- Biosecurity and containment measures
- Lost production and income

Global trade disruption

- Export bans and restrictions
- Supply chain interruptions
- Shifts in import demand

Protein price volatility

- Reduced poultry supply → Higher prices
- Higher demand for alternative proteins
- Long-term changes in consumer behavior

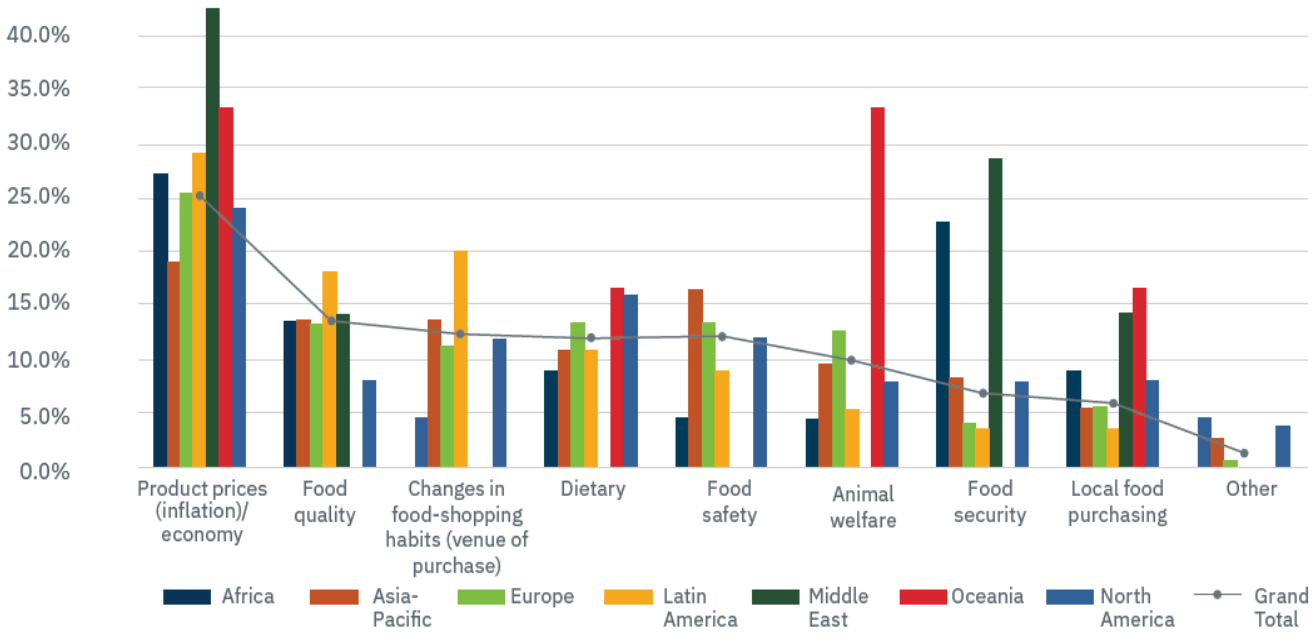


Fig. 1. Consumer trends affecting the agri-food sector by region

Economic pressures and a changing geopolitical landscape

Nearly 50% of the respondents who contributed to the Agri- Food Outlook survey reported that consumer behavior was most affected by the economy and protein product prices, which impact protein consumption habitsand animal feed consumption.

Similarly, on the production side, costs also shaped global dynamics — but some markets were able to use that to their advantage. Feed production got a boost in Asia, Europe and Latin America due to the lower costs of corn and soy, and the North American broiler sector benefited from high beef prices. Exports helped drive growth in pork, beef and poultry feed production in Oceania, Europe and Brazil.

Shifting geopolitical and trade dynamics also played a major role. Uncertainties related to the trade relationship between the United States and China, for example, impacted those countries' pork and soybean markets.

Survey respondents from Africa and the Middle East listed conflict and instability as the top issues affecting their feed production and buying habits, as many countries across the region rely heavily on imported feed ingredients — and conflicts in places like Sudan and elsewhere impeded their access to global supply chains.

Weather extremes leading to new sustainability legislation

Drought conditions in Latin America, North America, and Africa and the Middle East forced producers to increase their reliance on commercial feeds, leading to higher import costs. In Canada, which has faced four years of droughts — leading to conditions that many are likening to the 1930s Dust Bowl — crop insurance claims have surged sevenfold since 2021, and many grain-buying firms have declared bankruptcy.

In response, governments and other regulatory bodies around the world are taking action to enforce sustainability standards with the goal of fostering positive and lasting change. Changes in sustainability reporting led to increased feed efficiency in parts of Latin America and Oceania.

In Europe — which continues to lead the world in the adaptation of sustainable practices — new environmentally friendly innovations led to advancements in the aquaculture sector and others.

Because of these sustainability efforts, feed formulations in aquaculture are moving away from traditional ingredients, such as soy and fishmeal, toward more resource-efficient, lower-impact alternatives. In Norway, for example, the government's 2034 Sustainable Feed Mandate accelerates the move toward new protein sources made from waste or byproducts. This shift supports a more circular economy, potentially reducing costs and carbon footprints — while also meeting the rising expectations of regulators and investors for sustainable sourcing.

Shifting consumer preferences and habits

Poultry continues to benefit from consumer interest in lower-cost and more convenient protein options, especially in Asia, Latin America and Europe. Additionally, for both economic and environmental reasons, some consumers are committed to purchasing locally produced proteins — which was advantageous for the dairy sector in Oceania.

The pet industry has been the prime beneficiary of changing consumer preferences since the onset of the COVID-19 pandemic. Pet feed production surged around the world due to increases in pet ownership and premiumization trends, with many pet owners purchasing only the highest-quality options for their animal companions, which they consider as part of their family.

2024 Feed Tonnage by Region

This year's global feed survey estimated that the total global feed tonnage increased 1.2% over 2023, an increase of 16.7 million mt to approximately 1.396 billion mt.

Asia-Pacific (533.1 million mt): Feed production was down slightly in the region (-0.8%), though Asia-Pacific remained the largest feed producer overall. The decrease was largely due to headwinds in China as well as ongoing weather extremes, oversupply, and cheap feed alternatives that hampered expansion.

North America (290.7 million mt): The second-largest feed producing region saw a modest increase (0.6%) across beef, poultry and pork that was offset by HPAI impacts (in layers and turkeys) and stagnant aquaculture production.

Europe (267.8 million mt): Rebounds in pig, beef and aquaculture feed led to a 2.7% increase in total feed production, but structural constraints (sustainability policies and herd declines) will temper future expansion.

Latin America (198.4 million mt): The region experienced solid gains driven by robust poultry, pork and beef demand, as well as favorable export markets. Total feed production increased 3.6%.

Africa and the Middle East (95.5 million mt): This region had the strongest percentage growth (+5.4%), but it started from a smaller base. This growth reflects expanding commercial feeds in poultry, ruminants and pet food.

Stable growth in the Middle East in poultry and beef has been tempered by water scarcity and import costs.

Oceania (11.0 million mt): Gains in beef and aquaculture from low baselines led to an increase of 2.5% in overall feed production. Feedlot usage is high in Australia, but New Zealand's herd declines constrain further growth.

Tabl 1 - Feed Tonnage by Region

Region	2024 feed tonnage (million mt)	2023 feed tonnage (million mt) – updated*	Growth (million mt)	Growth (%)
Africa	57.787	53.895	3.893	7.2%
Asia-Pacific	533.137	537.251	(4.114)	-0.8%
Europe	276.761	260.779	6.982	2.7%
Latin America	198.376	191.490	6.886	3.6%
Middle East	37.682	36.657	1.025	2.8%
North America	290.724	288.957	1.767	0.6%
Oceania	10.972	10.706	0.266	2.5%
Grand Total	**1,396.438**	**1,379.734**	**16.705**	**1.2%**

**Figures used in Alltech's Agri-Food Outlook are updated throughout the year as official feed tonnage information becomes available. Our 2023 data has been adjusted to reflect final figures.*

Tabl 2 - Feed Tonnage by Sector

Sector	2024 feed tonnage (million mt)	2023 feed tonnage (million mt) – updated	Growth (million mt)	Growth (%)	Percentage of total feed production
Aqua	52.966	53.568	(0.602)	-1.1%	3.8%
Beef	134.054	131.627	2.427	1.8%	9.6%
Dairy	165.500	160.426	5.074	3.2%	11.9%
Equine	9.630	9.414	0.215	2.3%	0.7%
Other ruminants	23.636	23.148	0.488	2.1%	1.7%
*Other species	7.874	8.188	(0.314)	-3.8%	0.6%
Pet	37.692	36.068	1.624	4.5%	2.7%
Pig	369.293	371.406	(2.113)	-0.6%	26.4%
Poultry	595.795	585.889	9.905	1.7%	42.7%
Grand Total	**1,396.438**	**1,379.734**	**16.705**	**1.2%**	**100%**

**The "other species" category includes: Minor or specialty livestock (e.g., rabbits, deer/other cervids, camelids); game birds not included under poultry (e.g., quail, pheasant); and any exotic or niche species raised on farms or in other managed environments.*

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