

奧特奇第九屆全球飼料調查

Data Collected in a Two-Part Survey 調查數據分為兩部份













Quantitative定量:

Numerical data collected

Qualitative定性:

Short answer responses





來自145個國家 countries represented

13 個畜種species, including aqua, pets and equine

包括水產、寵物和馬

主要畜種有豬、牛、蛋雞和肉雞

Primary species represented: pigs, dairy, beef, layer and broiler

分析評估國家,區域 和全球趨勢

Analysis evaluates country, regional and global trends



Feed production expectations 預期飼料產量

Factors contributing to consistency

促進一致性的因素

Consumer trends affecting agri-food 影響農業食品的消費趨勢

Environmental sustainability concepts and initiatives 環境可持續性概念和倡議

The impact of geopolitical tensions 地緣政治緊張局勢的影響



Effects of disease, including imports and exports

疾病的影響,包括進出口

New advancements in ag-tech

農業技術的新進步

Biggest opportunities in the feed industry

飼料產業的最大機會

Biggest challenges in the feed industry

飼料產業最大的挑戰

Trends in aquaculture 水產養殖趨勢

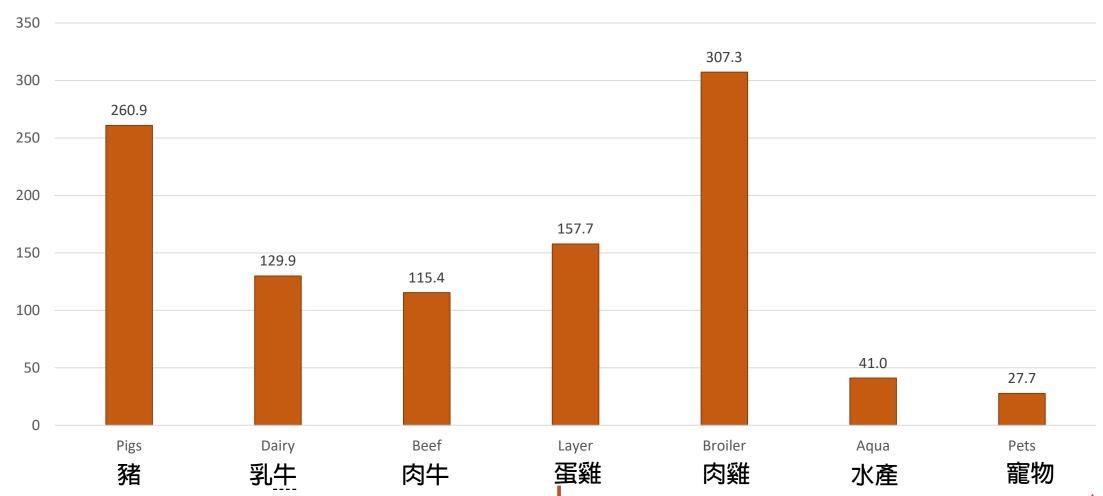




Global Feed Production Down 1% 全球飼料生產量下降1%

| Region | 2018 | 2019 | Percent Change %變化 |
|-------------------|---------|---------|-----------------------|
| Africa非洲 | 40.7 | 43.7 | 7.5% |
| Asia-Pacific亞太 | 384.5 | 363.2 | -5.5% |
| Europe歐洲 | 278.8 | 279.2 | 0.2% |
| Latin America拉丁美洲 | 164.3 | 167.9 | 2.2% |
| Middle East中東 | 27.6 | 26.0 | -5.8% |
| North America北美 | 232.2 | 236.0 | 1.6% |
| Oceania大洋洲 | 10.7 | 10.5 | -1.3% |
| TOTAL合計 | 1,138.2 | 1,126.5 | -1.0% |

Feed Production by Species 飼料產量_依畜種分類





Top 9 Countries of 20192019年飼料產量排名前9個國家

| Country 國家 | Feed Production 飼料產量 | Primary Species主要畜種 |
|------------|----------------------|--------------------------------------|
| USA美國 | 214.4 | 肉牛,豬,肉雞 Beef, pig, broiler |
| China中國 | 167.9 | 肉雞, 豬, 蛋雞Broiler, pig, layer |
| Brazil巴西 | 70.4 | 肉雞,豬Broiler,pig |
| Russia俄羅斯 | 40.5 | 豬, 肉雞Pig, broiler |
| India印度 | 39.0 | 蛋雞, 肉雞, 乳牛Layer, broiler, dairy |
| Mexico墨西哥 | 36.2 | 肉雞,蛋雞,豬,乳牛Broiler, layer, pig, dairy |
| Spain西班牙 | 34.8 | 豬, 肉牛, 雞牛Pigs, beef, dairy |
| Japan日本 | 25.3 | 蛋雞,豬,肉牛Layer, pigs, beef |
| Germany德國 | 25.0 | 豬, 肉牛Pigs, beef |







Pig Feed Production 豬料產量

| Region | 2018 Pigs 豬料 | 2019 Pigs 豬料 | Growth成長 |
|-------------------|--------------|--------------|----------|
| Africa非洲 | 1.1 | 1.4 | 29% |
| Asia-Pacific亞太 | 125.4 | 93.3 | -26% |
| Europe歐洲 | 80.1 | 79.5 | -1% |
| Latin America拉丁美洲 | 31.5 | 32.2 | 2% |
| Middle East中東 | 0.0 | 0.0 | 0% |
| North America北美 | 52.7 | 53.1 | 1% |
| Oceania大洋洲 | 1.5 | 1.3 | -7% |

Swine Feed Down 26% in Asia-Pacific 亞太區豬飼料減少26%

| Country國家 | 2018 Pigs 豬料 | 2019 Pigs 豬料 | Percent Decline減少比率 |
|--------------------|--------------|--------------|---------------------|
| China中國 | 79.600 | 51.740 | -35% |
| Vietnam越南 | 11.037 | 8.720 | -21% |
| The Philippines菲律賓 | 7.990 | 7.350 | -8% |
| Japan日本 | 5.585 | 5.552 | -1% |
| Thailand泰國 | 6.640 | 5.549 | -16% |
| Taiwan台灣 | 3.080 | 3.017 | -2% |
| Cambodia柬埔寨 | 0.900 | 0.700 | -22% |
| Malaysia馬來西亜 | 0.700 | 0.680 | -3% |
| Mongolia蒙古 | 0.028 | 0.027 | -4% |
| Sri Lanka斯里蘭卡 | 0.008 | 0.005 | -38% |

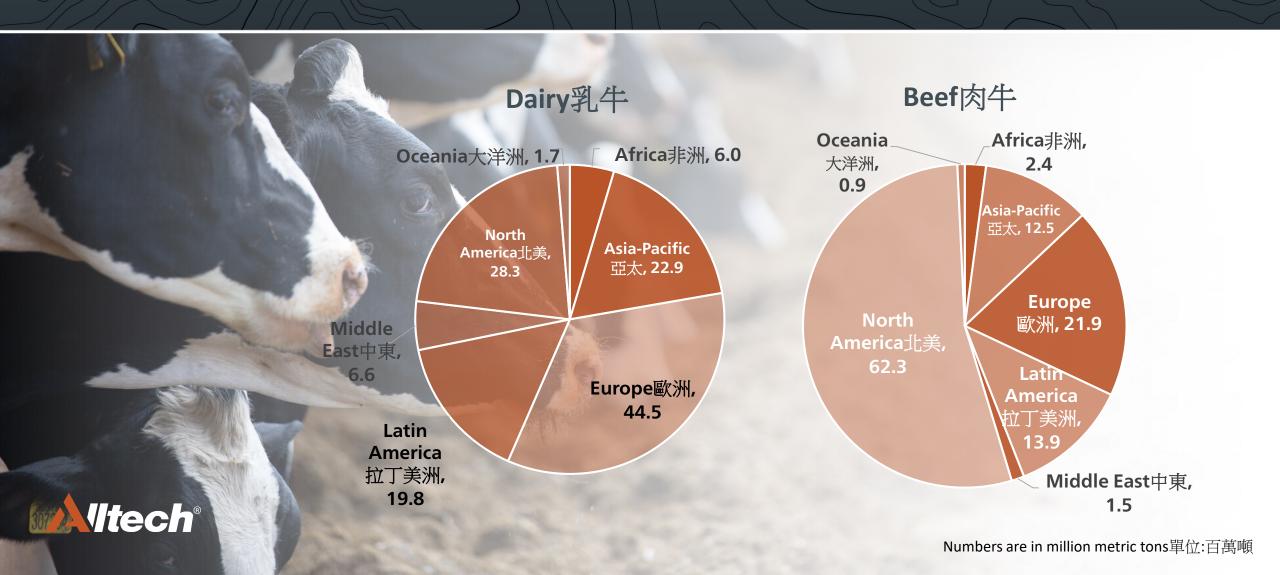




Poultry Feed Production 家禽飼料產量

| Region | Layer蛋雞 | Broiler肉雞 | Turkey火雞 | Other Poultry其他 |
|-----------------------|---------|-----------|----------|--------------------|
| Africa非洲 | 5.7 | 10.0 | 0.6 | 0.2 |
| Asia-Pacific亞太 | 73.1 | 115.2 | 0.01 | 9.5 |
| Europe歐洲 | 33.5 | 56.3 | 7.9 | 4.4 |
| Latin America 拉丁美洲 | 24.0 | 61.8 | 0.3 | 0.1 |
| Middle East中東 | 4.9 | 8.4 | 0.1 | 0.1 |
| North America北美 | 15.5 | 51.8 | 9.8 | 0.2 |
| Oceania大洋洲 | 0.9 | 3.8 | 0.1 | 0.1 |

Ruminant Feed Production反芻飼料產量



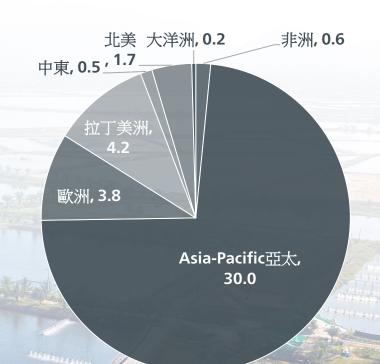
Aquaculture Feed Production水產飼料產量

Per ton, Asia-Pacific grew the most with an additional 1.5 MMT. The primary contributors to this growth were China, Vietnam and Bangladesh.

總體而言,水產飼料比去年成長了4%。亞太地區成長最快,增加了1.5百萬噸,主要成長的國家有中國、越南和孟加拉。

Europe's decrease is in large part due to a decline in feed production in Russia, which is primarily due to an increase in imports.

歐洲的產量下降主要是由於俄羅斯的飼料產量下降,主要原因是進口量增加。





Pet Feed Production Up 4% Globally 全球寵物飼料生產量成長4%

The largest tonnage increases were seen in Asia-Pacific, Europe and Latin America.

成長最多的依次是亞太(10%),歐洲(3%)和拉丁美洲(6%)。

By country, primary increases were seen in China, Indonesia, Portugal, Hungary, Ecuador and Argentina.

依國家別區分,中國、印尼、 葡萄牙、匈牙利、厄瓜多和阿根 廷的總量都有所增加。

| Region | Feed Production 飼料生產量 | Growth成長 |
|-------------------|--------------------------|----------|
| Africa非洲 | 0.4 | 13% |
| Asia-Pacific亞太 | 3.1 | 10% |
| Europe歐洲 | 8.8 | 3% |
| Latin America拉丁美洲 | 6.0 | 7% |
| Middle East中東 | 0.1 | 0% |
| North America北美 | 8.8 | 0% |
| Oceania大洋洲 | 0.5 | 0% |



Equine Feed Production馬飼料產量

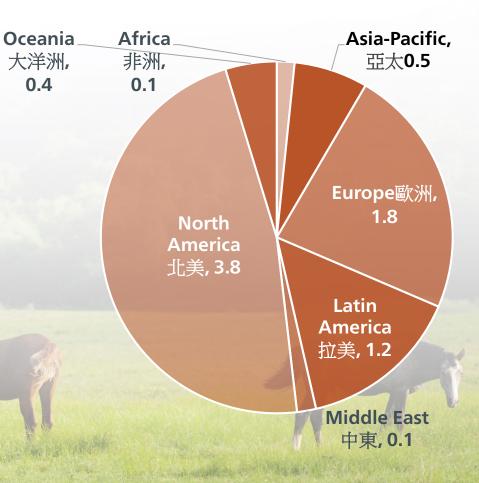
Globally, feed production estimations for the equine sector will remain relatively flat.

全球整體來說,養馬產業的飼料產量估計維持相對平穩。

North America continues to produce almost half of all horse feed (47.5%). 全球馬飼料將近一半產量(47.5%) 由北美生產

Europe produces about 23%, with the other regions making up the remaining 28%.

歐洲產量約佔23%,其他地區佔其餘28%。









African swine fever非洲豬瘟 Changing consumer demands 消費者需求改變

Geopolitical tensions 地緣政治緊張局勢

Government regulation

政府監管

Environment and sustainability 環保及永續性

New technologies 新科技



亞太區被非洲豬瘟重創導致:The Asia-Pacific region was significantly impacted

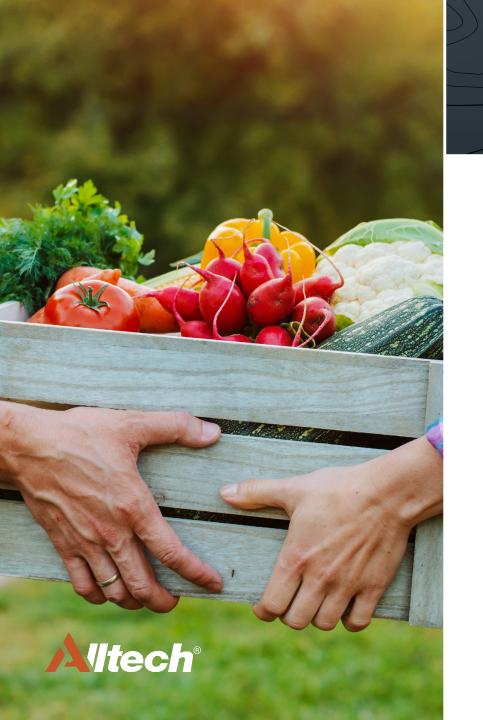
- 豬飼料生產下降26% Pig feed production down 26%
- 蛋白質替代品產量提高: 蛋雞7%及肉雞6%

Protein alternatives up: Layer (7%) and broiler (6%)

 受影響最大的國家:中國,柬埔寨, 越南,泰國,菲律賓和蒙古Most affected countries: China, Cambodia, Vietnam, Thailand, the Philippines and Mongolia

歐洲也受到影響,主要是愛沙尼亞,拉 脫維亞,立陶宛,羅馬尼亞,烏克蘭, 保加利亞;

- 未受影響國家的豬價上漲20%
- Europe was also affected, primarily Estonia, Latvia, Lithuania, Romania, Ukraine, Bulgaria
 - Pig prices up 20% in unaffected countries



Changing Consumer Demands 消費者需求改變

Europe 歐洲

Animal welfare and climate change concerns

動物福利及氣候變化議題



Increase in vegetarianism and veganism 增加素食主義和蔬食主義者

Latin America 拉丁美洲

Concern about GMOs
Desire for antibioticfree關注因無抗所發生的
基轉議題

Interest in food procurement 食品採購的喜好



美國失去之前大部分出口中國 路線;不確定多久才會恢復 The U.S. lost much of its previous export routes to China; time will tell how much ground it can regain. 為拉丁美洲和歐洲市場創造了牛肉, 家禽和豬肉的機會。 The tiffs created positive opportunities for Latin America and Europe by reopening markets specifically for beef, poultry and swine.



亞太區:

中國支持養豬業的政策;

馬來西亞,孟加拉, 汶萊,印尼亞和新加 坡對重金屬的擔憂

歐洲:

荷蘭,波蘭和希臘 減少飼養動物的數 量

北美:

加拿大已開始徵收 碳稅;

美國減少了抗生素 生長促進劑

大洋洲:

紐西蘭政府發布了新 的排放目標





乾旱風暴:

澳大利亞,智利,愛爾蘭,荷蘭,羅 馬尼亞,英國,摩洛哥,南非,美國, 加拿大等

Discussion around climate change has left many countries uncertain about potential impact or government regulation.

有關氣候變化的議題使許多國家都對其潛在影響或政府監管有不確定性。



New Technologies 新科技

新興趨勢 EMERGING TRENDS:

監控和追踪程序

Monitoring and tracking programs

無人機和GPS檢查牧場動物
Drones and GPS to check pasture
animals

數字平台/乳牛管理 Digital platforms/cow management

機器人擠奶Robotic milking

現況發展 ON THE HORIZON:

增加生物安全措施的技術 Tech to increase biosecurity measures

區塊鏈預計很快就會產生重大影響 Blockchain is expected to have significant impacts in the near future

減少牛的溫室氣體排放和腸内甲烷的技術 Tech to reduce greenhouse gas emissions and enteric methane in cattle

大數據與雲端計算 Vitech® Big data and cloud computing



Changes in 2019 evaluations

為了持續提高數據的準確性,奧特奇今年的分析方式進行了修改:將大洋洲與亞太區的數據分開分析以反映更廣泛區域現況。此次調查調整了美國家禽和反芻動物的計算方式,以更準確地反映所需的飼料量。因此,我們利用新的計算方法調整了2018年的分析數值,以保持2018年和2019年的一致性和準確比較。

Avid readers of the Alltech Global Feed Survey may have noticed some changes to this year's analysis. Primarily, the Oceania region was separated from Asia-Pacific in order to follow a more widely accepted regional analysis.

Secondly, the beef feed production estimation was recalculated to improve its accuracy. The new estimate takes into account the average days on feed and intake as a percentage of body weight in the feedlot. Please note last year's estimation was also recalculated to reflect this formula change for a proper year-on-year comparison.