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What To Expect in the Aquaculture Industry in 2023

Top Takeaways From the GSA GOAL Conference 2022

Summary

Industry experts at the 2022 Global Seafood Alliance (GSA) GOAL Conference remain optimistic about long-term growth in aquaculture despite increasing concerns about costs and market conditions heading into 2023. Global shrimp supply is on positive trajectory, driven by a supply push from Ecuador, while salmon supply growth from Norway and Chile is expected to normalize in the short term.

This report is accompanied by the results of our annual Global Seafood Alliance (GSA) GOAL finfish aquaculture and shrimp production survey and forecasts. Rabobank collaborated with its network of industry experts to provide insights and forecasts for key aquaculture species.

Shrimp: 6 Million Metric Tons by 2023 Within Reach

Ecuador's Historic Growth Will Lift the Americas Above 2m Metric Tons by 2023

Ecuadorian shrimp production is set to cross the 1.35m metric ton mark in 2022. Our annual GOAL survey indicates year-on-year growth of 18% in 2022 (*see Figure 1*), but current data suggests supply growth of 30% is more likely. This would give Ecuador its largest single-year volume growth recorded, adding over 300,000 metric tons in supply – only slightly lower than Thailand's total annual production. Continued growth driven by Ecuador will lift the Americas over the 2m metric ton mark by 2023.

Asia Set for First Decline Since 2013

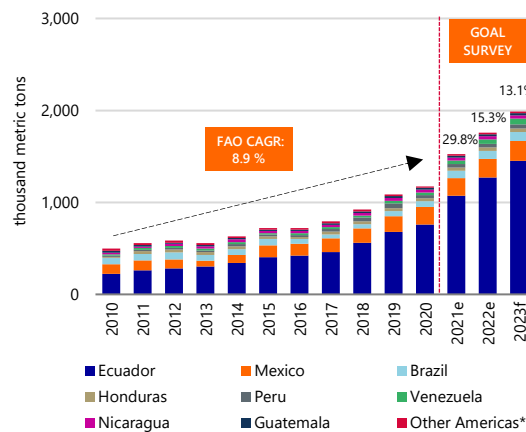
In 2022, Asia, the largest shrimp producer, is expected to experience its first production decline – albeit a small one, at 0.1% – since 2013, the year when the outbreak of Early Mortality Syndrome (EMS) was at its peak (*see Figure 2*). In 2023, however, we expect Asian production to rebound with supply growth at over 4% YOY, lifted by higher production in China and India and a slight increase in Vietnam, pushing Asian production above 4m metric tons in 2023.

Bullish expectations for 2023, driven by Ecuadorian growth and China's recovery

Overall global supply in 2022 is expected to increase by 4.2%, slightly lower than the historical rate, driven primarily by Ecuador and the Americas, which compensate for flat growth in Asia. However, the industry remains optimistic about supply in 2023, as Ecuadorian supply growth is expected to be supplemented by a strong recovery in Chinese production of 9.5%.

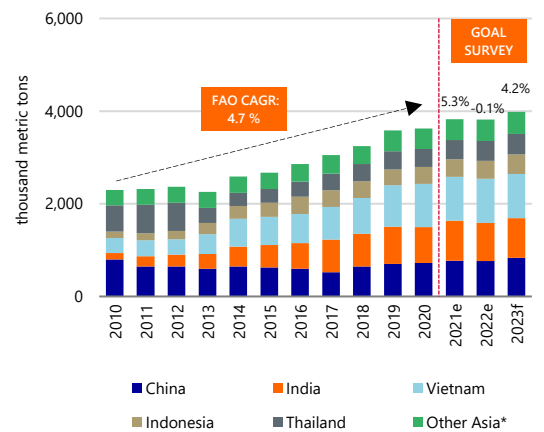
Read the complete 2022 [Global Shrimp Aquaculture Production Survey and Forecast](#).

Figure 1: Ecuador is pushing production in the Americas over the 2m metric ton mark



*Note: Other Americas includes Colombia, Costa Rica, Cuba, and Panama
Source: GOAL Survey 2022, Food and Agriculture Organization of the United Nations (FAO), Rabobank 2022

Figure 2: Asian rebound expected in 2023, following first decline since 2013



*Note: All others includes Bangladesh, Myanmar, Brunei, Japan, South Korea, Taiwan, Philippines, Malaysia, Saudi Arabia, and Iran.
Source: GOAL Survey 2022, FAO, Rabobank 2022

Salmon: Norway and Chile Normalize Production Growth as Others Accelerate

Growth for Norway and Chile To Normalize After Turbulent Two Years

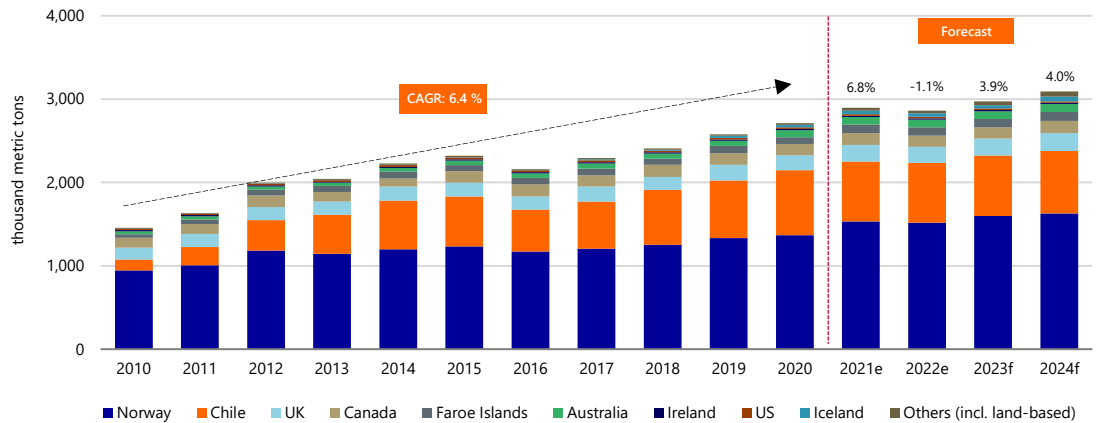
After a volatile 2021 that saw Norway expand year-on-year supply by 11.9% and Chile contract by 7.7%, 2022 is expected to deliver the first overall salmon production decline since 2016. Slow growth in 2022 is expected to be followed by volume expansion of roughly 4% in both 2023 and 2024. Supply for Norway and Chile in 2022 is expected to decline by 0.9% and 0.3%, respectively, followed by normalization of growth from 2023 to 2024 at CAGRs of 3.5% and 2.5%, respectively, as both countries use regulatory controls to moderate supply growth (see Figure 3).

Opportunities for Faroe Islands and Iceland

Cumulative supply growth (CAGR) for Norway and Chile is expected to drop to 3.1% for 2022 to 2024, compared to the 7% historical CAGR between 2010 and 2021. These lower growth expectations for Norway and Chile create an opportunity for Iceland and the Faroe Islands to become more relevant drivers in global supply this decade. The Faroe Islands experienced strong growth in 2021, expanding supply by 31% versus 2020, but volumes for 2022 and 2023 are expected to decline by 4% and 1%, respectively, followed by a 10% increase in 2024, which would put Faroe Island production above its previous 2021 peak production volumes. Iceland increased its volume by 44% in 2021, making it the fastest-growing producer in percentage terms. Expectations are that the country will reach 51,000 metric tons by 2023, exhibiting year-on-year growth of 7.8% in 2022 and 6.2% in 2023 (see Figure 3).

Read the full salmon forecast in the 2022 [Global Finfish Aquaculture Production Survey and Forecast](#).

Figure 3: Slowdown of salmon production growth expected over the next few years



Source: Kontali, Rabobank 2022

Diverging Trends for Tilapia and Pangasius

Tilapia Growth Accelerating as It Diversifies Consumption Markets

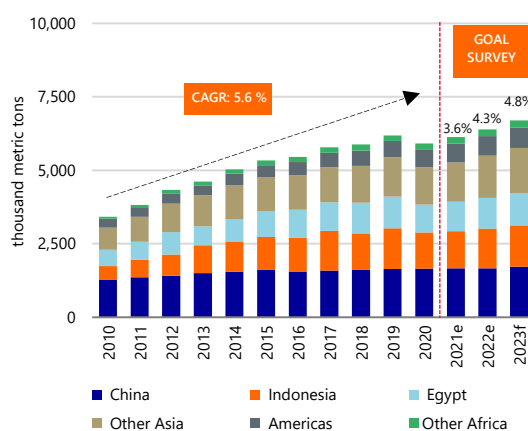
Latin America is leading the growth in Tilapia, although production there is still small compared to China, Egypt, and Indonesia. In 2021, Tilapia experienced flat supply growth in China, which was offset by stronger supply growth from Brazil. Tilapia supply growth is accelerating, with expected year-on-year growth of 4.3% in 2022 and 4.8% in 2023. This is only slightly lower than the long-term CAGR trend of 5.6% seen over the last decade (see Figure 4).

Pangasius Rebounding but Remains Below 2019 Levels

Pangasius supply has stumbled due to a slowdown from major supplier Vietnam, with supply still to recover following a decline in 2020. In 2021, the trend continued with supply contracting a further 1.5%. However, Vietnamese supply is expected to experience 3.1% growth in 2022, reaching around 2.8m metric tons, which is still below the 3m mark set in 2019 (see Figure 5).

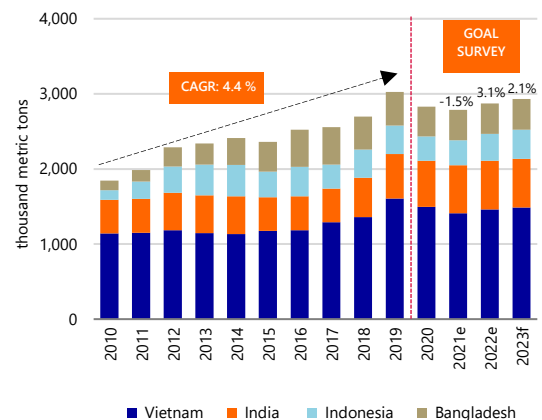
Read the full tilapia and pangasius forecast in the 2022 [Global Finfish Aquaculture Production Survey and Forecast](#).

Figure 3: Tilapia accelerating toward new high in 2023



Source: GOAL Survey 2022, FAO, Rabobank 2022

Figure 4: Pangasius recovering, but still below 2019 levels



Source: GOAL Survey 2022, FAO, Rabobank 2022

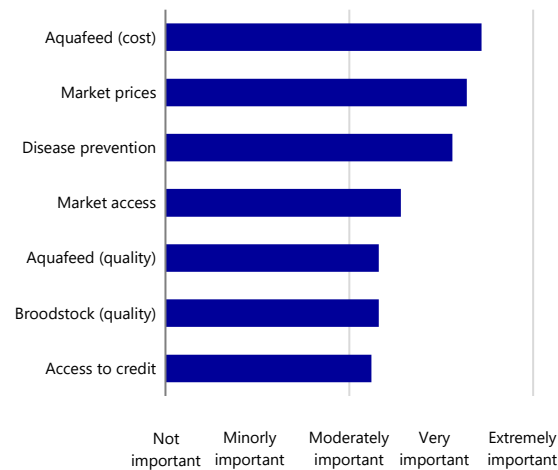
Inflation and Volatile Feed Markets Raising Concerns for Supply Growth

Aquafeed and market prices have consistently been the top concerns for fish farmers over the past few years. In the [2021 GOAL Survey](#), industry experts' top concern was market prices. However, the markets for feed ingredients have been volatile since start of the war in Ukraine, which led to a supply shock and sent prices soaring. This has pushed aquafeed prices to the top as fish farmers' primary concern heading into 2023 (see [Figure 6](#)), with low expectations for prices to decline in 2023 (see [Figure 7](#)).

Other concerns have not shown much movement in the rankings, with the exception of 'quality of feed' and 'access to credit,' both jumping up five spots to the fifth and seventh positions, respectively, heading into 2023. Industry participants highlighted an increased concern about feed quality, which was not among the top ten concerns heading into 2022. Producers are also increasingly worried about their access to credit as central banks raise interest rates in order to combat inflation and lenders curtail credit.

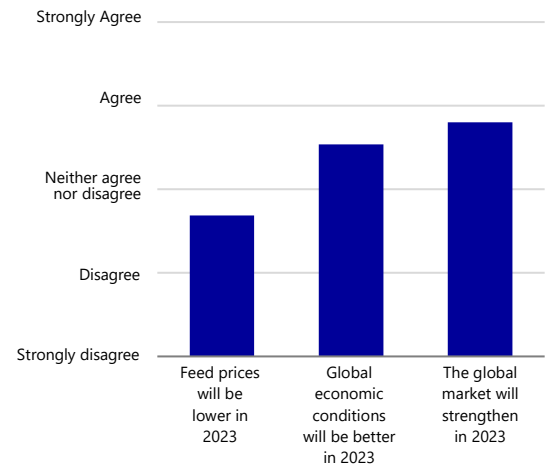
Read the complete 2022 [Global Shrimp Aquaculture Production Survey and Forecast](#) – including industry sentiment questions.

Figure 5: Feed costs back as the top concern for industry participants, 2022



Source: GOAL Survey 2022, Rabobank 2022

Figure 6: Industry pessimism due to economic and market uncertainties, 2022



Source: GOAL Survey 2022, Rabobank 2022

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