



Sustainable Aquaculture and Marine Biology: New Challenges and Strategies

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Important and scope

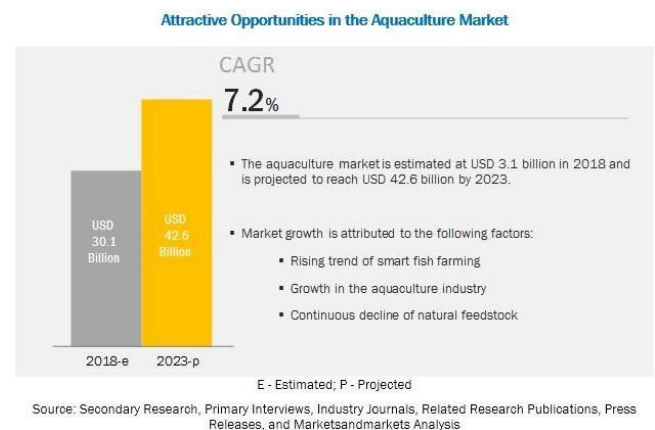
Fishing in lakes, rivers, and oceans has been a major source of food, employment, and other economic benefits for humankind since the dawn of time. Aquaculture is currently regarded as the world's fastest-growing food-producing sector. Seafood consumption is increasing as people become more aware of the health benefits and nutritional value of seafood. Furthermore, increased demand for fish oil in industries such as healthcare, pharmaceuticals, food, and nutritional supplements, among others, contributes considerably to market expansion. The combined effect of global aquaculture growth and population growth has resulted in a tenfold increase in the past two decades, in the average yearly per capita supply of edible fish for human consumption.

Fisheries and Aquaculture is the quickest developing food production system the global due to the lack of naturally available varieties of fisheries harvested in natural environments. Seafood intake has increased as people become more aware of the dietary benefits and nutritional value of seafood. Aquatic products, particularly cultivated salmon and shrimps, are exceptionally nutritious sources of food, consisting of important proteins, vitamins A, B, D, and Niacin, minerals like iron, iodine, zinc, and phosphorus. These foods also have a significant source of Omega-3 fatty acids for example docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA).

As per forecasts an annual growth rate for the worldwide aquaculture industry of 4.46 percent for the 5year period between 2018 and 2022. According to the report, the CAGR in 2018 will be 3.72 percent, followed by 4.12 percent in 2019, 4.50 percent in 2020, 4.83 percent in 2021, and 5.15 percent in 2022.

The aquaculture industry is expected to grow from USD 30.1 billion in 2018 to USD 42.6 billion in 2023, representing a 7.2 percent compound annual growth rate (CAGR). This is ascribed to the developing utilization of fish for its health benefit.

Furthermore, the growing popularity of fly fishing and an increase in fish trade are driving demand for hydroponics products.



The Asia Pacific accounted for the largest share in the market. This is due to an increase in demand for innovative and cutting-edge aquaculture goods that assist producers produce higher-quality output with less land and increase the efficiency of aquaculture operations. Furthermore, export-oriented aquaculture sectors exist in nations such as China, India, Vietnam, Indonesia, and Thailand; the aqua farming sector is of critical importance in these countries, with players focusing on technology adoption and automation, which is projected to boost the market in this region.

Global Agriculture & Aquaculture Universities:

- Iowa State University, USA
- Purdue University, USA
- Royal Agricultural University, England
- Harper Adams University, UK
- University of Reading, UK
- University of Aberdeen, Scotland
- University of St Andrews, UK
- Mendel University, Czech Republic

- Swedish University of Agricultural Sciences, Sweden
- University of Dubrovnik, Croatia
- Beijing Agricultural University, China
- Southwest University, China
- Nanjing Agricultural University, China

Global Agriculture & Aquaculture Companies:

- Golden State Foods, USA
- Kerry Group, Ireland
- Vilmorin, France
- Adler Seeds, USA
- China Agri-Industries Holdings, China
- ContiGroup Companies, Belgium
- Case Corporation, USA
- Heritage Foods, India
- New Holland Agriculture, Italy
- John Deere Tractor, USA