



Advancements and Innovations in Aquaculture and Fisheries

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Agriculture can help 80 percent of the world's poor, who work mostly in agriculture, better their economic situations, increase their earnings, and enhance their food security. The demand for enhanced seeds, pesticides, and fertilizers is expanding as a result of contemporary farming techniques. In addition, the usage of sensors and the increasing acceptance of livestock facial recognition is assisting the market's growth. Growing government support for the development of innovative agricultural practices, as well as increased global awareness of the benefits of agriculture, is predicted to boost the agricultural market's growth in the future.

The processed food industry has grown as a result of the modern world's replacement of home-cooked dishes with processed goods. The worldwide food processing equipment market is driven by increasing consumer demand for processed food, emphasis on food safety and worker safety, growing need to boost productivity, the rising concentration of producers of food items to lower production costs, and government support to promote the food processing industry.

Aquaculture is also soon becoming the world's fastest expanding food-producing sector. As the world's population grows, so does the need for aquatic food products. Capture fishing production has increased, and most of the major fishing areas have surpassed their maximum capacity. Sustaining fish supply through fisheries capture will not be enough to fulfill the rising worldwide demand for aquatic food.

Scope and Importance: For developing countries, agriculture, food, and aquaculture are major sources of revenue. By 2022, the worldwide food technology industry is predicted to increase dramatically, with a value of more than \$ 250.43 billion. In 2012, the global market for probiotic components and supplements was worth

\$23.1 billion, \$27.1 billion in 2013, and \$36.7 billion in 2018. The processed food industry is also worth more than \$ 2 trillion globally, with over 400,000 companies. In 2015, the aquaculture market was worth USD 156.27 billion, and by 2021, it is predicted to be worth USD 209.42 billion. A number of factors have contributed to this rise, including favorable meteorological conditions, the availability of natural resources, and low-wage labor. Furthermore, North America and Europe are likely to expand rapidly in the foreseeable future.

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- National Oceanic and Atmospheric Administration
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