



International Conference on

Aquaculture

July 10-12, 2023 Melbourne, Australia

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Welcome to Aqua Farm 2023

Aqua Farm is delighted to welcome the participants to attend the distinguished conference scheduled during **July 10-12, 2023** at **Melbourne Australia**.

In the post-pandemic era, feeding the world faces new obstacle. This emphasizes the importance of fisheries and aquaculture as viable solutions for supplying high-quality food and nutrition to the world's growing population. Aquaculture continues to be the world's fastestgrowing food production sector, despite the fact that capture fish production has remained largely stable in recent decades. Aquaculture increased 11% to 106,109 tonnes accounting of 38% of total volume.

However, increasing the scale of aquaculture has resulted in a number of concerns that will require long-term solutions. During the projected period, the fresh water segment is expected to increase at the fastest rate of 5.9%, followed by the marine water segment at 5.8%. As a result, it's critical to disseminate information on technological advancements and new modern approaches to sustainable fisheries and aquaculture around the world.

This conference will bring together pioneers from around the globe to discuss the latest trends in Aquaculture. The sessions will provide an interesting insight into the topics presented by the researchers and experts in their field and there will be slots dedicated for Q&A's as well to provide a detailed discussion on the topics to make sure that there is an opportunity for active participation. Everybody with an enthusiasm for aquaculture, sea life science, including imminent producers, specialists, educators, understudies or organization people with employments identified with aquaculture and sea life science can go to the gathering. Aqua Farm summit is additionally appropriate to people who offer merchandise or administrations to the aquaculture and sea life science industry.

Relish one-on-one networking opportunity to share best interest, make business deals, meet new clients and reconnect with your peers as the industry professional meet under one roof.

Rapidly growing in the Asian-Pacific region and increasingly being integrated, this conference provides an exceptional value for industry experts, researchers and academics. Therefore 2023 is the perfect time for the world aquaculture community to focus on Australia.

Why to Attend Aquaculture Conference?

- Find out the new technologies that uplift progress in this field.
- Learn early industry best practices for aquaculture.
- Brand establishment.
- · Get the latest update on design and development.
- Understand the ethical considerations and challenges that surrounds aquaculture.
- Build the most effective relationships with global and regional players and policy makers, to ensure commercial sustainability.
- Build strong and scalable delivery network that encourage multi-stakeholder collaboration.
- Deep analysis into successful strategies for post-launch manufacturing scale up and delivery network integration which will reduce your time and lower costs.
- Make your voice heard as a thought leader through interactive with 10+ sessions including live Q&A and panels.

Key Topics

- Building and enabling conditions for sustainable aquaculture investment
- Aquaculture market and industries update
- Aquaculture nutrition & supplies
- Value chains and market for aquaculture products
- Supply, cost structure and demand analysis
- Aquatic ecosystem & aqua farming
- Disease diagnosis and management
- Mass cultivation of freshwater microalgae
- Fish physiology and biochemistry
- Aquatic genetic resources and seed supply
- Aquaculture engineering & waste management
- Aquatic pollution and toxicology
 - Innovation in aquaculture
 - Aquaponics
 - Seafood and Health
 - Hatchery technology

Who will Attend Aquaculture Conference?

By Sector

- Government bodies
- R&D and academic institutions
- Aquaculture association
- Business technology leader, aquaculture/ vaccine
- Packaging industry
- Nets and fishing equipment's manufacturers
- Cage manufacturers
- Cold storage facilities providers
- Ornamental fisheries industry
- Processing technology & equipment
- Aquaculture pharmacy
- Disease & health management
- Marketing/exports/distributors
- Raw material suppliers
- Water quality analysis & treatment companies
- Distributors, media & trade publications companies
- Inspection & certification agencies

By Role

- Government officers
- Researchers
- Farmers
- Vice president and Director
- Business technology leader
- Chief operations officer & Executive vice president
- Chief technical officer
- Science and regulatory policy officers
- Medical director
- Global lead
- Global product communications
- Head of commercial supply chain
- Head of regulatory affairs
- Channel & commercial strategy lead
- Government affairs and advocacy lead
- Global supply chain lead

Bruce Sambell Ausyfish Pty Ltd, Australia

Advisory Board Members



Luca Micciche Verdesian Life Sciences, Malaysia



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Australian Aquaculture Market

Seafood demand in Australia has increased considerably over the last three decades. Currently, Australia's consumer demand for seafood exceeds the supply from domestic production and continues to grow.

A planned large-scale prawn farm in northern Queensland is expected to add between 2,000 tonnes and 2,500 tonnes to aquaculture output over the period.

Prices are projected to remain low in 2020–21 and to begin a slow growth trend in 2021–22 and 2022–23, consistent with an assumed slow economic recovery.

Prices in 2023–24 to 2025–26 are expected to plateau but remain favourable. A plateauing price effect is expected as domestic and global supply continues to increase. Domestic salmon GVP is projected to reach 1.8 billion dollar in 2022–23, reflecting this increased.

Aquaculture increased 11% to 106,109 tonnes accounting of 38% of total volume.

Global Aquaculture Market

Much like farming, fishing has quickly evolved into an unreliable industry for all parties involved.

Global aquaculture market to reach 262 Billion dollar by 2026 annual growth rate (CAGR) of 3.6% from 2021-2026. Amid the COVID-19 crisis, the global market for aquaculture estimated at reaches \$378,005.5 million by 2027, registering a CAGR of 5.8%.

The U.S market is estimated at \$2.7 Billion, While China is forecast to grow at 4.9% CAGR.

Size of US\$177.3 Billion by the year 2027 trailing a CAGR of 4.9% over the analysis period 2020 to 2027. Among the other noteworthy geographic markets are Japan and Canada, each forecast to grow at 2.5% and 3.4% respectively over the 2020-2027. Within Europe, Germany is forecast to grow at approximately 2.7% CAGR.

AGENDA

Day-1 July 10, 2023

09am – 09.30 Opening ceremony

09.30 – 10:30 Keynote presentation

 Role of blue economy policy in sustainable development of aquaculture industries

Blue economy policy supports the overall contribution of the oceans to economies. It addresses the environmental and ecological sustainability of the oceans. It helps in creating bonds across borders and sectors through a variety of partnerships and encourages growth opportunities in both developed and developing countries.

10:30 - 11:00	Break
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11.00 – 12:00 Session

- Native aquaculture species

Australia is one of the major producers of barramundi, salmonids, tuna, prawns, blue mussels, red claws, Murray cod and oysters, among this barramundi is a popular farmed species in aquaculture business due to its high market demand and rapid growth. Offshore farming of aquaculture species majorly mussels has experienced exceptional growth in past few years, this high value species contributes to Australian aquaculture economy

12:00 – 13:00 Session

Recirculating aquaculture systems design and its application in waste management

Recirculating aquaculture systems is concerned with the creation and design of effective aquaculture system for both marine and freshwater environments. This are operated in both outdoor and indoor system. They primarily convert waste produced by organism into biomass. The design and management of these system is dependent on the farming operation's production goals and economics.

14:00-15:00 Session

- Aquaculture nutrition & supplies

With the development of new, balanced commercial diets that support optimal fish growth and health, fish nutrition has evolved substantially in recent years. The nutritional value of the feed varies depending on the type and life stage of the fish being cultured. When fish are raised in high-density indoor systems or cages and are unable to forage for natural food (e.g., algae, aquatic plants, aquatic invertebrates, etc.), a complete diet must be provided.

15:00 – 16:00 Session

- Value chains and market for aquaculture products

To be successful, through initial preparation and ongoing attention to business finances are required. The economics of aquaculture can be seen from a variety of viewpoints. It might be viewed from the perspective of a single aquaculture business, the entire industry, or the entire nation. Production, technical, or cost issues, as well as marketing issues, can all contribute to an aquaculture project's economic failure. As a result, entrepreneurs who want to run a profitable aquaculture business must pay close attention to economics, particularly value chain and marketing issues.

16:00 – 16:30 Coffee break

16:30 - 17:30 Session

- Supply, cost structure and demand analysis

Wild capture fisheries presently remain the dominant supplier, aquaculture and fish import are projected to play more important roles in sustaining fish supply to meet increasing demand to 2030. Increasing import tax to stimulate domestic aquaculture investment cannot solve fish deficit but can cause inflation (increasing fish prices). Depending on wild-catch will result the fish consumers vulnerable to fish supply. Investing in aquaculture development and improving capture fisheries management could be solutions for improving food and nutrition security.

Day-2 July 11, 2023

09:00 – 10:00 Keynote presentation

10:00 – 11:00 Sessions

- Mussel Farming- Offshore

Mussel is one of non-fed species in aquaculture, and they are the most consumed aquaculture category after fin-fish. Mussel market has experienced exceptional growth in the past few years, and it is expected to continue in coming years. The increase in the size of mussel industry can be accounted to product innovation, effective resource allocation and technological breakthrough

11:00 – 11.30 Break

11:30 – 12:30 Session

 Role of synbiotics (prebiotic and probiotic) in aquaculture development

Aquaculture is the fastest growing sector, so culture systems must be strengthened by use of probiotic and prebiotic dietary supplement that benefits the host animal by improving intestinal balance, health, and growth. However, animals in this culture are subjected to stress conditions that weaken their immune systems. As a result, disease control in the aquaculture industry has progressed significantly by employing traditional methods such as synthetic chemicals and antibiotics

12:30 – 13:30 Lunch break

- Disease diagnosis and management

Aquatic farm animals and plants, unlike other terrestrial farm animals and plants, require extra attention to maintain their health. Except in tank-holding settings, they live in a complex and dynamic habitat and are not easily seen. As a result, the difficulties that aquatic creatures encounter are species and system specific. Because of the complexity of the aquatic ecosystem, distinguishing between health, inadequate performance, and disease can be challenging. One of the primary issues faced by aqua culturists around the world is the variety of diseases present in the industry.

14:30 – 15:30 Session

- Oyster production, restoration and conservation

Oyster farming is one of the world's oldest forms of aquaculture. It offers ecological and economic benefits. Due to the constant increase in demand for seafood, aquaculture-based oyster production has increased globally. Oyster habitats are affected due to recent coastal urbanization and unsustainable harvesting to prevent this conservation and restoration agencies are emphasizing on rejuvenating oyster habitat

15:30 – 16:00 Break

16:00 – 17:00 Panel discussion

Challenges and implementations of sustainability in aquaculture

17:00-18:00 Sessions

 Sustainable shrimp farming- Prospects and challenges

Shrimp farming has grown rapidly in response to high demand in the international market. This rapid development is, however, accompanied by a lack of adequate national policy planning and regulation. This necessitates the pursuit of a holistic approach to sustainable shrimp farming.

Day-3 July 12, 2023

09:00 – 10:00 Session

- Aquatic ecosystem & aqua farming

This incorporates connections between people of analogous species, between various species, and among creatures and their physical and substance situations. Sea-going nature incorporates the investigation of those connections in every single sea-going condition, including seas, estuaries, lakes, lakes, wetlands, waterways, and streams. Biological system scientists expect how supplements, energy, and watercourse through an environment.

10:00 – 11:00 Session

- Sea food and health

As the world's population grows so does demand for terrestrial and ocean environments as food sources and providers of other ecosystem services. Continued growth and development put additional strain on our climate, and the resulting climatic changes will have an impact on regional food productivity. Our food systems rely primarily on land-based plant and animal production, but wild capture fisheries and, increasingly, inland and marine aquaculture—the farming of fish, shellfish, and aquatic plants—are important sources of micronutrient-rich foods.

11:00 – 11:30 Break

11:30 – 12:30 Session

- Aquatic pollution and toxicology

When hazardous contaminants are discharged directly or indirectly into aquatic systems without being removed, this sort of ecological deprivation occurs. Pollution of the water causes harm to organisms and vegetation that thrive in it, including amphibians. Industrial waste, mining activities, sewage and wastewater, marine dumping, fossil fuel combustion, accidental oil leakage, global warming, atmospheric deposition, and urban development are all major sources of aquatic contamination.

12:30 - 13:30	Lunch break
13:30 - 14:30	Session

- Aquatic genetic resources and seed supply

Fisheries genomics is a new area that uses genomes to answer problems about fisheries management. Rapid advances in genomics and quantitative analytical approaches, in particular, have led to breeders using genetic marker technologies to aid animal selection. Only with more advanced genomic-based methodologies, where it is now possible to properly forecast genome-wide molecular breeding values for superior animal selection, can these qualities be genetically improved. This method, known as genomic selection, has found widespread use in the aquaculture breeding communities.

14:30 – 15:00 Panel discussion

- Climate change in aqua culture

15:00 – 15:30 Break

15:30 - 16:30 Session

- Fish physiology and biochemistry

Physiology is the science of how an animal's body responds and interacts. Heart rate, oxygen consumption, body chemistry and hormones, and survival under a range of situations are all parameters that are frequently measured in fish physiology studies. Fish physiology is crucial for maintaining fish populations, particularly in modified waterways. Physiological studies can provide a wealth of information that can help with fish conservation and management. Aquatic biochemistry is a sub-discipline of veterinary biochemistry that deals with the biochemical composition of Aquatic animals.

16:30 – 17:30 Session

- Innovation in aquaculture

Aquaculture biotechnology and other technological innovations are showing a positive impact on aquaculture diversification success, investment potential, and international technology exchange. The development of biotechnology in aquaculture should provide a means of producing healthy and fast growing animals, through environmentally friendly means. However, this development will largely depends on the desire and willingness of the producers to work hand- in-hand with scientists and the international donor community to assist developing counties in related research, capacity building and infrastructure development.

17:30 Closing

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