



After experimenting with different cage designs, P.T. Fega Marikultura settled upon a durable monofilament material for its low-impact offshore operations.

P.T. Fega Marikultura Ramps Up Barramundi Production In Indonesia

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Summary:

After years of pilot-scale research and operations, P.T. Fega Marikultura is ramping up its offshore cages in Indonesia to raise high-quality barramundi. Taking a methodical animal health approach in its hatchery, the company cultures large numbers of hardy fry for stocking in its cages. Appropriate siting and effective cage design and materials support sustainable production of the popular fish.

Tucked away in the Thousand Islands, a group of 105 islands some 65 km north of Jakarta in the Java Sea, in the vast archipelago that is Indonesia, is an aquaculture project that is poised to become the leading offshore, open-ocean cage culture producer of barramundi: P.T. Fega Marikultura.

Native to this area of the Pacific, barramundi are relished for their delicate but firm and tasty flesh. Unlike other commonly cultured fish species with little taste, properly reared *Lates calcarifer* have a characteristic taste consistent with that of the wild fish that made them a sought-after delicacy.

Aquaculture production of this species has increased slowly but steadily over the last 25 years to the point where today more than 40,000 mt are produced annually. Thailand is the largest producer, although barramundi are also farmed in Taiwan and, to a lesser extent, in Vietnam, China, Malaysia, Indonesia, Australia and even

the United States. Demand for the fish is increasing in the U.S. and European Union, the world's largest seafood markets.

Company Development

P.T. Fega Marikultura is no stranger to aquaculture. In 1983, it constructed one of the earliest *Penaeus monodon* shrimp hatcheries in Indonesia on Jukung Island, an 11-ha island near the northern end of the Thousand Islands. The island offered an ideal biosecure environment for the production of postlarvae with unlimited high-quality ocean water available. The shrimp hatchery was converted into a fish hatchery in 1995.

Fega has since been actively engaged in research and development at the hatchery level with barramundi and a number of other local fish species, including grouper, snapper and pompano to ensure a consistent supply of high-quality seed. Taking a methodical animal health approach in the hatchery, the company now successfully cultures large numbers of hardy fry for stocking in its cages.

On its 2,300-ha open-sea concession, Fega has experimented with different cage designs, materials and locations. It has settled upon a rigid durable monofilament material for the cages that facilitates good husbandry techniques, such as easy high-pressure water cleaning.

The area in which the cages are sited has a strong current, so organic wastes are carried into the Java Sea and westward into the Indian Ocean. The cages are located in water that is around 35 m deep and securely moored to the seabed floor using time-tested technologies.

Marketing

Fega is undergoing a significant expansion as a result of increased interest in the consumer market for both fresh product and frozen fillets. Until recently, most of its fish were sold fresh. Fresh fillets are now delivered in less than 50 hours to the Los Angeles area and to five major cities in Australia in less than 30 hours.



A selective-breeding program will support traceability from the brood females to the customer's door.

Today, fish in the water reflect a potential harvest of 6,000 mt with more than 1,000 mt of fish sized 3 kg and up this year. Given the capacity of the hatchery and the current cage site, production is targeted to reach 30,000 to 40,000 mt by 2013. This remarkable growth would make P.T. Fega Marikultura the world's largest producer of ocean cage-reared barramundi.

Sustainability

A word now almost universally claimed to describe aquaculture operations is sustainable. While the basic definition of sustainability is typically agreed upon – activities today that do not threaten the ability of subsequent generations to engage in the same activities in the future – there is disagreement about how to achieve this.

It is widely felt that vertical integration is critical for sustainability, and Fega is pursuing total integration. Currently it produces all of its own seed, operates farming and growout operations, processes all of the fish it produces and has a firm grip on the market. A feed mill is planned.

Fega's operations are very low-impact from an environmental perspective. The offshore cage operation is located in an ideal area far away from any anthropogenic influences. The islands are sparsely populated, and their mainstays are fishing and ecotourism.

Management has a long-term commitment to the production of barramundi and other suitable species as market demands dictate. The company has been very systematic in its approach to growth, initially taking a slow, measured approach to production before ramping up in the current growth phase.

The nearest cage culture operations are 10 km away in another area of this group of islands. Currently in the earliest stages of a selective-breeding program, Fega can trace animals from the brood females to the customer's door, ensuring control over the entire process of production and giving consumers a high degree of confidence in product quality.

When you hear the name P.T. Fega Marikultura in the years to come, you will be able to link it to a state-of-the-art offshore cage-rearing operation that produces fish of the highest quality in an environmentally conscientious manner. The natural conditions of production ensure a consistent product that is as close as you can get to the taste of the fish in the wild.

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