

Fish 2.0 Market Report: Rights-Based Management An Investor Update on Sustainable Seafood



Rights-Based Management: A Foundation for Building Seafood Businesses

Wild-capture fisheries represent over \$270 billion in global economic value and deliver an essential protein source for nearly 3 billion people worldwide, but years of overexploitation are threatening wild-catch resources and related industries. In most resource-based market systems, such as agriculture and mining, harvest or property rights exist. However, fisheries have historically operated as a common good with open access rather than clearly defined rights to the fish, and this has resulted in overuse.

One solution to restoring wild-catch stocks is to implement Rights-Based Management (RBM) systems that include limited access and secure rights. RBM systems allocate rights to an individual, company, or boat for a specific share of a fishing resource or a specific area. These rights guarantee the owner a specific share of the total “allowable” catch, which may be changed depending on the health of the overall fishery. This creates an incentive for long-term sustainability, as the amount of fish one may catch—and, hence, the value of the rights—increases if the fishery is healthy. The sense of ownership creates security and stability in the fishery, built upon responsibly managed ocean resources.

With businesses built upon a well-managed resource, the entire value chain can thrive. This market stability enables consistent and predictable supply, time-balanced harvests, more secure employment, and increased investment opportunities.

Investors may seek opportunities along RBM-associated value chains including these:

- Investing in infrastructure, such as fishing gear and vessels, to enhance efficiency and competitiveness.
- Financing “quota banks” that buy quotas on behalf of communities and lease them to local fishermen rather than outsiders.
- Creating monitoring and enforcement technologies to capitalize on growing market and government requirements.
- Developing forward-contracting markets to support more well-planned fishing and secure businesses.
- Creating new branded products that highlight socially and environmentally responsible features of an RBM fishery and its products.

What Are Rights-Based Management Systems?

All well-managed fisheries possess three components: secure tenure, sustainable harvests, and robust monitoring and enforcement. Rights-based management (RBM) systems create the first of these: a secure tenure system for a resource that has historically been treated as a public good with open access. RBM is a game changer in the wild-catch industry as stakeholders are assigned asset rights and benefit from associated privileges.

Fisheries operating under RBM generally control resource use in one of three ways:

- Limiting access to the fishery: locally managed marine areas, fishing rights area, licenses
- Controlling fishery inputs: fishing effort, time fished, gears or size of boat, fishing accessories
- Controlling fishery output: total allowable catch shares, quota banks

Currently there are 195 RBM systems around the world, and up to 20% of fish landings by value occur in RBM fisheries. RBM still takes place largely in developed countries, as these nations may be able to more easily gain policymaker support and management resources for implementation and enforcement.



Source: NOAA

Market Benefits of RBM

Specific market benefits of RBM include the following:

- **Accountability.** Participants are required by law to stay within geographic or quota limits and apply monitoring, control, and surveillance.
- **Stock Control.** Environmental agencies determine the total allowable catch to support fish stock regeneration and sustainability.
- **Enforceable Exclusivity.** Only certain entities can harvest fish, and these rights are defensible by law.
- **Security.** Once granted, the property right is irrevocable and cannot be challenged by individuals, institutions, or governments. This is important as RBM takes time to yield benefits.
- **Transferability.** Temporary or permanent transferability enables economic efficiency and allows entities holding rights to decide whether to sell to community members or outsiders.

Implementation Challenges

The initial implementation of RBM presents a number of challenges. Once the system is in place, it can be adaptive if the right governance mechanisms are provided.

- Considerable collaboration is needed to set up and manage the government, local community fishing bodies, public sector partners, and private entities that hold and manage the rights.
- Fishermen who are highly dependent on fisheries but cannot access quota will endure challenges from restricted rights allocation or moratoriums.
- The systems are expensive to manage, with costs ranging from 4%–10% of capture value.
- Information gaps can create problems, with misinformation leading to failed management or failed fisheries.
- In some cases, a fisherman's emphasis on cash-in-hand vs. future value can limit the stewardship incentive or present conflicts of interest.

Environmental Benefits: Fish Stock Regeneration

Fish populations under RBM systems have a lower incidence of overexploitation, and RBM has been demonstrated to halt, and sometimes reverse, fishery collapse.

Well-run RBM systems can also result in up to a 50% reduction in bycatch. As fresh, traceable seafood is highly valued, the industry can leverage these environmental benefits into a local-catch story and associated brand value.

Social Impacts: Improved Earnings and Safety

Good fisheries management encourages innovation and collaboration between stakeholders. Establishing and protecting rights among fishermen has resulted in fishery co-management. Collaboration can result in profit increases of up to 20% if fishermen are able to operate more efficiently.

RBM systems in some regions have also increased wages by up to 66% and decreased work-related accident risks. Worker safety tripled in zones where RBM systems were implemented. And because seasons are more predictable, jobs become more secure and community security improves.



Source: womenoffishingfamilies.org

Business Growth from RBM Fisheries

Through careful management and collaboration, a rights-based system founded on sustainability can grow overall industry value. The following are selected examples of businesses that have been able to grow based on supply sourced from rights-based managed fisheries.

Processing & Marketing for Alaskan Sablefish

RBM and Marine Stewardship Council certifications have enabled fishing businesses in Alaska to expand by developing processing and marketing capabilities. Many of these use sustainability from RBM as a platform to expand distribution. Fishing associations have also adopted new video-monitoring capabilities to support enforcement of RBM systems.

Processing, Distribution, Retail for New England Groundfish

In this fishery, local fishermen and processors have diversified their sales channels and increased promotion of lesser-known seafood species to fully utilize the rights they have been allocated. Further production integration includes processors maintaining interests in fishing boats and quota permits, and fishermen operating distribution or retail businesses.

Vertical Integration for Canadian Shrimp

The collapse of the cod fishery in the Atlantic prompted businesses to reevaluate how they operate so that boats would not return to port empty. Lessons have been adopted by the RBM-managed Canadian shrimp fishery, which emerged after the cod collapse. Some companies have since entered the fishery with an emphasis on sustainability to secure the long-term productivity of stocks. Their careful management has yielded a consistently robust shrimp harvest that is now one of the region's most valuable.



RBM and Value Creation — Alaskan Halibut Case Study

The Alaskan Halibut Fishery was faced with near collapse after decades of overfishing due to poor management: in 1994 the entire fishing season was limited to three days.

In 1995, the International Pacific Halibut Commission initiated a rights-based quota bank system, which functions as a collection of harvesting privileges governed by rules for use and distribution. This management framework determined sustainable catch amounts, allocated quota to fishermen, and supported monitoring and enforcement.

Valued at \$152 million in 2012, the Alaskan halibut fishery is now considered one of the best-managed fisheries in the world, and stocks are on the rise for the first time in decades.

The RBM system is credited with rebuilding the fishery and the associated value-chain businesses. Since the system's implementation, the halibut quota value has nearly doubled in price.

- **Increased Market Revenues.** Revenues are estimated to have been \$16.1 million higher during 1995–98 than if British Columbia and Alaska had not implemented the quota bank system.
- **Year-Round Processing.** Under previous regulations, fishermen would deliver the year's catch, 46 million pounds, in just several days, requiring processors to freeze nearly all the fish. Since an RBM system was implemented, fresh product is delivered year-round, and employment is more stable.
- **Broader Distribution.** Historically, 80% of Alaskan halibut captured has been sold to the US and Canada; however, this is changing due to increased stock sustainability and larger catches. Growing demand for sustainable seafood and Marine Stewardship Council-certified products has enabled Alaskan halibut to be sold into new premium markets such as the EU.

Investment Opportunities Enabled by RBM Fisheries

RBM offers an unprecedented opportunity for seafood companies by offering a much more stable investment opportunity compared with businesses built upon fisheries that lack ownership rights. Investment can occur in both supply-side improvement (stabilizing and growing the fisheries) and demand (responding to buyer desires for sustainability).

Currently, 20%–25% of global landings by volume come from RBM fisheries. There are 195 programs that manage 500 species globally. In the US, 24 programs managing 117 species were established in the last 40 years, with more than half of them coming online in the last 10 years.

The value created by transitions to RBM and the resulting fishery recoveries is considerable. Since 2000, 37 fisheries recovered in the US, equating to tens of billions of dollars flowing through the economy.

Investment opportunities in RBM fisheries include the following:

- **Infrastructure Investments.** Investment in fishing gear, equipment, and improved vessels enhances fuel efficiency, species access, and catch quality. It also improves the financial viability of fishing businesses and competitiveness against imported products.
- **Quota Bank Financing.** The ability for fishermen to buy or lease additional quota when needed allows them to maximize catch requirements to cover the fixed cost of trips and enhances overall efficiency and profitability. Investment opportunities focus on financing community-led quota banks and improving market transparency and leasing mechanisms.
- **Enforcement Technology Investment.** As RBM systems gain momentum around the world, companies that offer affordable, effective monitoring and enforcement technologies will be strong targets for investment. Small- and large-scale businesses are starting up around the world to capitalize on the growing market and government requirements for legal and responsible harvest assurances and requirements in RBM fisheries for effective monitoring.
- **Forward-Contracting Market Development.** Today, most fishermen must accept whatever prices are offered, and buyers tend to source from the cheapest supplier. By knowing how much they can catch during the entire season and developing forward contracts based on this certainty, fishermen can plan activities knowing the price they will receive. This stability supports more deliberate and well-planned fishing as well as more secure businesses.
- **New Branded Product Opportunities.** RBM systems allow opportunities for users of RBM products to build brands that highlight socially and environmentally responsible features. The market for these brands is growing: In the US market alone, over 20 retailers, accounting for more than 70% of seafood sales to consumers, have sustainable seafood policies.



Sources: Aleutians East Borough

Key Sources

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