



Press Release

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Subject: Challenges and Solutions for Balancing Aquaculture Growth with Environmental Restoration (opinion piece)

The escalating global demand for aquatic food, anticipated to surge by almost 80% by 2050 according to a Stanford University study, is propelled by diverse factors such as population growth and shifts in local affordability. Anticipating and meeting this burgeoning demand necessitates the sustainable growth of aquaculture. However, the responsible expansion of aquaculture practices requires meticulous environmental considerations to ensure the sector's growth does not compromise ecosystems, both locally and in the sourcing areas for raw materials. Issues such as habitat degradation, water pollution, and biodiversity loss must be prioritized throughout any scaling initiatives. With the total aquaculture production reaching a staggering 122.6 million tons in live weight in 2020 and a farm-gate value of \$61.3 billion USD, it becomes evident that the industry's growth also represents a substantial economic force. By endorsing responsible policies, engaging in community empowerment, and endorsing advancement in innovative aquaculture technologies, we can create a future where the industry not only meets the rising demand but does so in balance with the natural world, ensuring long-term sustainability and resilience.

Innovation and technology play a pivotal role in overcoming challenges associated with conventional aquaculture practices. It is crucial to endorse and promote the adoption of eco-friendly farming systems, exemplified by practices such as recirculating aquaculture systems (RAS) and downsizing the sourcing of raw materials used for fish feeds towards lower trophic levels. RAS involves the recirculation of water within a closed system, significantly reducing water usage and minimizing the discharge of waste into natural water bodies. In comparison to traditional methods where water usage can reach 50 m³/kg of fish produced, RAS operates at less than 5 m³/kg.