

Audit of cage and control tank plans for seaward angle cultivating

CM Wang*

Department of Marine Technology, University of Queensland, Australia

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Description

Fish farming, or aquaculture, has emerged as a key player in meeting the world's growing appetite for seafood. The promise of sustainable protein production and relief for overexploited wild fish stocks has driven the rapid expansion of this industry. However, beneath the shimmering surface of fish farming's benefits lie complex challenges and unintended consequences that cannot be ignored. From environmental degradation to human health concerns, the side effects of fish farming demand careful examination. This article dives deep into the less-visible currents of fish farming, shedding light on the hidden impacts that can have far-reaching consequences for ecosystems, communities, and our global food system. Fish farming can have profound ecological consequences. Open-net pens and cages used in many fish farms can result in the discharge of excess nutrients, waste, and chemicals into surrounding waters. This can lead to water pollution, eutrophication, and the disruption of fragile marine ecosystems. The accumulation of uneaten feed and waste on the seabed beneath fish farms can also lead to benthic habitat degradation. Intensive fish farming practices can create conditions that facilitate the spread of diseases among farmed fish. Pathogens can proliferate in crowded and stressful environments, potentially leading to disease outbreaks. These outbreaks can not only devastate fish farms but can also have cascading effects on wild fish populations if the diseases spread to the surrounding waters. The escape of farmed fish into the wild can lead to genetic interactions with wild populations. Farmed fish may interbreed with wild counterparts, diluting the genetic diversity and adaptation potential of wild species. This can compromise the resilience of native fish populations to changing environmental conditions. Disease outbreaks often lead to the use of antibiotics and other chemicals to treat farmed fish. Overuse of antibiotics can contribute to the development of antibiotic-resistant bacteria, posing risks to both aquatic ecosystems and human health. Additionally, the

presence of antibiotics and chemicals in farmed seafood can raise concerns about their safety for human consumption. Many fish farming operations rely on fishmeal and fish oil derived from wild-caught fish to feed their stock. This practice contributes to the depletion of smaller fish species, which are often essential components of marine food chains. The demand for fishmeal can exacerbate overfishing, straining already fragile aquatic ecosystems. The expansion of fish farming can pose a threat to traditional small-scale fisheries. The competition for resources and markets can lead to reduced access and economic opportunities for these communities, potentially resulting in the displacement of local fishers. Coastal areas are often targeted for aquaculture operations due to proximity to water and markets. However, the establishment of fish farms can lead to land use conflicts, displacement of communities, and the loss of coastal habitats such as mangroves. The growth of the fish farming industry may lead to the exploitation of labour, particularly in regions with lax regulations. Poor working conditions, low wages, and inadequate labour protections can contribute to social inequity and negatively impact the well-being of workers. Freshwater-intensive aquaculture operations can strain already scarce water resources, especially in regions facing water scarcity.

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Conflict of Interest

The author declares there is no conflict of interest in publishing this article.

*Corresponding to

CM Wang

Department of Marine Technology,

University of Queensland, Australia

Email: cm_wang@uq.edu.au