

## **Brackish Water Ponds and Freshwater Ponds: A Comparative Analysis of Aquaculture Development in Qing Taiwan**

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### **ABSTRACT**

Aquaculture is an important traditional industry in East Asia. Both brackish water ponds and freshwater ponds were introduced to Taiwan in the second half of the 17<sup>th</sup> century. Through comparing and analyzing the development of brackish water and freshwater aquaculture in Qing Taiwan, this essay highlights the significance of aquaculture, particularly milkfish aquaculture, in the economic and social development of Taiwan.

While freshwater aquaculture had been very popular and highly commercialized in southern China, its initial development in Taiwan was hampered by the need to import fish fry from China. Moreover, reliance on rainwater for pond replenishment also restricted independent growth of freshwater aquaculture, causing it to be attached to the ecosystem of paddy rice cultivation. Hence, freshwater aquaculture could only remain an income-earning sideline of Taiwanese farmers and could hardly be commercialized throughout Qing dynasty.

By contrast, brackish water aquaculture, though restricted to the southwest coastal area of Taiwan, was the best land-use practice in the tough environment of salty soil. In addition to sufficient provision of fish fry, its product, milkfish, was deeply embedded in the daily consumption of local inhabitants, fitting the needs of Tainan, the then largest consumption market in Taiwan. In this context, brackish water aquaculture developed as the most important industry in western Taiwan. More importantly, the high cost, great risk, and huge commercial interests involved made brackish water aquaculture a highly capitalized and professionalized business. In particular, during the early 19<sup>th</sup> century, with the formation of new lands around the western coastal area of Taiwan, many local Tainan entrepreneurs invested in the exploitation of brackish water ponds in these new lands,

strengthening the capitalization and professionalization in this business. This essay suggests that these two characteristics of brackish water aquaculture led not only to rapid expansion of brackish water aquaculture after mid-Qing dynasty, but also brought significant impact on the economic and social development of western coastal Taiwan.

**Keywords:** Brackish Water Ponds, Freshwater Ponds, Aquaculture, Milkfish (Chanos chanos), Milkfish industry, Capitalization, Professionalization