

Type of Aquaculture Farm

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Abstract

Aquaculture is the controlled cultivation of aquatic organisms such as fish, shrimp, molluscs, crustaceans, and aquatic plants for food, commercial production, conservation, and other economic purposes. With the increasing demand for aquatic products and pressure on natural fisheries, aquaculture has become an important component of global food production. This paper provides an overview of the major types of aquaculture farms and their characteristics. Aquaculture farms can be classified according to the farming environment, culture system, species cultivated, and level of management. Freshwater aquaculture farms commonly cultivate species such as carp, tilapia, catfish, and freshwater prawns in ponds, tanks, cages, or raceways. Brackish-water farms are primarily associated with shrimp, crab, and certain fish species and are generally established in coastal areas. Marine aquaculture, or mariculture, involves the cultivation of organisms such as marine fish, oysters, mussels, and seaweed in coastal or offshore environments. Based on production intensity, farms may also be categorized as extensive, semi-intensive, intensive, or super-intensive systems, depending on stocking density, feed inputs, water management, and technological requirements. Integrated aquaculture systems combine fish culture with agriculture or livestock production to improve resource utilization and reduce waste. Recirculating aquaculture systems provide another modern approach by treating and reusing water under controlled conditions. The study highlights the diversity of aquaculture farming systems and their importance in sustainable aquatic food production, employment generation, resource management, and economic development.

Keywords: Aquaculture, aquaculture farms, freshwater aquaculture, marine aquaculture, brackish-water farming, intensive farming, extensive farming, integrated aquaculture, fish farming, sustainable aquaculture.