

Aquaculture

The Australian Government has a number of important functions in relation to aquaculture, including national programs for research, management of biosecurity, aquatic animal health, food safety, environmental management, and market access and trade. However, primary responsibility for regulating aquaculture rests with the states and Northern Territory.

In 2017, the Australian Government released a [national aquaculture strategy](#) (/fisheries/aquaculture/national-aquaculture-strategy). The strategy was developed in consultation with key stakeholders, including industry and relevant Australian, state and Northern Territory government departments.

Aquaculture is defined by the Food and Agriculture Organization of the United Nations as the farming of aquatic organisms including fish, molluscs, crustaceans and aquatic plants with some sort of intervention in the rearing process to enhance production, such as regular stocking, feeding and protection from predators.

There are various stages of aquaculture operations including:

- a hatchery operation which produces fertilised eggs, larvae or fingerlings
- a nursery operation which nurses small larvae to fingerlings or juveniles
- a grow-out operation which farms fingerlings or juveniles to marketable sizes.

Depending on the species being farmed, aquaculture can be carried out in freshwater, brackish water or marine water. There are a number of different systems that can be used for aquaculture, including ponds, tanks, pens and floating cages.

Aquaculture can be extensive, semi-intensive or intensive, depending on the level of input and output per farming area and the stocking density. Intensive aquaculture involves intervention in the growing process, such as with supplemental feeding and water aeration (such as prawn farming), whereas extensive aquaculture allows the stock to grow on its own, using natural food sources and conditions (such as oyster farming).

Aquaculture can be used to produce a variety of species including fish, molluscs, crustaceans and aquatic plants for human consumption, or for producing ornamental species and other products such as pearls.

Aquaculture can also be operated with other agriculture activities forming an integrated aquaculture–agriculture system. An example of an integrated aquaculture–agriculture system is the farming of fish in a rice field, or an aquaponic system.

If you are interested in starting an [aquaculture business](#) (/fisheries/aquaculture/starting), you may wish to contact your relevant state or territory government department for more information.

General enquiries

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