

Environmental and Social Aspects of Organic Aquaculture

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If aquaculture is to become an increasing contributor to the human food supply, it is critical that aquaculture feeds rely less on marine-derived fishmeal and fish oil as the preferred source of essential proteins and lipids. Not only is the wild fishery from which these products are extracted at maximum sustainable levels of harvest, but there is increasing concern that these marine feedstocks may contain contaminants and pollutants that have accumulated in the fish from which the fishmeal and fish oil were derived. Despite nutritional improvements to the diets of aquaculture species, many scientists question the long-term sustainability of pelagic fisheries intended for fishmeal and fish oil. Researchers are now exploring options to replace fishmeal with terrestrial animal and plant-based ingredients. Vegetarian feeds for carnivorous species are, however, still in early stages and require additional research to ensure that these do not adversely affect the animal's physiology or the flavor of the final seafood product.

Organic aquaculture protects the health of consumers by reducing the overall exposure to toxic chemicals from pesticides that can accumulate in the ground, air, water and food supply. Because Organic aquaculture doesn't use toxic and persistent pesticides, choosing organic products is an easy way to help protect oneself. Organic aquaculture also helps prevent topsoil erosion, improves soil fertility, protects groundwater, and conserves energy. As well, because organic standards and industry practices do not allow the use of genetic engineering in the production and processing of organic products, organic aquaculture gives consumers who wish to avoid genetically modified seafood a choice in the marketplace.

Consumers consider Organic seafood to be a good choice because 1) Organic products meet stringent standards that are the public's assurance that products have been grown and handled according to strict procedures without toxic chemical inputs, 2) Organic aquaculture is environmentally sustainable, 3) Organic seafood reduces health risks, (4) Organic farms respect our water and soil resources, 5) Organic certification offers small rural farmers the ability to command fair prices for their products, 6) Organic aquaculture offers continual access to markets where trade barriers often restrict sales, and finally 7) because Organic seafood tastes great!