



Benefits and Characteristics of Aquaculture

Dr. Ozgur ALTAN
Aquaculture Expert

FAO - Sub regional Office for Central Asia
Ivedik Cad. No:55, Yenimahalle – Ankara, TURKEY

Ozgur.Altan@fao.org

Phone: +90.312. 307 95 36

Fax: +90.312. 327 17 05

Mobile: +90.533. 364 73 63



A question to
answer...



Why we do
aquaculture?

We do aquaculture; because we want to...

- a) Save the natural fish stocks?
- b) Enrich the natural wild fish populations – fish release activities-?
- c) Research about fish?
- d) Meet human's requirement of “cheap” protein sources?



**Did you
forget
something?**

Yes, You / I Did.



Supply and Demand

- Fish farming allows for large supplies of fish to be farmed according to demand. Catching fish from the wild may not yield enough product to meet consumer demand and simultaneously keep the natural ecosystem in balance. The Food and Agriculture Organization of the United Nations estimates that by 2030, about 40 million tons of seafood will be necessary to keep up with demand. The ocean's ability to produce enough fish has diminished over the years, leaving aquaculture as the only method to keep up with this increasing demand.

Preserving Natural Ecosystems

Fish farming does not require the extensive capture of wild fish. They can be raised in tanks until they're ready to be sold on the market without having to strip oceans of entire schools of fish, allowing for better preservation of marine ecosystems.



Health Benefits

- Many farm-raised fish are more nutritious than their wild brethren. On farms, fish are often fed a variety of protein- and nutrient-rich foods and pellets that make them far healthier than wild fish, which may have been exposed to dangerous chemicals or pesticides.



Job Producing

- Since more than 1 billion people rely on fish as their primary source of protein, most of them located in developing countries, farming is often an attractive practice to them, as it supplies food and jobs. In fact, global fish exportation now earns more money per year than any other food commodity, meaning there is money to be made and job positions to fill.



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Another Question...



You have two choices on your plate... One wild fish and one farmed fish. Which one would you prefer to eat and why? (You have the right to eat one of them only)





Find eight differences between the fish from wild and the fish from aquaculture ...

Difference 1.

<u>KEY POINT</u>	<u>FISH FROM WILD</u>	<u>FISH FROM AQUACULTURE</u>
Investment Costs	Low	High



Difference 2.

<u>KEY POINT</u>	<u>FISH FROM WILD</u>	<u>FISH FROM AQUACULTURE</u>
Annual Operational Costs	Low	High



Difference 3.

<u>KEY POINT</u>	<u>FISH FROM WILD</u>	<u>FISH FROM AQUACULTURE</u>
Job Complexity	Low/Normal	High



Difference 4.

<u>KEY POINT</u>	<u>FISH FROM WILD</u>	<u>FISH FROM AQUACULTURE</u>
Period from Water to Market	Short	Long



Difference 5.

<u>KEY POINT</u>	<u>FISH FROM WILD</u>	<u>FISH FROM AQUACULTURE</u>
Food Security	Low	High



Difference 6.

<u>KEY POINT</u>	<u>FISH FROM WILD</u>	<u>FISH FROM AQUACULTURE</u>
Crude Protein and Essential Amino Acids	High	Normal

Fish is the number one source for protein globally.



Difference 7.

<u>KEY POINT</u>	<u>FISH FROM WILD</u>	<u>FISH FROM AQUACULTURE</u>
Lipids and Fatty acids (Omega 3)	Low/Normal	High



Difference 8.

<u>KEY POINT</u>	<u>FISH FROM WILD</u>	<u>FISH FROM AQUACULTURE</u>
Market Price	High	Low

