AQUACULTURE

Hydroponics

Soils and composts can carry disease. Some growers have developed methods of growing in non-soil mediums. With hydroponics, nutrients that are traditionally supplied by the composts or soil must be supplied via the water. Some organic growers have experimented with this method, however, it is generally *not* recommended as it inevitably uses more resources than traditional growing methods and cannot be conducted without input from distant processing plants, extensive road networks, and other high input factors.

Aquaponics

In general, this is a method of combining fish farming with hydroponics. Fish farming is typically reliant on the use of processed fish meal made from fish that are caught by fishermen but are not considered as fit for human consumption. While fish populations around the world are in decline, largely through over-fishing, it is a good use of 'waste' fish. Yet with increasing pollution levels and the fact that fish are near the top of the food chain, this may not be the best idea.

Other aquaponic systems are possible, but at present, they are not common.

Seaweed Farming

People have harvested the sea since before the beginning of agriculture. Growing food or other products in the sea is a way to increase supply, similar to the development of agriculture. Sea farming is easily done on a low tech basis and also requires a fair bit of human labour, so it can provide independent and reliable work for people otherwise tempted by the bright lights of the atomic/fossil-fuelled cities.

Seaweeds can provide food and food ingredients such as agar and carrageenans, that are used in many foods, for example soft ice cream. They are also a source for **biofuel production**!

A **good book** on seaweeds: Extreme Greens: Understanding Seaweeds by Sally McKenna (Estragon Press)

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In Ireland and around the world, people are developing methods of seaweed cultivation. Click here (seaweed.ie) for more information.

Energy from the Sea

Anyone who thinks about the sea will also think of waves. Waves are an example of the power obtained in the wind. It is possible to intercept and collect this energy for use in heating homes and the like. A wave power device, Salter's Duck, was developed in the 1970s, but this was not approved for use due to the objections of scientists related to certain nuclear power interests.

*Other **sea power projects** include*
"Tidal Power" as well as methods exploiting differences
in surface and deep waters.

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Caution is recommended when considering aquaculture!

- Levels of pollution are rising in all seas.
- Mercury is found in fish.
- Plastics are found in the waters.
- Recent events in The Pacific only add to concerns over the still-present fall out from the Bikini Atoll and other experiments.

Aquaculture-Related Videos (click for links)

⇨ Aquaculture - Short Animation ⇦

⇨ TEDxTalk: Sustainable Aquaculture by Pery Raso ⇦

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