

The cultivation of marine products on artificial wooden islands will change the world's food culture.

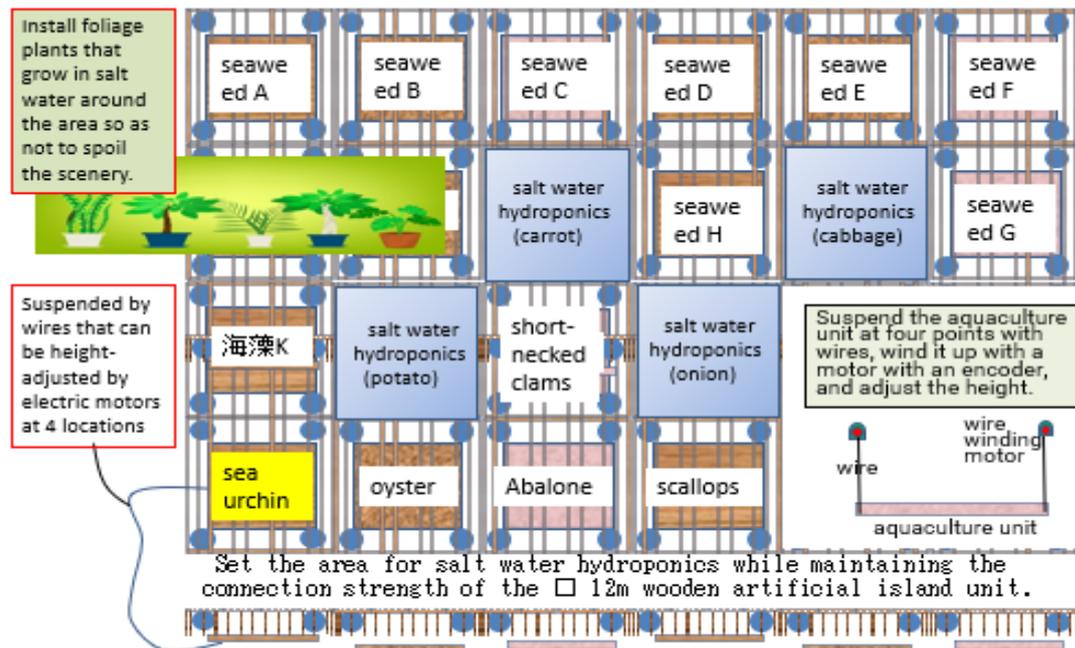
Storing wine in water is said to be very delicious, and it seems that commercialization has started off the coast of Izu. → "Venus Project"

On the artificial wooden islands, wine can be stored safely like in the Venus Project, and extensive nets are laid between the artificial islands and under the artificial islands to create a farm where fish can migrate over a wide area. However, it is possible to cultivate various types of seaweed, so (although there are restrictions on catching fish), we believe that marine products will expand in the food culture through wooden artificial islands. increase.

It is expected that the cost of marine products will decrease and the ratio of "meat to fish" and "vegetables to seaweed" will change, but even if the shift to artificial islands and aquaculture businesses is unavoidable in places that have benefited from natural harvesting up to now. Due to the pressure and the loss of fishing grounds in the coastal waters due to artificial islands, there is a similar pressure to convert to various fish farming businesses. (The aquaculture business, which costs less, is going to drive out the fishing business, but it is a good direction because it will lead to the protection of the natural environment and the reduction of CO2 emissions.)

In cities, towns and villages facing the sea around the world, "wooden artificial islands + tidal power generation + tree type" will become 100% renewable energy, and "wooden artificial islands + fish farming + seaweed farming" will change the food culture. We believe that it will bring us closer to local production for local consumption and self-sufficiency.

Even in inland municipalities, pools have been set up in rivers, and the total cost has been reduced by "wooden artificial island + water current power generation + tree type" & "wooden artificial island + freshwater fish farming and aquatic food cultivation". I think there is a direction of local production for local consumption & self-sufficiency.



Although it is still in the research stage, salt water hydroponic cultivation has been successful with potatoes, and carrots, onions, and cabbage are said to be on the verge of commercialization. , it will be a cultivation method that will become the mainstream in the future.

As mentioned above, the utility of the wooden artificial island is

1. "Wooden artificial island + tidal current power generation + tree type" can achieve global greenhouse gas emissions of  $\pm 0$  by 2050 ahead of schedule.
2. Through "wooden artificial islands + fish farming + seaweed farming" , the world' s food culture will shift from "meat to fish" and "vegetables to seafood and freshwater products" , bringing closer to local production for local consumption and self-sufficiency.
3. By cultivating "seafood and freshwater products" on wooden artificial islands, photosynthesis increases and CO2 itself can be reduced.
4. Utilizing the abundant power of "tidal power generation + tree type" on the wooden artificial island, we will develop vegetables (\*) that can be grown in "hydroponic culture" by desalinating seawater or even in salt water.

5. By narrowing (fastening) the tidal flow between wooden artificial islands and collecting marine debris there, (when garbage accumulates to a certain extent, the robot automatically puts it in the collection box on the artificial island.) It can also be used to purify the sea. To contribute.

(\*) Regarding salt water hydroponics, It is said that more than 1 billion hectares of farmland around the world are suffering from salt damage due to rising sea levels caused by global warming.

When seawater infiltrates into the groundwater table due to sea level rise, the groundwater is salified even inland far from the coastline. Soil that has been exposed to seawater due to floods or storm surges becomes difficult to farm due to salt damage.

Reference information: Salt Farm Texel in the Netherlands is making the following efforts.

By subdividing conditions such as variety, salinity, and planting season, and repeating experiments, we established a potato cultivation method that is adapted to salt water and chlorinated soil. Currently, in addition to potatoes, they are experimenting with carrots, onions, cabbage, barley, etc. (Even in Japan, the emergence of artificial wooden islands will accelerate saltwater hydroponics.)

Rapid expansion of renewable energy (= drastic reduction of fossil fuel use and countermeasures against fossil fuel depletion), aquaculture of various marine products (= prevention of overfishing and countermeasures against depletion of marine resources), effective use and circulation of forests, and ocean A wooden artificial island connects the dreams of urban construction.