

## Coastal Environmental Pollution Caused by Aquaculture

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The Organization to Prevent from Using Formalin at Fish-farms in Amakusa, Amakusa, Japan

After World War II, lots of tidelands and seaweed areas disappeared because of reclamation in Japan. Then, coastal fisheries turned down so much losing superior fishing grounds and instead, aquaculture increased rapidly with the background to promote “fisheries to raise & breed” by the Fishery Agent.

But, those fish farms set up in closed bay are easily polluted with leftover baits and excrements of fishes as a result of jammed breeding and over feeding to get the maximum efficiency at the limited area.

Chronic fish diseases rise at the self-polluted fish farms, and they can't help dispensing a large quantity of antibiotics & antibacterial medicines to prevent the expansion of damage.

Over 1800 tons of antibiotics & antibacterial medicines are produced as chemotherapeutic agents for aquaculture every year in Japan. Most of them are dispensed mixing with baits and leftover spread over the sea. They must affect the marine ecosystem seriously, however, no research has been done about it.

Dirt prevention paint containing a deadly poison-organic tin compounds (TBTO) are still used in secret at fish farms to paint nets of enclosure keeping away from attaching organisms for a labor-saving maintenance to exchange and wash nets.

Furthermore, it becomes a very serious problem at fish farms in Japan to use a large quantity of formalin as an antiseptic to worm and discharge onto the sea accompanying with rapid increase of high-priced globefish & flatfish production recently.

It is reported that seaweed areas have decreased or disappeared and organisms have been in disorder or died off around those fish farms, but epidemiological and accurate study & research is none.

In Japan, there are various approaches to reduce & control pollutants from lands. To preserve the environment of closed waters, it is indispensable to investigate the actual conditions of pollutants in the sea such as fish farms which tend to depend on chemicals and to assess the affect to the marine environment.