

Environmental issues with salmon farming

1. Impact of feeding on fish stocks

Salmon being a carnivorous animal protein production of salmon farming is highly inefficient. Indeed one needs to feed about **2.5 to 5.5kg of wild fish per kilogram of farmed salmon**. The impact on fish stocks is very heavy since half of the fish used for salmon feeding is suitable for human consumption.

2. Sea lice

Because they are concentrated in unnatural densities, farmed salmon are exposed to a parasite called sea lice. This parasite eats the skin and the fins of the salmon causing pain and ultimately death to the fish. The farms being open nets floating in the water, the lice can spread freely from these nests and attack the wildlife. Wild salmon and trout are their first victims and fishermen association have reported **many fjords completely emptied of wild fishes** because of lice from salmon farms.

3. Diflubenzuron and shellfishes

To treat their salmon, farmer use a chemical forbidden in agriculture in the EU called diflubenzuron which is effective by preventing the sea lice from forming their shell. Unfortunately this chemicals affects all shellfishes likewise. Reports have shown that diflubenzuron used in salmon farms is responsible for the **destructions of crabs, shrimps and lobsters** in Norway.

4. Waste

Salmon farms produce huge amounts of waste that directly goes into the sea. This waste, mainly fish feed and faeces, sediments on the bed sea and causes **eutrophication**, that is an explosion of algae population leading to hypoxia of the water and death of many species. An average salmon farm (3000tons) produces **more waste than a city of 50,000 inhabitants**. In Norway, farming is responsible for much more waste than the whole of Norwegian population. All this is in strong contradiction with EU regulation.

Because of these pollutions Norway is clearly violating the **European water framework directive** and it should be accounted for this.

5. Escape

No salmon farm can prevent salmon escape into the sea. This is major issue because escaped salmon spread diseases, lice but also can affect the genetics of wild salmon. Because salmon always turn back to where they were born to fray, every river and every fjord usually hosts a specific genetical poll, ensure to the salmon a great genetic variety. However, **salmon escape is estimated to be at least 500,000 per year**, which is about the estimated wild population in Norway. It is clear that this level of escape is not sustainable and threatens diversity.

6. Animal welfare

From stocking to slaughtering around 20% of the farmed salmon die because of diseases, parasites, malformation, attack from other salmon, injuries for lack of care and stress. Besides death, sea lice can cause a lot of pain to salmon which are literally eaten alive by the parasites.