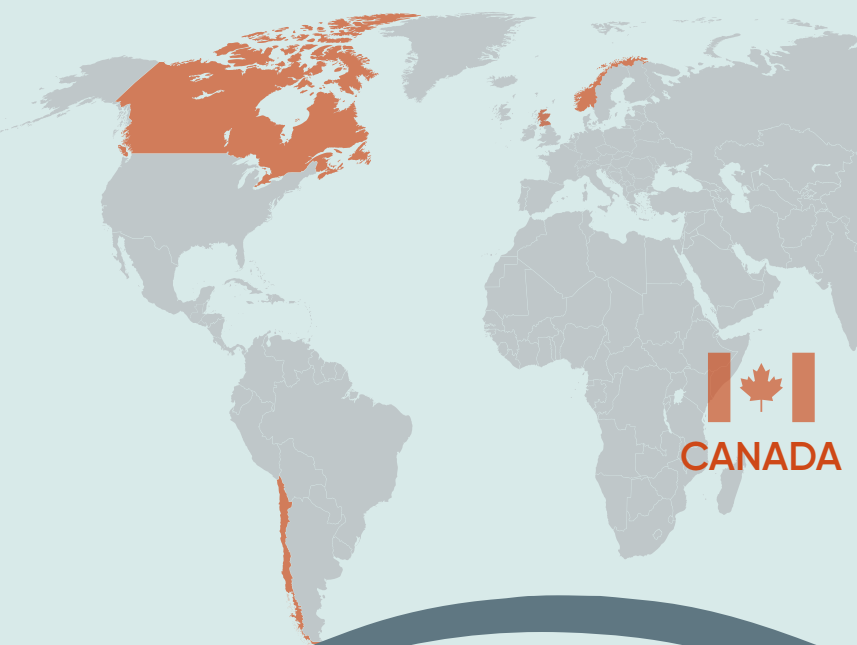


# The false economy of poor farming practices on salmon farms



Salmon aquaculture is worth close to

US **\$20 billion**

annually with **96%** of production concentrated in just four countries.



CANADA



NORWAY



CHILE



SCOTLAND

and **50%** of production controlled by **10 multinational companies**.

Mortality rates on salmon farms are high with the major contributing factors being:

Estimated cost of mortalities is

**\$15.5 billion**

with the top 10 producers responsible for 100 million salmon deaths and escapes since 2013.

PARASITES



ESCAPES



POLLUTION



DISEASE



**Lice and disease spread** are a result of high stocking densities designed to increase productivity. This is arguably a false economy: since 2013 lice control alone has cost the sector over

**\$4 billion**



**Aquafeed** is the single largest cost centre for salmon farmers, driven by the high cost of fishmeal and fish oil (FMFO), derived from wild fish. We estimate over the period 2013-2019 that the cumulative costs of using marine ingredients in salmon farming is over

**\$8 billion**



The false economy of poor farming practices on salmon farms continued



is the estimated cost of pollution for the four countries since 2013. Pollutants from salmon aquaculture include **uneaten feed and faeces**, which are directly discharged into the marine environment.

Salmon farming is also contributing to the decline of wild salmon through

**LICE & DISEASE SPREAD POLLUTION HYBRIDISATION**

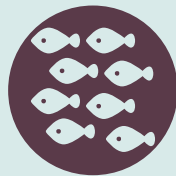


Yet there is a strong 'willingness to pay' amongst consumers in the four countries to preserve wild salmon. As a result we estimate a loss to communities of

**\$308 million** since 2013

A partial valuation of the ecosystem benefits of forage fish lost to fish farming, due to the use of **FMFO**, is around

**\$1.8 billion**



Consumers in **Europe and Canada** have shown a high willingness to pay for better fish welfare. We estimate the cost of poor fish welfare at

**\$4.6 billion**



**\$8.3 billion**



Is the estimated social cost of carbon from salmon farming. Although positioned as a low carbon alternative to meat, life cycle analysis reveals a higher cost than reported

Since 2013 the unaccounted cost of salmon farming across the four countries is over

**\$47 billion**

