



#### WILL FEED BE A CONSTRAINT TO FUTURE GROWTH IN SALMON FARMING?

Salmon farming has been a spectacular success in recent history. From a standing start in the 1970's, the global harvest of Atlantic salmon *Salmo salar* passed 16 million tonnes (whole fish equivalent, wfe) in 2011, according to Kontali Analyse AS<sup>1</sup>. Total harvest of all salmonid species, including salmon and trout, exceeded 2.4 million tonnes (wfe).

However, will the industry become a victim of its own success? Salmon feed, the argument goes, is composed mostly of fishmeal and fish oil and since production of these is static, how can

salmon farming continue to expand when it relies so heavily on a limited resource? Accordingly, conservationists are concerned that increasing demand for salmon, will translate into increasing pressure on capture fisheries from which fishmeal and oil is made. They fear that this can lead to the decline and eventual collapse of fisheries.

In response, new industry standards such as the Salmon Aquaculture Dialogue, seek to limit the amount of marine ingredients used in salmon feed. The Monterey Bay Aquarium's

Seafood Watch scheme in the US has farmed salmon 'red-listed' whilst the Marine Conservation Society in UK advocates switching away from salmon and towards other fish species to reduce pressure on stocks of fish used for reduction to meal and oil.

In this report we examine the facts surrounding these issues. We ask: Will feed be a constraint to future growth in salmon farming? Or, are the concerns unfounded?

**"SALMON FARMING HAS BEEN A SPECTACULAR SUCCESS IN RECENT HISTORY, BUT WILL THE INDUSTRY BECOME A VICTIM OF ITS OWN SUCCESS?"**