Norwegian salmon farming: predictable and environmentally sustainable growth



In a White Paper presented to the Parliament in March 2015, the Norwegian government proposed a completely new system for regulating the growth in the salmon farming industry. The proposed system ensures predictability, and relies on environmental indicators and established production areas. The proposal got broad support in Parliament.

The main objective of the White Paper was to discuss how Norway can maximise value-creation based on long-term predictable sustainable growth and improved environmental adaptation in salmon farming.

## **Environmental sustainability**

The Governments view is that environmental impact should be the most important assessment criterion when deciding how the salmon farming industry can operate and how much it can produce.

With the current production technology (with net-pen sea cages), all salmon farming sites in a given area influence each other. Even if each individual site, in isolation, operates within acceptable limits, the overall environmental impact of several farms in the area could exceeded the carrying capacity of the area.

In other words, the environmental footprint of each individual site may be acceptable, but the combined footprint from all sites in an area may be unacceptable. Consequently, aquaculture cannot be managed at the level of the individual site only. In the future, it should be managed on the basis of production areas, in which acceptable environmental impact is defined and assessed. The government will:

- Facilitate predictable and environmentally sustainable growth in the salmon farming industry.
- Let environmental sustainability be the most important issue to consider, when deciding on the further growth of the industry.

## **Environmental Indicators**

The Government will select environmental indicators, where changes in the environmental footprint correlates with production capacity within a particular production area.

The Government have considered the following environmental impacts of aquaculture on the surrounding environment; genetic interaction/escapees, pollution/effluents, diseases/ parasites, and harvesting of feed resources.

It is concluded that sea lice is the only appropriate indicator in the short and medium timeframe, relevant to be used in a rule-based system for capacity adjustment at the licensing level within defined production areas.

The selection of indicators may be adjusted, as environmental challenges changes; this will allow for inclusion of other (or removal of existing) indicators for environmental impacts in or from the system over time. An indicator on pollution (effluents of organic material and nutrient salts) will be considered developed.

The government will:

• Currently, use sea lice as an indicator in a rule-base system for capacity adjustments.