



Paul S. Valle &
Tarique Mahmud
Spillfree Analysis AS
Stiklestadvein 1, 7041
Trondheim, Norway

Potentials in improved disease handling in Norwegian Salmon farming!

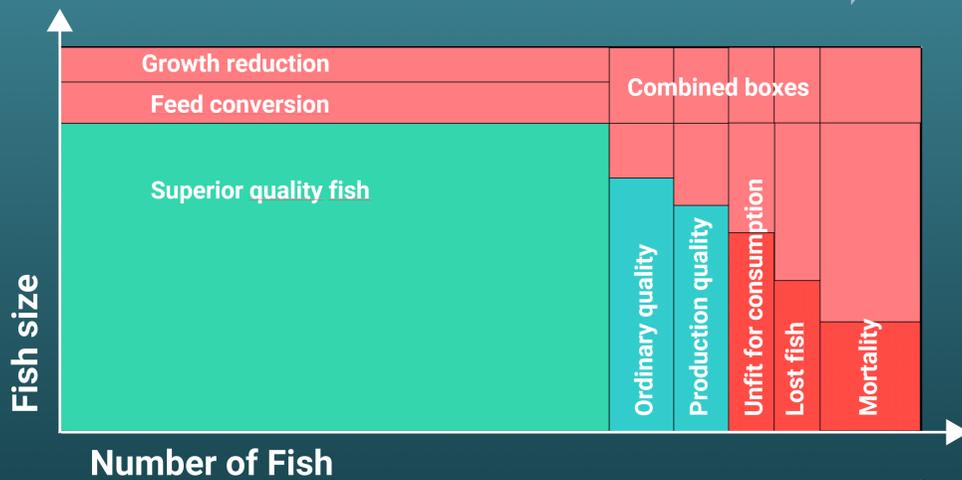
**Spin-offs:
Processing Industries
(Norway + EU ++)
Supply Industries
+++**

**Estimated Farming Potential
w/reduced disease problems:**
Incr. production + 20 %
Incr. economic result + 50 %
Significant # Jobs and
Contribution to GNP

**1.3 billion
meals**

Reduced Mortality/m - 1 -> .5%
Reduced down-grading - 50%

An AquaTools® Simulation
<https://spillfree.no/en/aquatools/>
«Give or Take»



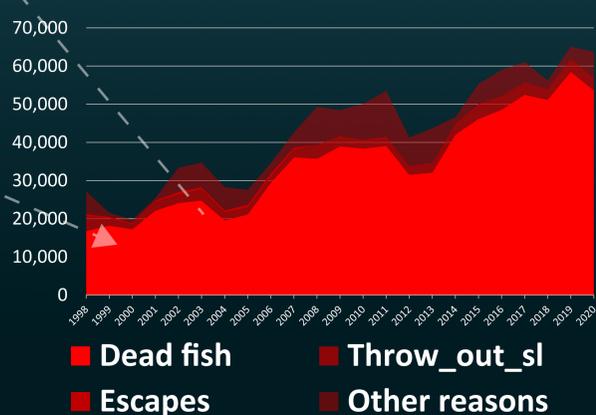
Improved
Weight Gain
VF3 2.87 -> 3.33
bFCR 1.16 -> 1.10

Figure 1, The **biOLOGIC PRODUCTION-LOSS MODEL (bPLM)** describes the potential biomass of a Salmon Production
DARK RED shows the Lost Biomass
LIGHT RED the UnRealised Pot. for Biomass Prod.
BLUE show areas of Reduced Quality and
GREEN is the Produced Biomass of Superior Quali-

of Livestock and Losses (#, %) at sea, 1994 - 2020



Losses by reason at sea



References:
Arnfinn Aunsmo; "Health related losses in sea farmed Atlantic Salmon – quantification, risk factors and economic impact", PhD Thesis, Norwegian School of Veterinary Science, Oslo 2008
Directorate of Fisheries. Aquaculture Statistics, Atlantic Salmon,
<https://www.fiskeridir.no/English/Aquaculture/Statistics/Atlantic-salmon-and-rainbow-trout>
Ingun Næve et al. "The power of genetics: Past and future contribution of balanced genetic selection to sustainable growth and productivity of the Norwegian Atlantic salmon (Salmo salar) industry", Aquaculture, Volume 553, 2022, 738061, ISSN 0044-8486
<https://doi.org/10.1016/j.aquaculture.2022.738061>

In relation to the Global Burden of Animal Diseases Programme – GBADs & Norwegian Veterinary Institute
<https://animalhealthmetrics.org/>