

# ADM's Full Pantry of Aquaculture Products

Tailor-made feed solutions & services for common challenges you're facing.

**Stressed fish are more susceptible to disease.**

## Common stressors in aquaculture operations:

### Physical stressors

INJURIES, TRANSPORT, SORTING, VACCINATIONS, EXPOSURE TO HYPOXIA, UNDESIRABLE WATER QUALITY

### Chemical stressors

PRESENCE OF A XENOBIOTIC IN THE WATER

### Biological stressors

INFECTIOUS ENVIRONMENTS



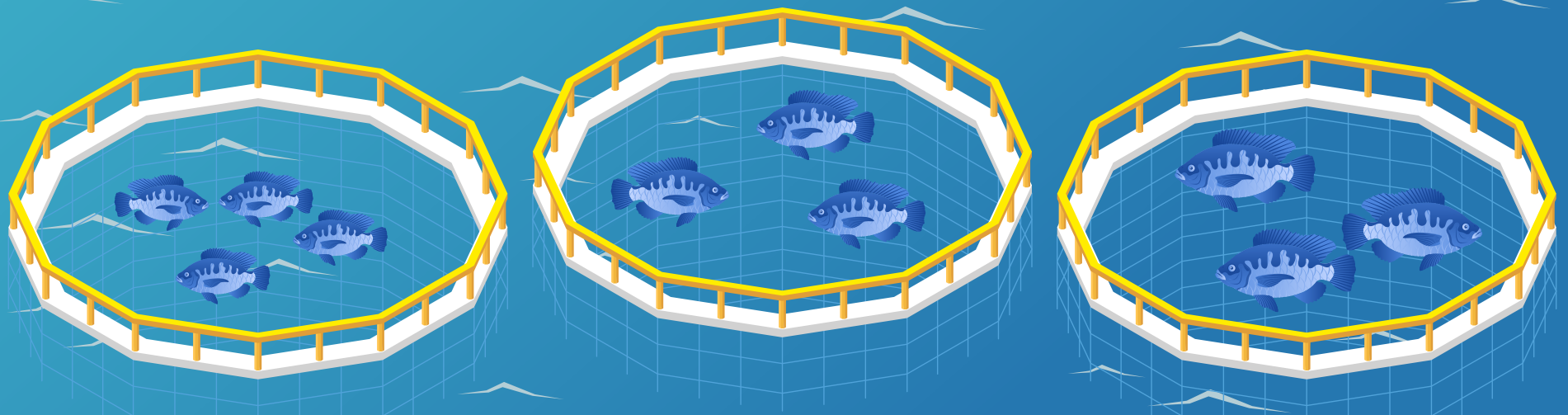
### Impact of stressors:

- Compromised health
- Reduced performance

Many of these events happen at juvenile stages, where the effects are amplified.

*To combat these challenges, customized ADM Feeds, Feed Additives, Premix and Services were developed to help juvenile tilapia better cope with such stress.*

A large field trial in ADM Brazil R&D facilities showed significant results after 4 weeks distribution:



**+23%**  
BIOMASS GAIN

**-13% FCR**  
(FEED CONVERSION RATIO)

**+11%**  
ERYTHROCYTES

**+22%**  
ALBUMIN BLOOD CONCENTRATIONS

With a statistically significant **5% higher body weight** at harvest 6 months later, after only 4 weeks distribution of special feed at juvenile stage.

*These ADM Feeds, Feed Additives, Premix and Services were then applied to a main tilapia producer in Brazil looking to reduce their use of antibiotics.*

**100%**

### Antibiotic Reduction

100% stoppage of antibiotics as a preventive practice.

**BAP AWARD**

### BAP Certification

This allowed them to earn BAP (Best Aquaculture Practice) Certification, opening new markets for sales.

### Antibiotic Resistance Decreased

Additionally, antibiotic resistance has dramatically decreased.

*All in all, ADM Feeds, Feed Additives, Premix and Services help fish producers:*

• Improve their farm management practices and performance

• Reduce their reliance on antibiotics and chemicals

• Lower antimicrobial resistance

• Decrease their impact on the environment

Get started with customized ADM Feeds, Feed Additives, Premix and Services and **gain healthier, bigger fish at harvest.**



Let's Collaborate.  
[adm.com/aqua-solutions](http://adm.com/aqua-solutions)