





High eFCR (economic feed + Feeds Clearance of + Fertilizers vegetations for aquaculture conversion ratio) + Antibiotics, hormones + Parasites & patogens + Chemical substances + Exotic invasive species **AQUACULTURE POND** RIVER/STREAM/LAKE/COAST Sewage Food miles + Ammonium + Nitrate + Organic waste + Toxins + Algae blooms -+ Nutrients + Bacteria decomposition + Anoxic conditions

Negative Impacts:

Biodiversity losses | Disruption of ecosystem processes | Water contamination | Pollutants entering food chains | Low aquaculture productivity | Greenhouse gas emissions

KEY PROMOTED GREEN AQUACULTURE PRACTICES



Select & manage pond site



Use resources efficiently



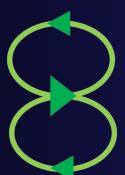
Limit chemical use



Manage waste



Utilize renewable energy sources



Apply integrated systems



Opt for responsible seed sources



Adopt
Integrated
Pest
Management



WATER QUALITY PARAMETERS

TEMPERATURE influences fish metabolism, growth, reproduction, & immune function.

25-33°C (depend on species)

pH indicates the acidity or alkalinity of the water.

6.5 - 8.5

WATER CLARITY
presents the degree to which
light can penetrate & travel
through the water column.

Secchi depth of 25-35 cm

DISSOLVED OXYGEN (DO)
tells adequate oxygen levels are
essential for fish respiration and
overall health.

4-8 mg/L (depend on species)

AMMONIA (NH3/NH4+)
is a toxic waste product of fish
metabolism & decomposing
organic matter.

Below 0.5 mg/L

NITRITE (NO2-)
is produced by the bacterial
breakdown of ammonia in the
nitrification process.

Not greater than 0.5 mg/L

NITRATE (NO3-)
is the end product of the
nitrification process & can
negatively impact fish health.

0.2-10mg/L

BIOLOGICAL OXYGEN DEMAND (BOD)

presents the amount of oxygen
required to decompose organic
matter in water.

Below 6 mg/L (surface water)



