



Aquaculture Site Selection Checklist

- Environmental factors
- Political, regulatory, and social-cultural factors
- Operational and logistical factors




Depth profile / availability of hydrographic maps showing seafloor

- Are there maps available that show the seafloor along with type of bottom?
- Are bathymetry maps available to evaluate seafloor depth? For finfish, is the recommended depth of 20-60m reached?




Exposure to wind and incidence of storms

- What is the wind velocity and strength in the proposed area?
- Are the proposed cages or lines protected from any leeward sides of islands?
- Are the cages or lines in protected bays?




Tides and currents

- What is the current velocity in the proposed area? For finfish, is the recommended velocity of 0.05 - 0.2 m/s achieved?
- In what direction do the currents flow and are they seasonal?
- Are there strong tides in the area and in what direction do they flow?



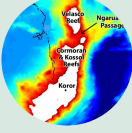
Wave activity

- Is the proposed area in an area with wave activity?
- What is the maximum wave height and is wave activity seasonal?




Water quality, temperature, and salinity

- Have water quality tests been carried out for fecal coliforms, nutrients levels, and the presence of harmful algae blooms?
- Has dissolved oxygen been measured?
- What are the temperature and salinity ranges for this area and is there a




Bottom type; hydrographic maps showing seafloor

- What is the type of sediment under the cages or lines?
- Is the recommended sandy bottom available?
- For finfish, if the bottom is muddy, has the recommended depth >40m been reached?




Presence of sensitive habitats

- Are there corals and seagrasses present in the area? Are the cages or lines sited far enough away and/or with enough depth to not impact or shade sensitive habitats?
- Are there mangroves near the area? For finfish, are the cages sited far enough away to ensure excess nutrients do not impact the mangroves?




Plankton occurrence and distribution; red tides

- Has a plankton abundance study in the local waters been done?
- For finfish, will the operation of cages affect that abundance? For seaweed and shellfish, are there sufficient nutrients to farm these species?
- Are harmful algal blooms (HABS) an occurrence in the proposed areas? Could nutrients from finfish farms affect algal blooms? Could seaweed or shellfish farms be affected by HABS?




River runoff, stratification

- Is there river runoff present in the local area? Will it negatively affect production?
- Is there a thermocline present in the proposed area?
- Is there water stratification present in the proposed area?




Likelihood of impacts from climate change

- Is sea level rise projected in this area?
- Are there expected water quality or temperature changes due to climate change in this area?




Bioremediation, mitigation needs

- For finfish or very large-scale shellfish aquaculture, if the farm produces more than minimal nutrients, what mitigation or bioremediation strategies are put in place to reduce ecological risks?
- For seaweed or shellfish aquaculture, are there ways the farm can be sited to remove excess nutrients and improve local water quality?




Ease of gaining permits; local public acceptance

- What is the public perception of marine aquaculture in this area?
- Is it difficult to obtain permits for marine aquaculture in this area?




Use conflicts, number of ocean users in area

- Is this an area that local fishermen use wherein farming could create user conflict?
- Is this an area with significant tourists that use the marine space?




Extent of tenure rights

- What are the property rights and local jurisdictions of this area?
- Are there indigenous or local communities that need to be consulted prior to putting a farm in this area?



Marine infrastructure

- Are there sewer outfalls in this area? Is the desirable distance more than 1000m away?
- Are there fiber optic cables or other infrastructure in this area? Is the desirable distance more than 200m away?




Navigation channels and ports

- Are there significant navigation channels or ports in the area?
- Is the farm enough distance away to ensure that ships and boats will not impact the farms and vice versa?




Availability and cost of fingerlings or seed

- Is there a hatchery in the local area where fry or seed can be sourced from? If not local, where are the fry or seed procured from and are there risks in the supply chain?
- What is the cost of fingerlings or seed of the chosen species?




Availability and cost of feeds

- For finfish and other fed species, ss there a local source of feed in the nearby area? If not local, where is feed procured from and are there risks in the supply chain?
- For finfish adn other fed species, what is the cost and ingredients for the feed?




Distance from shore

- What is the distance from shore and how are the cages reached?
- Is the recommended distance of 0.2-6km achieved?
- If intertidal shellfish or seaweed, is the farm accessible by low tide or by boat?




Existing aquaculture farms / risk of pathogen transfer

- How many other and what type of aquaculture farms are near this area?
- Is there a risk of pathogen transfer from other farms?




Farm security; threat of theft

- Is there a system of security guards or personnel to safeguard equipment being stored on land as well as the farming equipment and farmed species?
- Are appropriate gear in place to prevent marine predators from damaging the nets or lines?




Manpower available at all levels

- Is there enough local labor to carry out regular (daily in the case of finfish) farm operations?
- Are there specialized people that can carry out specific tasks such as cage or line construction, harvest, veterinary services, fry or seed delivery and farmed species harvest?




Proximity to transportation, markets, processing plants

- Are there roads leading from the hatchery to the dock where boats can bring fry or seed to farm?
- What kind of processing is locally available?
- How far is the closest market to sell the product?



Availability of freshwater, electricity

- Does any farming equipment need electricity or power and from where will it be sourced?
- Will freshwater be needed for processing and where will it be sourced?



Piers, docks, anchorage, or mooring areas

- Is there access to a dock where the boats or water vessels can be docked at?
- Are the cages or lines easily accessible? Is the dock easily accessible?
- For finfish, is there a dock or a storage area where feed can be kept for daily feeding?