

FAQ

What are the benefits of seaweed cultivation?

Seaweed cultivation uses no fertiliser or other chemical or fossil fuel fertilizer inputs to promote plant growth. Only sunlight is needed to grow large, healthy plants. Important nutrients and minerals are fixed into the plant that the end user benefits from. Seaweed farming can take pressure off traditional farming on land. As a new industry to Scotland, seaweed cultivation offers new jobs and investment to coastal communities.

What will you use the seaweed for?

Mara Seaweed Ltd. will use the seaweed from the farm for food ingredients in products that they are selling to customers. These products are not only highly nutritious, but they help to reduce carbon by reducing consumption of more carbon-intensive foods.

What impact will the farm have on other Marine Users?

At 6 miles from shore, Mara's farm site is beyond most of the pleasure craft and other water users. By using vessel movements tracked by satellite, the chosen site can be seen as a quiet area for fishing vessels and for vessels transiting the coast or in and out of the Tay ports. This

site has been chosen ahead of other alternative sites due to the low impact expected on other marine users.

Will the seaweed farm affect the view from the shore?

There is very little visual impact from a seaweed farm, as most of the farm infrastructure lies underwater, so little will be seen even from passing vessels. Mara's seaweed farm will lie 6 miles offshore and so will not be visible from the land. Indeed, yellow marker buoys will need to be placed at each corner of the farm to give marine users visual sighting of the site and each buoy will have a flashing light on top for night navigation. All this will be assessed by Nature Scot and Northern Lighthouse Board during the application process.

Will the farm affect the nutrient quality of the seawater?

Seaweed cultivation does not require the input of feed or conditioning chemicals. All the plants require to grow is sunlight. Seaweed draws in nutrients and minerals essential for its growth. These are the available to us when we consume the plants. Mara's farm site is in open sea, with strong tides replenishing the nutrients constantly preventing nutrient depletion in the surrounding waters. There is evidence that seaweed farms helps reduce ocean acidification as it helps to reduce nitrogen in the water; a by-product of intensive land farming practises.

Is there a risk of Cetaceans getting entangled in the farm?

Whilst there have been no reported cases of entanglement of cetaceans (sea mammals

such as whales, dolphins and porpoises) in kelp longline farming, Mara Seaweed Ltd are designing their Seaweed Farm with cetacean safety in mind. Most cases of cetacean entanglement seem to be from discarded fishing gear (ghost fishing) or from loose mooring lines or creel

ropes. The farm design at St Andrews Bay will ensure that lines are taught and well-spaced to allow cetaceans to safely pass through the site.

Will the farm affect other sea life on the seabed due to shading?

Seaweed cultivation lines are placed out at sea on the farm in late autumn and the lines over-winter there with little or no growth on the lines until spring. The seaweed on the lines grows rapidly February through to April and is all harvested out by end of May. The seaweed lines are well spaced apart to prevent them rubbing and with the low angles of the sun in the spring months the estimate of shading of the seabed and water column is less than 1% in Dec, less than 4% in Jan, less than 7% in Feb, less than 10% in Mar, less than 15% by end of April and the seaweed is harvested out by end of May. The chosen site of the seaweed farm is light sand seabed which does not hold wild seaweed plants that require sunlight for photosynthesis. It is therefore hoped that the seaweed farm will have a negligible effect from shading on the wider marine environment. In fact, there is some evidence that seaweed farms have a positive impact on biodiversity; for example, by acting as a nursery for crustaceans and small fish.

Will the Mara farm location have an impact on shore-based expansion and transport activity?

Mara Seaweed Ltd intend to use existing shore base facilities in St Andrews, Tayport and various other harbours on the Fife coast. Vehicle traffic will be light and limited to a short harvest period in April and May. Mara have opened a new facility for harvest processing in Glenrothes. This will ensure short vehicle journeys between harbour and processing facility.

Will the seaweed grown on the farm be an Invasive Non-Native Species (INNS)?

Mara Seaweed Ltd will only seed lines at their farm of species that already grow within the St, Andrews Bay area. Seed stock will be taken from wild seaweed stock from the rocky foreshore where Mara have been operating an aquaculture license for hand harvesting wild species since 2013. Very small amounts of wild seaweed plants are sustainably harvested to create the stock for a whole farm. Once the farm is in production, seed stock will be taken from the farm itself.