



# Climate Action Leadership Seaweed Sector Training Specification

## Training Purpose

In accordance with the Oireachtas Committee's decision to protect traditional seaweed harvesters' rights, industry and community, there is a need for further education and training (Fetac Professional Qualification) and the connection of the 6,000 traditional seaweed harvesters through one community – to which they can have recourse if they are further threatened through the growth of the sector. To empower communities with information on the wider industry, value of their licenses and to provide training in scientific assessments; the identification of seaweed species, algae, shellfish and monitoring of water quality, pressures and threats to the ecological environment.

## Context

This course has been developed in response to a national plan to map the biomass and distribution of seaweed, using remote viewing equipment. The planning does not include contact with the traditional seaweed harvesters even though there is a need for ground-truthing, to validate computer-based results. At the moment, larger commercial operators pay biologists to physically inspect and measure site-specific seaweed distribution. With this approach, local harvesters' licensed areas may not be placed on the map and their seaweed stocks may be inaccurately calculated, reducing the value of their assets or making them a target for larger operators.

The repeated narrative is that traditional seaweed harvesters will not want to and may not be able to 'share their data' on what seaweed stocks they have. In reality, harvesters would much prefer to enter information for such a map, rather than have a private interest group flying and canoeing along their shore, or speculating on what might be there, from afar. It would guarantee the development of a social economy, as well, if harvesters gathered information on more than just the distribution and quantity of seaweed. With an awareness of other performance indicators for the industry, like ability to make a living, harvesting best practice, new markets and alternative seaweed projects. Inclusion on the map of these competent communities, the regional social and environmental benefits, or threats and pressures, would help smaller license holders with funding applications, protection of rights and inclusion in the information loop of the wider seaweed market and sector growth.

There is no reason why local license holders, in addition to privately deployed biologists and remote viewing equipment, should not be paid for submitting information to the National Seaweed Resource Management Mapping study; supported as it is by Small Business Innovation Research (SBIR), the Marine Institute and Enterprise Ireland, and identified as a project 'with potential to impact Irish citizens, government, and to deliver a solution to identified unmet needs in the public services'.



## INFOMAR

This training in resource assessment is being proposed to qualify harvesters as ground-truthers for the national mapping project. The technological solution (drone-footage, geological images and data analysis) is being co-funded by Enterprise Ireland, Marine Institute, DAFM, European Maritime Fisheries Fund (EMFF) and the Department of Communications, Climate Action and Environment via the INFOMAR seabed mapping programme, jointly managed by Geological Survey Ireland, and Marine Institute. If there is coastal community interest in this training, accreditation will be sought from the IITD. Participant action plans will be supported and funding application assistance provided, as part of the learner journey.

It is acknowledged that harvesters can best manage the health, resource quality, regrowth potential and value of the industry with, in addition, licensing authorities having accurate estimates of seaweed resource distribution. Harvesters are also best placed to submit the real solid data to those licensing authorities that is so very limited in availability and difficult for regulators to acquire.

With international industry players currently seeking large-scale regional licenses for resource harvesting and the absence of an accurate map of Ireland's seaweed and smaller license holders', there is a risk that commercial interests could still over-ride local harvesters' rights, if they are not clearly on record on the new map. In fact, before the decision was made by the Oireachtas Committee to protect traditional harvesters' rights, the State actually sold a stake in Ireland's seaweed resource, overseas. As those companies are requesting licenses now to proceed with harvesting the wild stocks, along some large sections of coast that they purchased licenses for, local harvesters will need to know exactly what they have and what it is worth.

The ecological context is one of recurring contamination of seaweed and shellfish waters with human waste from coastal towns and industrial and farm-run-off. This in turn leads to drinking water in municipal systems that is not safe to drink. There are opportunities for grey water systems to alleviate gutter water that is currently creating overflow into the harbour, of sewage works. New seaweed applications such as using seaweed beds as a natural filter, in water management and understanding seaweed stocks as a carbon sump, should attract funding as an alternative livelihood to harvesting; including skilled removal of algae plumes and recovery of seaweed, shellfish and public health, or the careful dredging of harbour-floor pollution. Lasting solutions to fresh and marine water degradation and the wider environmental crisis are presented with the mapping project but only if harvester license holders (active or non active) related services and communities are employed to map and then retained, with bi-annual payments, for the submission of pre- and post harvest stock estimates, ecological environment and water quality reports. Providing coastal communities with industry training, from climate science to organic practices and certification will empower them to lead the growth of the sector in a sustainable way.



## Aims

- Provide a union-style community to connect seaweed harvesters, processors and producers as the sector grows.
- To develop competencies in
  - Environmental standards and methods for harvesting and processing.
  - Scientific assessment skills
  - Submission of routine and event-specific observations to data hubs.
- To increase understanding of climate science and changes in water quality, temperature and impact on the seaweed resource.
- Outline of traditional seaweed harvester's rights.
- Business and project planning; setting specific, measurable, attainable, realistic and time-lined value on licenses and employment within the industry.
- Promote communication, solidarity, transparency and information sharing, through the National Mapping survey, as a means to record and protect regional enterprises and businesses.
- Deliver site-specific data of seaweed resources, shellfish and water quality, local employment and parameters of licenses – for use by license-consenting bodies such as local authorities & ICARUS
- Form a community of harvesters and other stakeholders to train others in scientific assessment of resources and submitting data to open-source data hubs – including the National Biodiversity Data Centre and The Sustainable Development Data Hub.
- Create Local employment
- Develop competencies in organic standards of harvesting and processing,
- Protect from larger commercial entities that require seaweed as a raw material for their products and services
- Environmental best practice protocols, methodologies
- Pre-harvest and post-harvest biomass assessments.