

Innovative Research Solutions with Industry

Seafood

CLIENT:
Comhar Caomhan Teo

AREA:
Marine and Freshwater



Design and development of a facility for long-term storage of live lobster



The Aran island based co-op Comhar Caomhan Teo specializes in exporting lobster to lucrative markets in Europe and Asia. In collaboration with researchers at the Marine and Freshwater Research Centre at Galway-Mayo Institute of Technology (GMIT), a new lobster storage unit was installed to increase survival rates over longer periods, taking some of the uncertainty out of the business.

Live lobsters are stockpiled in open ponds or holding cages at sea for several weeks prior to transportation, a process which is often put on hold as the exporter awaits the firming up of volatile market prices. In the meantime, mortality and spoilage during storage is common. The aim of this collaboration was to develop an energy efficient system to increase survival rates over longer periods and take some of the uncertainty out of the business.



Fishermen removing lobster from pots off Inis Oirr

GMIT's Marine and Freshwater Research Centre works closely with state and semi-state agencies, other Higher Education Institutes and industrial stakeholders like Comhar Caomhan Teo to transfer, develop and commercialise novel products, methods and services to optimise and modernise the seafood industry. GMIT's particular expertise in shellfish physiology and its excellent sea water holding facilities provided the research platform for the company to investigate its problem.

Working collaboratively with Comhar Caomhan Teo, GMIT's scientists demonstrated the potential of a temperature controlled sea water

re-circulation system based at GMIT for the long term storage of live lobster. The knowledge generated from using this system allowed GMIT scientists to design and adapt a new state of the art one tonne re-circulating unit, valued at €40,000 for the company.

The company availed of funding from GMIT, Bord Iascaigh Mhara and the Enterprise Ireland Innovation Voucher scheme to support the project. The company contributed substantial product knowledge and expertise, as well as the stock used in the experiments. ➔

Comhar Caomhan Teo | www.inisoirr-island.com

Inis Oirr Island,
Co. Galway,
Ireland.

T: +353-99-75008
F: +353-99-75071
E: ccteo@eircom.net



•→ The economic viability of the lobster holding system was demonstrated by reducing significantly the mortality rates and wastage associated with storing lobsters. The re-circulation system increased the storage period for live lobster to up to 6 months and provided the company with far greater control over their product. This increased the average unit value from €10/kilo to €40/kilo.

The overall impact of GMIT's collaboration with Comhar Caomhan Teo was to facilitate the company's business growth. The increased export quantities generated have resulted in improved profitability and the project has provided an excellent platform for further development. ■

TESTIMONIAL

Paddy Crowe

*Manager,
Comhar Caomhan Teo*

"Comhar Caomhan Teo are delighted with the installation of a state of the art lobster storage unit. Until the installation of the unit, the co-op was not able to store shellfish on the island. Rather than sending products directly to the continent at low prices dictated by European buyers the co-op now has the ability to store lobster for up to six months which has provided us with far greater control of our stock and responsiveness to seasonal market demand."



Dr. Eugene McCarthy

MARINE & FRESHWATER RESEARCH CENTRE

Galway Mayo Institute of Technology

Dublin Road, Galway, Ireland.

T: +353-91-753 161

E: Eugene.mccarthy@gmit.ie