TECHNICAL SHEET

Fish coolers

A cooler is a fixed (in-ground or built-up) or mobile (cabinet or container) installation with isothermal properties, which allows food or drink to be kept cold or ice to be stored. Unlike a refrigerator, a cooler is passive: ice must be put in beforehand. The cold is only maintained until all the ice has melted and reached the temperature of the ambient air. There are electric coolers (which maintain the coolness permanently by means of an electric power supply) and non-electric coolers (which maintain the coolness over a specific period). Some so-called electric coolers are more like small refrigerators since a small electrical refrigeration system is incorporated, usually in the lid, and are therefore intended to be used in conjunction with a motor vehicle. Unlike a refrigerator, they are not equipped with a thermostat and have a simpler function than maintaining a constant temperature in their enclosure: they ensure a temperature difference between the inside and the outside by means of a Peltier effect heat pump.

Refrigeration is more effective the earlier it is carried out, so it should be undertaken as soon as the fish are removed from the water, especially if they are fragile species such as sardines, or if they are caught in a warm climate (CREPEY and MAILLIARD, 1965). Iceboxes are very often used for the transport under ice of fish species of high commercial value. They have a lifespan of at least 5 years. They are a good choice for small boats. The return on investment is possible after two months of intense activity, especially in periods of abundance (NDIAYE and DEI OUADI, 2009).

Characteristics of the technology

- 60% increase in income
- Reduce fish losses by 50%.
- Preserve fish quality
- Storage time: 30-36 hours
- Holding capacity: 18 kg
- Reduce fish decay by 10%.

Bibliographic references

CREPEY, MAILLIARD (1965) : DISTRIBUTION ET VENTE DU POISSON FRAIS : AMÉLIORATIONS POSSIBLES ; Science et Pêche, Bull. Inform. Document. Inst. Pêches marit., no 138, juin 1965 ; 16p.

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Other references

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