

## IV. MARKETING

### Technology No. 33

### **SOLAR POWERED COOL BOX**

**Inventors:** Sanath Kumar H & Binaya Bhusan Nayak

**Division:** Fisheries Resources, Harvest and Post-Harvest Technology Division

**Technical details:**

The solar fish cooler can hold 50 kg of fish. Powered by two solar panels, the system has a battery to store power. The cooler can achieve a temperature of  $-20^{\circ}\text{C}$ . However, fish intended to be sold in retail market can be stored at  $0$  to  $5^{\circ}\text{C}$ , which will lower the consumption of power and prolong the storage period. Solar-powered cooler is expected to reduce the dependency on ice, prolong the shelf life and ensure the quality and hygiene of fresh fish sold in the retail markets.

**Salient features of the technology**

Useful for retail fish vendors who do not access to or cannot afford ice. Solar panels make use of free solar energy to generate electricity and this electricity is used to run a conventional cooler.



Director & Vice-Chancellor Dr. Gopal Krishna (third from left) and Head of the Division Dr. B. B. Nayak (third from right) with other faculty.

**Impact, if adopted?**

The solar cooler can preserve fish for longer and thus reduce the spoilage of fish. It will also reduce the dependency on ice. Fish can keep longer and the better-quality fish will fetch better price.

**Social impact:**

Useful to retail fish vendors/fisherwomen and help them store their fish hygienically. The increased shelf life of fish will reduce the loss due to spoilage and improve the economic returns.

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