

ODA

BIBP

ICE BOXES ADD VALUE TO YOUR FISH CATCH



Overseas Development Administration

POST-HARVEST
FISHERIES
PROJECT

Ramu and Raju are cousins. They each own a fishing boat. Their friend, Kumar, however goes fishing on a Catamaran. These are the traditional fishing crafts of South India.

Each morning the three fishermen land with their catch.

And yet, why is it that by the end of the sale; Ramu is the luckiest of the three? He always sells his produce at the most favourable price.

This is why; Ramu carries an INSULATED ICE BOX onto his vessel, whilst Raju and Kumar have not. This results in landing fresher fish catches which stay in premium condition for a longer time. As we know, FRESH FISH FETCHES BETTER PRICES and therefore iced fish does not make losses because of deterioration in quality; BOTH FISHERMEN AND TRADERS EARN MORE. This makes everyone happy, except for... Raju, Kumar and all those fishermen who still haven't got round to owning ice boxes to carry onto their vessels.

"If you want to maintain the quality of your catch and therefore have a stronger bargaining power with the traders", suggests Ramu to his cousin; "just buy or make an ice box for your Vallam. An insulated box is always best for two main reasons. Less ice is required for effective preservation as it lasts longer in a well insulated box and the whole catch without any loss is saleable."

What about Kumar? He seems to fare the worst. Since his Catamaran often lands later than the other larger boats and certainly does not have an ice box onboard; at times he is forced to sell his catch at a lower price in order to prevent total loss by spoilage.

The answer is clear, Ramu tells his friends, "form A VILLAGE SANGAM and pool resources together for the installation of a PIB" (Permanent Ice Box). This will enable them to keep their catch fresh at all times; and in case they do land late, they need not be obliged to sell their fish at reduced rates. They can preserve the catch and sell it at a better price the next day. In addition, those who have ice boxes on their Vallam can buy ice from the PIB's which can function as a storage facility for both ice and fish.

So remember, all fish stored in an insulated ice box will keep fresh for a long time without loss — wherever you choose to install it. The special insulation will reduce ice melting; therefore less ice will be needed to maintain the fish quality. This will make everybody happier — fishermen, traders and consumer's alike will benefit.



RAJU
(OWNS A
VALLAM)



RAMU
(OWNS A
VALLAM WITH
ICE BOX)



KUMAR
(OWNS A
CATAMARAN)



Mornings are hectic at the market place with fishermen selling their produce and auctioners bidding the highest prices... Ramu always gets the best deal. Why is that?



"What can I do to improve my catch"? Raju asks his cousin Ramu. "Do what I have done, install an ice-box onto your vessel. The results are immediate; fresher fish and better prices," he says.



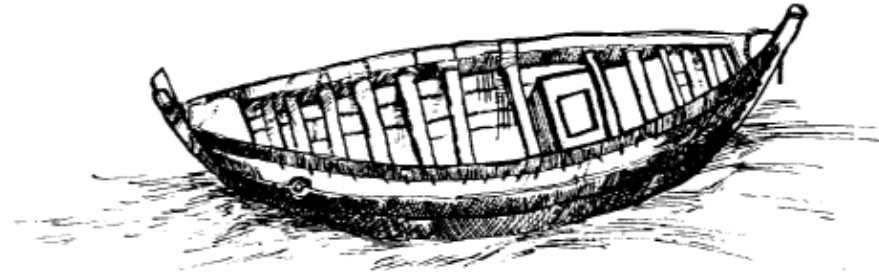
Raju asks Ramu to explain how to use the ice box in the boat to keep the fish fresher and get high price

Ramu explains

HOW TO USE ICE BOX

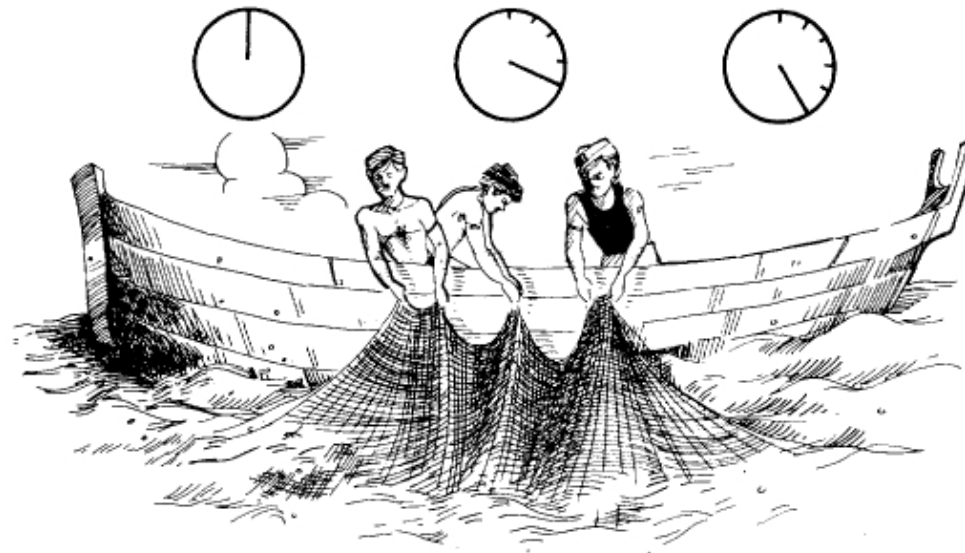
I. INSTALL ICE BOX WITH CRUSHED ICE ON BOAT

- a. *Below the thwarts*
- b. *Lid to be kept between thwarts and easily accessible*



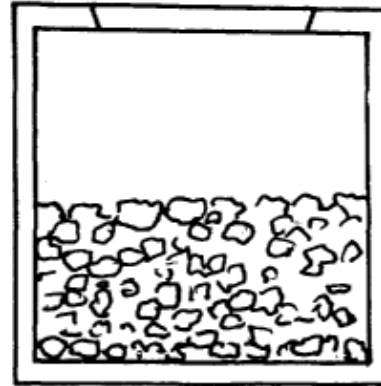
- c. *Drain plug towards the back of the boat*
- d. *As a semi-permanent installation.*

2. SHORT DURATION (4-5hrs.) NET HAULS PREVENT SPOILAGE OF FISHIN NET.

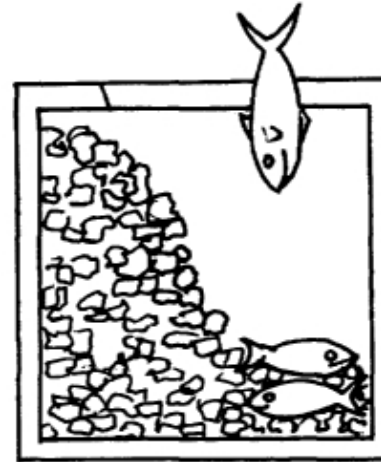


**3. PLACE FISH IN ICE IMMEDIATELY AFTER
HAULING NET**

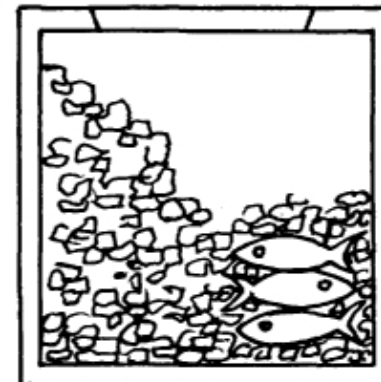
a. Fill the box upto half level with crushed ice.



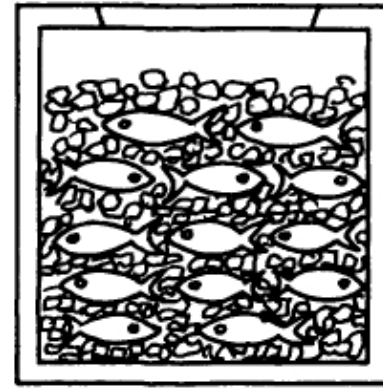
b. Transfer some ice to one side of the box leaving a layer at the bottom. Put one layer of fish on this layer of ice.



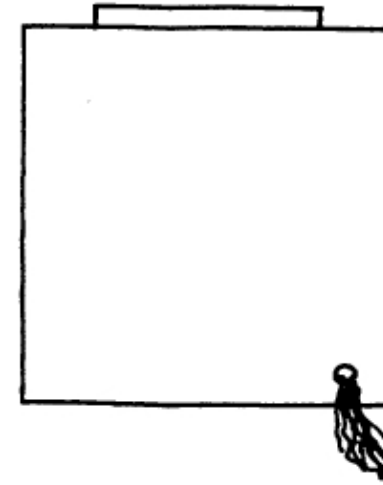
c. Cover the fish with ice.



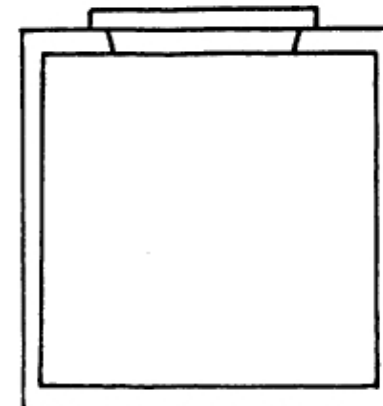
- d. Repeat the process of keeping fish on ice and covering the fish with a layer of ice.



- e. Open drain plug periodically to remove melt water.



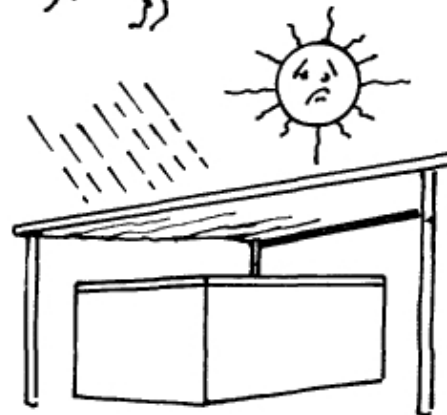
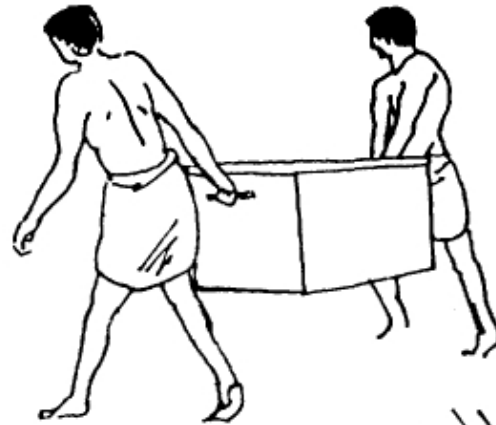
- f. Keep the lid closed when not loading or unloading fish/ice.



MAINTENANCE



- Do not roll an empty box on the shore. Always carry it.
- Do not drop full or half blocks of ice into the box; it will damage the bottom.
- Do not crush the ice inside the box. Always crush the ice separately.
- Do not keep the box exposed to sun or rain when not in use.



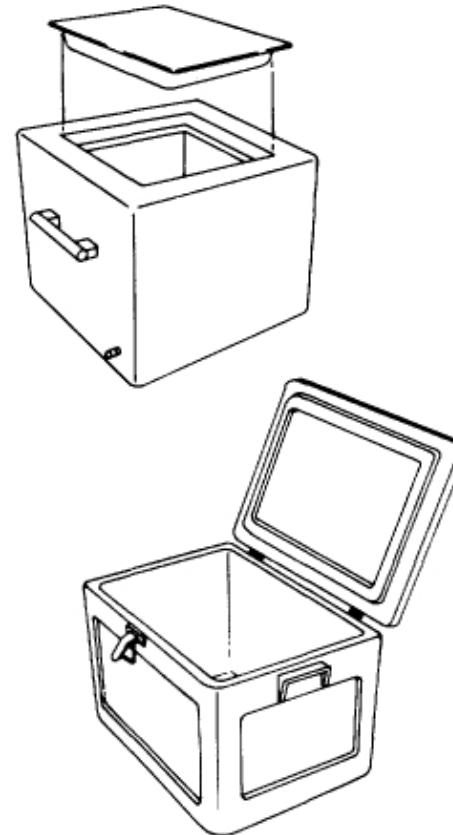
Raju asks Ramu

“Now that I have heard about using ice boxes, I want to know what size of boxes are available to suit my requirements.”



Insulated fish boxes are made with three types of materials. Fibreglass reinforced plastic (FRP/GRP); High density polyethylene (HDPE); and Low density polyethylene (LDPE); all using poly urethane foam as sheets or by “in situ injection” for insulation. The lids for the boxes are tight fitting and also insulated. Boxes which are to be used for keeping fish should have drain hole at the bottom for melt water to flow out. Boxes which are to be used exclusively for keeping prawns need not have a drain hole.

The boxes are available with varying capacities — from 20lt capacity to keep about 12 to 15Kg of fish & ice upto 325 lts to keep about 200 Kg of fish & ice with HDPE material; from 50 lt capacity to keep 30 to 35 Kgs of fish & ice upto 300 lts to keep 180 to 190 Kgs of fish & ice with LDPE material; and from 70 lt capacity to keep 45 Kgs of fish and ice upto 500 lts to keep 300 to 320 Kg of fish & ice with FRP material, to suit the requirements of fishermen and fish traders.

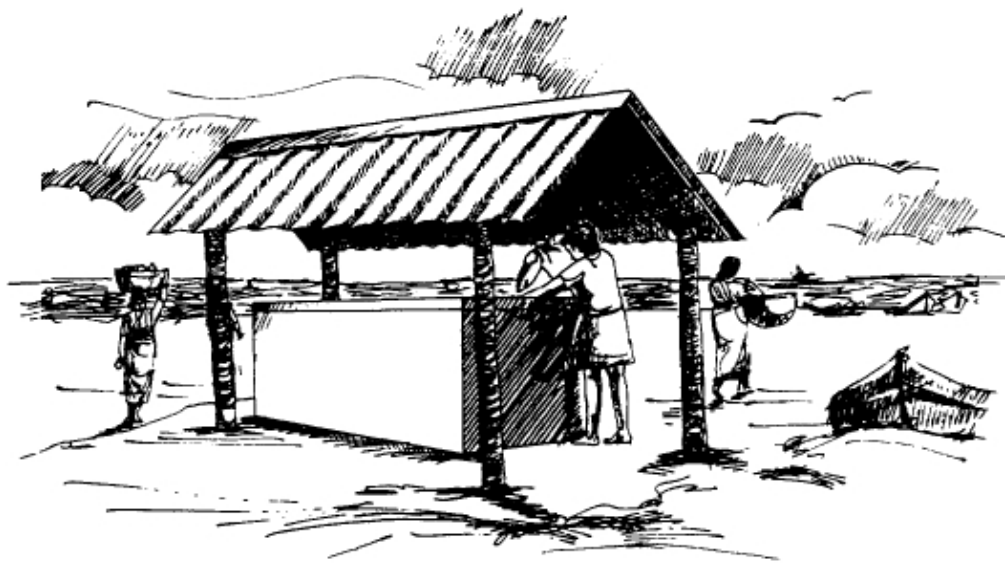




Raju and Ramu have both benefitted from the installation of insulated boxes onto their vessels. Nowadays their fish is maintained in tip-top condition. They therefore have a bargaining edge on wholesalers who are happy to pay higher prices for fresher fish.

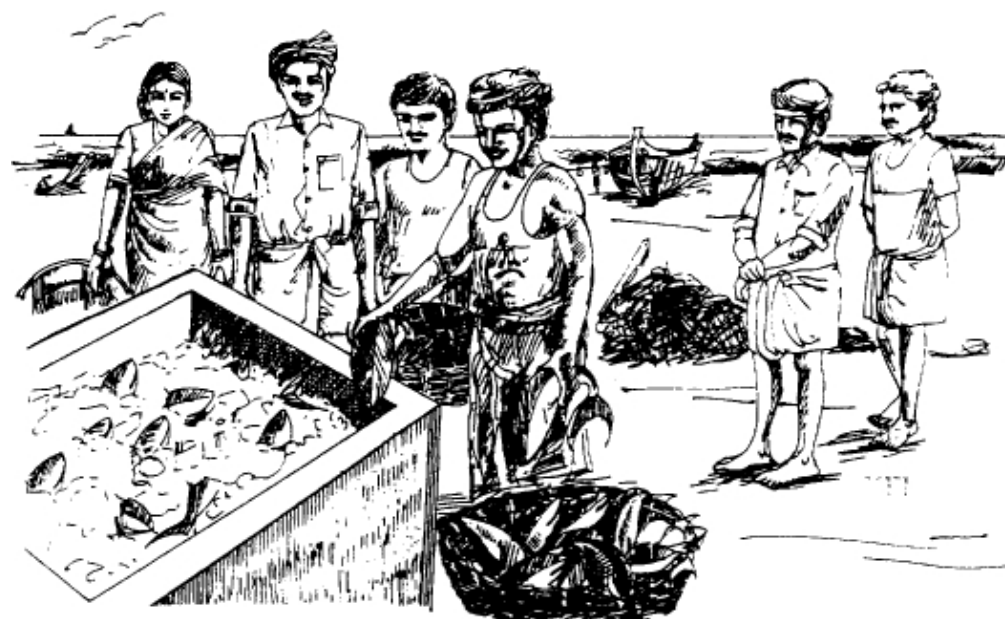


Kumar's situation is quite alarming. His Catamaran rarely lands before the larger boats. This delays the sale of his produce at the market and results in him being forced to sell his fish at unfavourable prices.



The best option for Catamaran fishermen without on-board icing facilities like Kumar, is the erection of a permanent ice-box onshore.

** Details for constructing the P/B is given in another leaflet.*

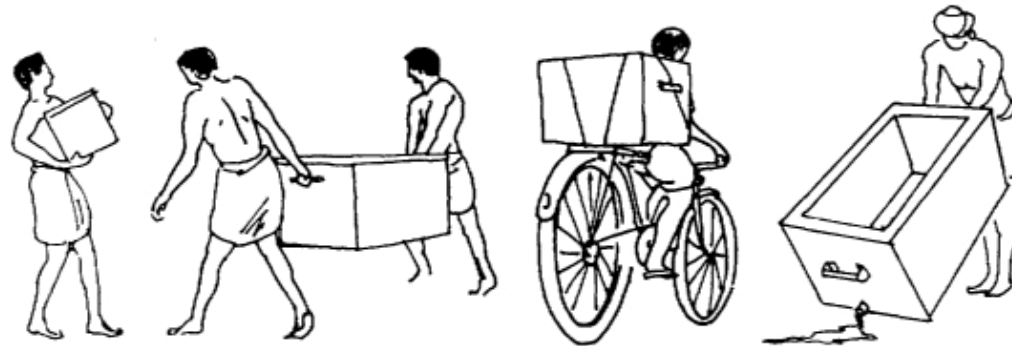


In this way fresh varieties are stored cheaply and hygienically. The village can avail of a ready stock of ice and storage space for the produce of fishermen without their own ice boxes onboard is assured.

CHECKLIST

Before you buy or make a box, check the following :

- Is size of box suitable for size of fish?
- Is the box light enough to lift when full, so that it can be carried easily?
- Is the box easy to clean?
- Is there a drain hole at the bottom?
- Is the insulation thick enough and well protected from getting wet?
- Is there a tight fitting lid with seal?



CONCLUSION

The advantages of insulated containers and boxes are:

- LESS ICE NEEDED
- ICE LASTS LONGER
- FISH STAYS FRESH FOR LONG TIME
- FRESH FISH GETS BETTER PRICE
- FISHERMEN AND TRADERS EARN MORE
- FISHERMEN AND TRADERS HAPPIER!

GOOD FISH



GOOD FORTUNE

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