

ISSN 0254-380 X



# MARINE FISHERIES INFORMATION SERVICE

No. 191

January, February, March 2007



TECHNICAL AND EXTENSION SERIES

CENTRAL MARINE FISHERIES RESEARCH INSTITUTE

COCHIN, INDIA

(INDIAN COUNCIL OF AGRICULTURAL RESEARCH)

In addition to meat, almost all the body parts of rays are used for different purpose. Ray's skin, head, gill rackers, liver, tail and stomach content are processed and converted as value added products.

At Tuticorin, on an average 1334 t of rays are caught by trawlers, hook and line, bottom set gillnet and drift gillnet annually. They are procured for Rs 10 to Rs 30 per kg at the landing centre depending upon the demand and variety.

The head is removed and boiled with water and calcium powder for about 2 hours so as to remove the flesh from the skull. Then the skull is cleaned thoroughly by using brush and washed in water to remove the adhering dirt. The skull is then dried in shade. These are used for making fancy novelty items. The gill rackers are removed and washed thoroughly in water and then dried in sunlight. After drying they are packed in polybags for transportation. They are sold for Rs.300 to 400 per kg. These are used for making decorative hair clips and medicines. Skin of rays is used

as an excellent source of leather of high durability. The skin is removed meticulously by engaging professional peelers so as to avoid any damage and wastage. Peeled skins are washed thoroughly in clean water and then dried. The skin of *Dasyatis bleekeri*, *D.uarnak* and *Pastinachus sephen* are preferred. Various value added products such as purses, chappals, wallets, belts, ladies bags, wall hangings and floor mats are made by using the skin. The skin is sold in predried condition for Rs. 60 - 70 per piece. Dried skin is sold between Rs 30 - 40 per piece. The liver is used for extracting oil. All the livers collected from the rays are put together and boiled in tin barrel; oil is separated and collected in clean containers. It is mainly used for medicinal purpose. One barrel of oil (200 l) costs Rs.5000. The tail is dried and preserved with coating of oil on the surface. They are also used in making fancy items. The stomach contents are dried in the open sun and used in making fish meal for poultry feed.

---

*Prepared by* : G. Arumugam and T.S. Balasubramanian, TRC of CMFRI, Tuticorin.