

## Migrant women labourers in Puffer fish processing

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Puffer fish *Lagocephalus inermis* is found occurring in multi-day trawl catches off the coast of Karnataka. Incidence of puffer fish landing has been recorded at Mangalore and Malpe harbours. The peak season of puffer fish landing at Mangalore harbour was during the months of October (1653 t), November (1270 t) and December (955 t) in multi-day trawls, during the year 2012. At Malpe harbour the landings of puffer fish was 1786 t during October, 750 t in November and 687 t during December, 2012. These months provide additional employment for the women migrant labourers who are otherwise employed in the secondary sector which includes loading /unloading of fish, sorting, peeling and other processing activities. Around 75



Fig. 1. Migrant women labourers engaged in puffer fish processing at Mangalore Fisheries Harbour

women migrants from Tamil Nadu are engaged in the processing of puffer fish at Mangalore harbour once, it has landed. The working hours are from 7 to 9 am (3-4 h). A woman cuts 200 kg of puffer fish during this time. The cutting charges are ₹50/box. The capacity of a box is 40 kg and a woman can handle 4-5 boxes during 3-4 h. The average earning of a woman labourer is ₹250/day.

The cost of puffer fish at the landing centre varies from ₹13-17/kg. The processing of the puffer fish involves removal of the head, skin, ovaries and liver of the fish by cutting and separating these body parts. The skin, ovaries and liver of this fish contain the poison tetrodotoxin (TTX), which is a neurotoxin and is found to shut down the central nervous system of the victim within 4-6 hours of consuming the fish. Though a delicacy in Japanese cuisine, only specialized cooks in Japan are certified to clean, cut and prepare the dish to ensure the safety standards in consumption. “*Fugu*” is the Japanese word for puffer fish and the dish prepared from it. Normally species of genus *Takifugu*, *Lagocephalus*, or *Sphoeroides*, or porcupine fish of the genus

*Diodon* are used. Though the fish is popular in oriental cuisine, the fish is not known to be preferred in the Indian domestic fish market. At Mangalore harbour the price of puffer fish varies from ₹13-17/kg and at Malpe harbour in Udupi it is as low as ₹10/kg. In the fish markets at Udupi, the price is ₹15/kg. At Malpe harbour, the entire catch of puffer fish goes to the fishmeal plants.

At Mangalore harbour, puffer fish of weight more than 200 g are cut. Twenty percent of the fishes are taken by local agents for dry fish making. The rest (80%) are taken to Tamil Nadu, where the market price is ₹ 40/kg. In Tamil Nadu there is demand for the meat of puffer fish in the local wine shops where it is cooked and consumed as Kababs. The rest of the puffer fish from Tamil Nadu finds its way to fish markets in Malaysia and China. Once ignored by fishermen as a low value fish, the puffer fish catches are slowly gaining the attention of export markets and if the migrant women work force are effectively utilised, it could lead to the growth of small export houses exclusively for puffer fish processing along the Karnataka Coast.