

## NOTES ON ROLE OF MULLET IN COASTAL FISHERY

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The mullet fishery resources worldwide have received a great deal of attention as a food source, they are a ubiquitous species that are found in tropical, semi-tropical regions from Japan to South Africa, Cuba and India. Grey mullets in India are highly sought after as a brackish-water fish, that forms a staple part of the food for coastal communities. Currently, approximately 20 species are farmed in different regions of the world, striped mullet being the most desired one, especially in the USA. The mullet fishery has grown from an annual harvest of around 56250 kg in 1918 to an annual harvest of over 1.15 million kg during much of the 1970's (Tilmant, 1989). In Pakistan, the mullet coastal fisheries and its significance is less recognized.

The Mugilidae family is considered as a widespread and abundant inshore teleost (Odum, 1970). Its circumglobal distribution (Collins & Bruce, 1989) inhabiting all major coastlines between 42° north and 42° south latitudes with both eurythermal and euryhaline conditions that increase their importance as food source for humans, potential in aquaculture, and importance as foraging species (Collins & Bruce, 1989). Mulletts are known to occupy turbidity fields, that may be due to their benthic feeding activities (Odum, 1966). They are also considered a principle prey of numerous game fish stocks in the marine waters of Florida Bay (Scott *et al.*, 1989). The gears that are mostly used for mullet fishery are trawl net, gillnet, pair trawl, cast net and among recreational fishery bandit gear, handline, rod and reel and spear. They are ecologically important as primary consumers feeding at the lowest trophic levels in the food chain of coastal and estuarine waters (Nash & Shehadeh, 1980).

The grey mullets belongs to Class: Teleostomi;  
Order: Mugiliformes; Family: Mugilidae; Genus:

Mugil; Species: *Mugil cephalus* locally known as Pharra or Boi. The general appearance of fish is grey in colour, silvery in the lower two-thirds of the body; tips of the dorsal fin are blackish. The mouth is small and the teeth are not visible. Adults are omnivorous feeding on diatoms, blue-green algae and organic detritus and usually move in large shoals or schools in the coastal waters. Mulletts being a coastal water fish would be a hardy fish and are able to tolerate changes in salinity, temperature etc. According to an estimate the eggs and newly hatched mugilid larvae in the Persian Gulf are found during the winter season when the temperatures range between 12-22 °C and salinity range are 33 to 38‰ (Ahmed & Hussain, 2000). The sudden changes in the biomass or fish mortality could be an indicator that the coastal ecosystem is in need of management from harmful algal bloom (Baig, 2000; Baig *et al.*, 2005), water quality monitoring, oil pollution etc. (Rabbani *et al.*, 2004) (Fig.1).

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