

## Case Report

# Livelihood on Mud Crab Catchment: A Case Study of Sundarban Coast, West Bengal, India

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- Crab catching, in the Sundarban coast is an age-old avocation of local poor populace of this region. Though it remains in its traditional form even today but there is increasing demand of live crabs in the local as well as export market and hence there is increasing catchment, livelihood dependency, decreasing catch per unit effort and clandestine catchment of mud crabs (*Scylla* spp.) including adult and undersize crabs from prohibited areas of Sundarban Biosphere Reserve (SBR). The increase in catchment of mud crabs is also due recent surge of mud crab fattening in coastal Sundarban areas [1, 2]. The present case study is made out of a mud crab catching group who resort to hook fishing in prohibited Lothian Island which is one of the three Wildlife Sanctuaries of this Biosphere Reserve (SBR) in West Bengal. It indicates their preference for this profession over others like agricultural labour, daily wage, etc.
- DuluNaiya (38), the Group Leader of 10 hook fishers from Dwariknagar, under Namkhana Police Station, who used to initiate their journey in the early morning at 5 am by using his country boat called Paukhato Lothian Island and return to the landing ghat after 5-8 hours, depending on the lunar period. Participant fisher catches 40-60 crabs per day and earns Rs.450/- to Rs. 800/- depending on the season, market price and market demand of the traders and exporters (Table 1).

Fishing season	Tidal flux (Lunar periods)	Catch/ day (kg);No. of crabs/ hr	Earnings/day (Last year 2016)	Market price (January 2017)
Premonsoon	High tide (11th to 5th)	4-7 kg / day 5-10 crabs/ hr	Rs.450- 500 /-	Less than 100 gm: Rs.80-100; About 100gm : Rs 100-200/-; Size 150-200gm (female- 300-600/-; male 200-400/-; 200gm or more: female 600-800/-, berried female 800-1000/-; male 500-600/-
	Neap tide (6th to 10th)	5-7 kg/ day 5-10 crabs/ hr	Rs. 500-600/-	
Monsoon	High tide (11th to 5th)	6-8 kg/ day 5-12 crabs/ hr	Rs. 600-700/-	
	Neap tide (6th to 10th)	8-10 kg / day 5-12 crabs/ hr	Rs. 700-800/-	
Post Monsoon	High tide (11th to 5th)	3-5 kg / day 5-10 crabs/ hr	Rs. 500-700/-	
	Neap tide (6th to 10th)	5-7 kg / day 5-10 crabs/ hr	Rs. 600-800/-	

**Note:** During 2016 Dulu Naiya earned on an average Rs. 500/- (Premonsoon), Rs. 700/- (Monsoon) and Rs. 650/- (post monsoon) but he earns Rs. 100/- more everyday which he received as rent @ Rs. 10/- per head per day from participant hook fishers for using his boat in daily trip to Lothian Island and back (as informed to one of us – SKP) Earlier hook fishers of Fatikpur of Sundarbanes-tuaries was known to earn Rs. 364/- a month in 1993, collecting an estimated 640 crabs in 8 trips (weekly 2 trips of 2-3 days duration) with a total sale proceeds of Rs. 576/- after selling them at an average Rs. 18/- per score i.e., 20 crabs, spending an average expenditure of Rs. 212/- a month which include boat owner's charge (Rs. 25/-), fooding expenses of Rs. 150/-, permit charge Rs. 12/- and pocket/ petty expenses of Rs. 25/- only [3]. These suggest

that market price has increased manifold and as a result there is increasing exploitation as well as increasing conservation concern of mud crabs.

## References

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