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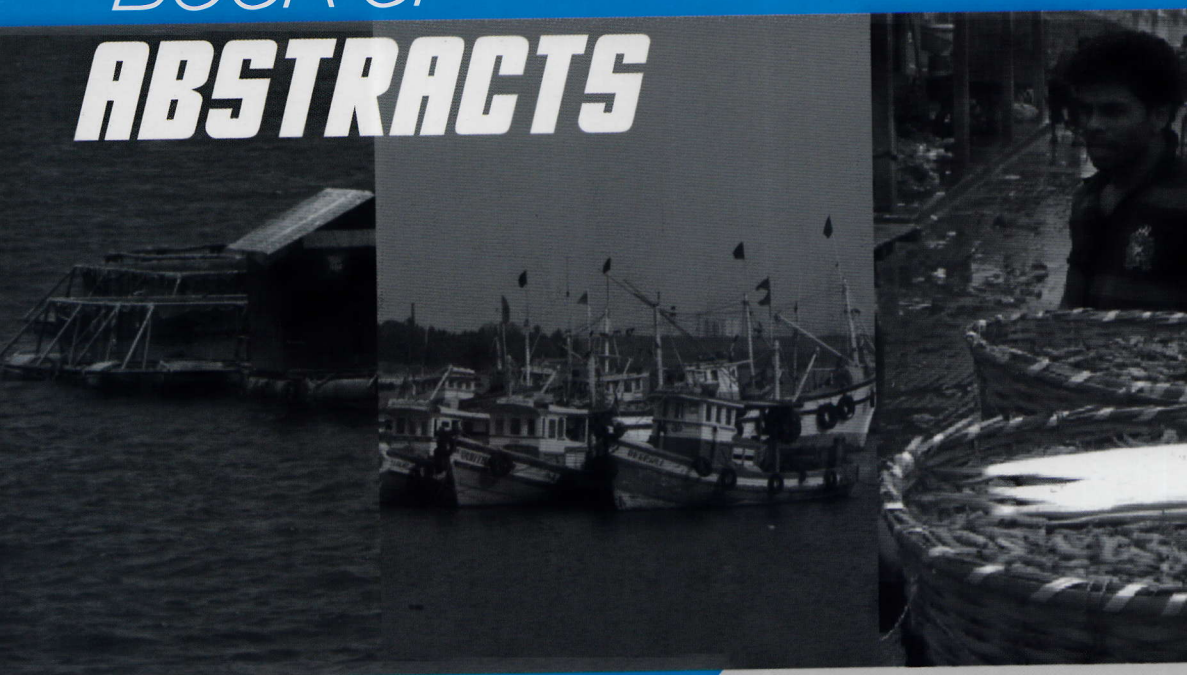
BOOK OF ABSTRACTS



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Present status of cephalopod fisheries of Kerala with an assessment of the stock status of major resources

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The fisheries of cephalopod resources in the state of Kerala from Vizhinjam, Kochi and Kozhikode during the period 2012 to 2016 (XIIIth plan) was monitored and analyzed. Fishery catch estimates of cephalopod resources were based on the data collected from Fishery Resource Assessment Divison. During the XIII Plan period the total cephalopod catch increased by a little more than 43,000 tonnes to 2,07,745 tonnes. The average annual catch was also higher by 8,000 t at 41,549 t registering a 26.5% increase in production. Cephalopod catch of Kerala fluctuated from 35933.8 to 48119.4 t during the period 2012-16. The annual catch varied from almost decadal average 35,000 t in 2016 to a little more than 47,000 t in 2014 indicating fluctuations in abundance. The increase in total production of cephalopods was not comensurate with increase in effort. The major gear exploiting cephalopods was trawl (70-80%), while other artisanal gears such as beach seines, hand jigs, lines and gillnets were in use particularly in the southern district of Thriruvananthapuram. During the XII and XIII Plan period cuttlefishes dominated the catches followed by squids and octopus. Among squids the main species exploited was *Uroteuthis Photololigo duvaucelii* followed by *U (P) edulis* and *U (P) singhalensis*. Among cuttlefishes 5 species belonging to the genus *Sepia* were exploited and it was predominated by *Sepia pharaonis*. Among octopuses, *Amphioctopus negelectus* and *A. marginatus* were the most dominant followed by *Cistopus indicus* and *Octopus lobensis*. The 3 main species contributed to nearly 80% of all cephalopods caught in Kerala. During 2012-16, Cephalopods showed maximum abundance in fishing grounds during the post-monsoon months of August, September and October with catch rates exceeding 15 kg/h. On an annual basis, the abundance of cephalopods shows a declining trend with peaks in 2013 and 2014. *S. pharaonis*, *U. (P) duvaucelii* and *A. neglectus* stocks were analysed for their mean lengths in the fishery. In all stocks the percentage of spawning stock biomass was more than 80% of the standing stock (ST) which is an indication that all stocks are in healthy condition. The rapid stock assessment of the 11 cephalopod stocks indicated that *S. pharaonis*, *U. (P.) duvaucelii* and *S. inermis* were in abundant state.