

بازسازی ذخایر آبزیان**Category:** Management and recovery of aquatic stocks**Title: The biology and fisheries management of the of Hilsa Shad (*Tenualosa ilisha*)
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adaimsc@yahoo.com Tel. 009647801295288**Abstract:**

The present study describes some biological aspects, fishery and stock of Hilsa shad (Sbour), *Tenualosa ilisha* in Iraqi marine waters, northwest Gulf during the period from November 2012 to October 2013, in an attempt to evaluate the management of the stock. The marine artisanal fishery sector was described by gathering data on the fishing effort and the total and shad landings through making interviews and questioners for the fishermen. Also, experimental fishing was carried out in the Iraqi marine waters by steel fishing dhow (Zainab). The total fish catch during the study period was 2,937t and the shad formed 11.4% of the total catch. Total number of fishing boats operating in the artisanal sector was 405 dhows, 100 dhows of them working in shad fishing. The catch per unit of effort of the shad for fishermen subjected to the questionnaire ranged between 1.3-5.1 kg/h/1000m with annual average 2.8 kg/h/1000m and formed 69.7% of the total catch, while for those from experimental fishing varied between 0.02-2.24 kg/h/1000m with annual average 0.95 kg/h/1000m and constituted 49.4% of the total catch.

The operculum was used in age determination. Five age groups were recognized for *shad* and their lengths were 18.0, 28.5, 35.3, 41.3 and 46.3 cm, respectively.

The stock of shad was assessed using FiSAT II program by adopting data combination length of 3,523 fish collected from the landing site in Fao. The exploitation rate was 0.67, revealed a high fishing pressure on the stock and was close to the E_{max} value (0.72). From the probability of capture analysis using selection curve the estimated optimum length of shad at first capture (L_c) was 27.8cm. Furthermore, the information indicated that the shad population is exposed to heavy exploited. also the shad stock in the north Gulf is under heavy exploited by Kuwait, Iran and Iraq.

Keywords: Population dynamic, Hilsa shad, fishery management, Iraq