

Preliminary investigation of the Chank (Gastropoda: *Turbinella pyrum*) fishery at Hambantota and Kirinda of Southern Sri Lanka

The chank or 'Indian conch', *Turbinella pyrum* (Linnaeus,1758) is a large, thick-shelled gastropod, abundant in the shallow waters between India and Sri Lanka. This Benthic and neritic organism lives on sand at depths from 12 to 16 m and is very common in Gulf of Mannar, in the Real Oysters Bank. As a result of the introduction of SCUBA diving, chank fishery has grown and spread from northern and eastern parts to the other parts of the island, including coastal areas such as Hambantota and Kirinda of Southern Sri Lanka. Present study is a preliminary investigation in two sites in Hambantota and Kirinda. Objective of this study is to gather basic information of this fishery, which was recently introduced to Southern Sri Lanka. Information was collected from November 1999 to March 2000, when the sea was calm and favourable to carry out the fishery. All chanks, which were collected 5 km away from the shoreline at depths ranging from 15 to 30 m, had a clutch size of 19 cm. Length and width of a sample of 42 shells were measured and other data were gathered by field observations and conducting interviews with the divers engaged in the fishery. In 1999 and 2000 number of boats operated for this fishery from Hambantota was 20 and 4 and from Kirinda were 50 and 30 respectively. Total number of divers engaged in collection of chanks at Hambantota, were 200 and 250 and at Kirinda were 250 and 150 respectively. Most of the divers involved were from the north-western parts of the island. Each diver used 4 SCUBA tanks per day during which they performed 2-3 hours of diving and this do not comply with diving regulations. During this total diving period each diver collected an average of 50 chanks per day. According to the information gathered through personnel communications during 1999 and 2000 approximately 4, 000 000 chank shells have been exploited. 25% from the total collection have been collected at the depth range 20 to 25 m. Chanks are selected by an experienced chank collector and are graded according to the clutch size. Shells which are undamaged and with a clutch size greater or equal to 19 cm are considered as top grade. Each of them is bought from the collectors at the rate of Rs. 90.00 and sold at Rs. 125.00. Mean length and mean width \pm SD of 42 conch shells sampled were 14.9 ± 1.5 cm (13.0 - 18.5 cm) and 8.5 ± 0.9 cm (7 -11) respectively. 76.2% of the shells belonged to 13 to 15.9 cm length group. During 1999 and 2000 three sinistral chanks (commonly known as "Walampuri") have been found, two from Kirinda. 75% of the collected chanks were recorded to be live and most of the dead shells were occupied by Hermit Crabs (*Eupagurus* sp.). Decline in the chank fishery has occurred from 1999 to 2000 and in 2001 no fishery was recorded. Further investigations should be carried out with respect to population dynamics of chanks in order to find the reasons for the decline of this fishery and to utilise this marine resource in a sustainable manner.