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## Abstract

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The study aimed to investigate if increased flock size increases production, sale and consumption of household duck egg and duck meat in the coastal areas of Bangladesh. A cross-sectional survey was carried out for three months from 15 April to 15 June, 2021 in three villages under the Tala upazila in Satkhira. Results indicated that majority of the respondents (53.3%) belonged to middle age group with secondary level of education (46.7%). The percentage of Khaki Campbell (88.9%) was highest followed by Jinding (6.67%) and Deshi (4.44%) ducks. Average flock size of Deshi, Jinding and Khaki Campbell ducks were 5, 7 and 7.28, respectively. The majority of them (88.9%) used brick-cemented house while 8.9% and 2.22% of them used earthen and wooden houses. All of the duck farmers reared their ducks in semi-scavenging system. Average feeding frequency was 2.00, 3.33 and 2.53 for Deshi, Jinding and Khaki Campbell ducks, respectively. The study showed that Deshi, Jinding and Khaki Campbell ducks started laying at an average age of 6.50, 6.67 and 6.18 months, respectively. Annual egg production was highest in Khaki Campbell (176) followed by Jinding (173) and Deshi (140). Mongoose was the leading predator followed by jackal, wild cat, dog, crow and muskrat. None of the farmers practiced vaccination and deworming. Overall incidence of disease was 57.8% which appeared to be the main challenge for duck raising. Mortality was also high in Khaki Campbell (12.4%) followed by Deshi (10.0%) and Jinding ducks (9.52%). Shelter for the ducks was the primary need of the farmers. An increased flock size was associated with increased annual egg production which ultimately increased net annual family income. Further, an increased annual egg production concomitantly increased annual egg and duck sale. Accordingly, increased annual duck and egg production increased annual household consumption of duck egg and duck meat. The heatmap indicated that an increased sale of duck was associated with reduced consumption and sale of duck egg and duck meat and the vice versa.

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**Keywords:** Duck, consumption, egg, flock size