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Growth, Condition and Spawning Season of *Chanda nama* (Hamilton, 1822) in a Wetland Ecosystem (Gajner beel): Recommendation for its Sustainable Management

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ABSTRACT

This research presents a comprehensive analysis of the population structure, growth patterns, condition factors (including allometric K_A, Fulton K_F, relative K_R, and relative weight W_R), spawning and peak spawning season through GSI (gonadosomatic index), along with the size at sexual maturity (L_m) of *Chanda nama* in the wetland ecosystem of Gajner *beel*, Bangladesh from May 2019 to October 2021. A total of 507 fish samples were randomly collected monthly by commercial fishers using cast nets, gill nets, and square lift nets. The specimens exhibited a total length (TL) variation ranging from 2.6 to 7.2 cm. The estimated allometric coefficient (b) suggested isometric growth (b = 3.089). Additionally, relative weight W_R (101.08± 10.28) did not significantly differ from the expected value of 100 (p<0.0001). Based on TL vs. GSI results and considering L_{max}, the calculated L_m was found to be 3.9 cm and 4.41 cm. The spawning period was observed from April to October, with the peak season in June to July. The research recommends the establishment of a fishing ban during June-July, and a complete prohibition of fishing until the individuals attain sexual maturity. These measures aim to conserve *C. nama* populations in Gajner *beel* and its adjacent ecosystems.

Introduction

Chanda nama (Hamilton, 1822), commonly known as elongate glassy perchlet, belongs to the family Ambassidae of the order Perciformes. Locally, it is called as Chanda, nama Chanda, Lomba Chanda, etc. The species is distributed across Pakistan, India, Nepal, Bangladesh, and Myanmar, thriving in diverse environments such as canals, ponds, streams, and flooded rice paddies, adapting seamlessly to both fresh and brackish water. Its abundance notably increases during the rainy season. Feeding on mosquito larvae, worms, and occasionally consuming the scales of other fishes, *C. nama* plays a crucial role in maintaining ecological balance (Grubh and Winemiller, 2004). This species is recognized as a Small Indigenous Species (SIS) in Bangladesh, particularly in the northern regions where it is commonly dried and consumed. Dried Chanda fish holds a significant place in local markets, being used as a delicious

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and nutritious ingredient in rural area of Bangladesh, despite its comparatively low market price (Talwar and Jhingran, 1991). These small, bony, fleshy fishes are often sold in abundance alongside other small fish varieties in local markets. Furthermore, *C. nama* has gained popularity as an aquarium fish, enjoying high demand among ornamental fish enthusiasts (Gupta and Banerjee, 2012). While the presence of *C. nama* contributes to checking mosquito breeding to some extent, its more significant impact lies in effectively reducing the density of cyclops, making it a potential asset in the control of guinea worms and malarial prevention (Bhuiyan, 1964). Due to its wide distribution and the absence of major threats, *C. nama* has been assessed as "least concern" globally and in Bangladesh according to the IUCN (2022) classification.

Population structure is essential for comparing morphological characteristics among species or different populations of the same species in diverse environments (Sabbir et al. 2020). Additionally, it serves as an indicator of a species' stock status and breeding periods (Ranjan et al. 2005). LWR and LLR are crucial biometric indicators that can be employed to compare and contrast various biological conditions (Ilah et al. 2023). However, LWR plays a vital role in the exploitation and sustainable management of fish populations and is essential for stabilizing the taxonomic characteristics of fish species (Rahman et al. 2023). It is noteworthy that length-length relationships are more relevant than age, as several ecological and physiological factors demonstrate a stronger dependence on length rather than age (Rahman et al. 2020).

In assessing the physiology, well-being, and growth of fish (Richter, 2007), various condition factors are applied. These factors encompass numerical parameters that measure the health of fish, providing insights into their immediate and potential reproductive potential by influencing development, survival, as well as reproduction (Le Cren, 1951; Mawa et al. 2022). The relative weight (W_R) stands as a crucial and widely employed index for evaluating the condition of fish (Rypel and Richter, 2008). Furthermore, W_R serves as the predominant metric used to assess the prey-predator dynamics of fish within a specific environment (Froese, 2006; Khatun et al. 2023).

Effective fisheries management relies on an accurate assessment of biological parameters, including growth parameters, reproduction, size at sexual maturity (L_m), and stock assessment (Tracey et al., 2007). The L_m of fish is crucial for exploring the causes of variations in the length of maturation (Templeman, 1987). Additionally, the maturation size of fishes is widely used as an indicator of the minimum allowable capture size (Lucifora et al. 1999; Hasan et al. 2021).

Reproduction is critical to the efficiency of fish populations and their resilience to fishing and environmental changes (Parvin et al. 2022). Successful reproduction is the primary factor that determines individual intensity and population replacement (Donelson et al. 2014). According to Khatun et al. (2019), reproductive biologyoffers factors needed for stock evaluation and population viability models. Furthermore, precise calculation of reproductive characteristics provides insight into the major elements that might impact the sustainability and recruitment of diverse fish populations (Sabbir et al. 2021). The size at sexual maturity in fish is particularly important to determine the causes of variations in maturity size (Templeman 1987), and it is more often employed as a marker of minimum landing size for capture (Lucifora et al. 1999). The gonadosomatic index (GSI) is the most often used method for determining the stage of gonadal maturation, spawning season, and peak spawning cycle (Le Cren 1951; Parvin et al. 2022).

Numerous studies have explored various aspects of the *C. nama* fish species (Table 1); however, there is a significant lack in detailed information regarding the features of condition factor, spawning season (reproduction) and management strategies of *C. nama* in the wetland ecosystem of Gajner *beel*, Bangladesh. This study aims to provide a comprehensive description of the population structure (LFD), growth pattern (LWR and LLR), condition factor, size at sexual maturity, spawning and peak spawning season, of *C. nama* within the aforementioned wetland ecosystem. The research involves a diverse range of specimens, including various sizes, throughout the study duration.

Table 1. Available study of *Chanda nama* from worldwide water bodies

Aspects	Country or Habitat	References
Biology	Sindh, Pakistan	Khoso et al. (2018)
	Old Brahmaputra River, Bangladesh	Ahmed et al. (2019)
Length-Weight relationship	Dora *beel*, Assam, India	Sheikh et al. (2017)
	Tripura, India	Sangma et al. (2019)
Life-history traits	Mathabhanga River, southwestern Bangladesh	Hossain et al. (2021)
Morphometric and meristic	Mathabhanga River, southwestern Bangladesh	Hossen et al. (2020)

Materials and methods

Study site and sampling

The study was carried out at the Gajner *Beel* wetland, which is located in Sujanagar upazilla, Pabna, northwest Bangladesh (Lat. 23° 55'N; Long. 89° 33' E). (Fig.1). Gill nets, trawls (wire spacing: 2-3 cm), and traditional fishing techniques were used to catch fish from May 2019 to October 2021. After being collected, samples were placed in ice and then kept in 10% buffered formalin in order to ensure that they would be suitable for further research.

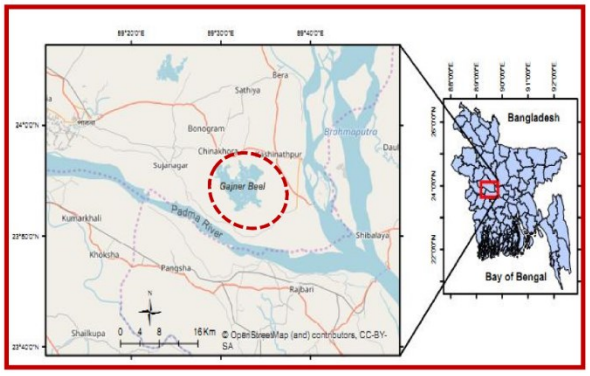

Fig. 1. Study site in the wetland ecosystem (Gajnar *beel*), Bangladesh

Fish measurement

Gonadal observation under a microscope was used to identify male and female individuals, although only females were analyzed. Before being weighed, each female was further given a water wash and allowed to dry outside. Each sample's individual body weight (BW) was measured using an electric balance with an accuracy of 0.01 g, and the total length (TL) was measured with a precision of 0.01 cm using a measuring board. The females' ventral dissection was used to gently extract the gonads, which were then accurately weighed (GW) to within 0.01 g.

Population Structure

The length frequency distribution (LFD) for the *C. nama* species was organized using a total length (TL) class interval of 1.0 cm.

*Growth pattern (*LWR and LLR*)*

The growth pattern of the species was analyzed using Length-Weight Relationships (LWR), following the methodology outlined by Le Cren (1951). This method involves the equation $W = a * L^b$, where parameters '*a*' and '*b*' can be assessed by employing the equation: $ln\ (BW) = ln\ (a) + b\ ln\ (TL)$. Additionally, the relationships between Total Length (TL) and Standard Length (SL), as well as TL and Fork Length (FL), for *C. nama* were determined, denoted as LLR.

Condition factors

The allometric condition factor (K_A) was determined using the formula W/L^b, as introduced by Tesch in 1968. In the computation of Fulton's condition factor (K_F), the expression was employed $K_F = 100 \times (W/L^3)$ (Fulton, 1904). To assess the relative condition factor (K_R), the equation $K_{R=} W/(a \times L^b)$ was employed (Le Cren, 1951). Furthermore, the relative weight (W_R) was assessed by evaluating $W_{R=}(W/W_S) \times 100$, in accordance with the methodology established by Froese in 2006.

Size at first sexual maturity (L_m)

The calculation of L_m, specifically GSI *vs*. TL, involved the utilization of the gonadosomatic index (%), which was determined using the Nikolosky equation from 1963, expressed as (GW/BW) * 100. To compute sexual maturity and establish the initial value for the increase in GSI proportionate to TL, the equation log (L_m) = 0.1189 + 0.9157 log (L_{max}) was applied.

Spawning period and peak spawning period

To ascertain the spawning period and peak spawning period of *C. nama*, an extensive study was undertaken, involving monthly observations of gonadal changes in female specimens. The careful analysis of the gonadosomatic index (GSI)

provided valuable insights into the specific timeframes during which spawning activities were most pronounced and prevalent.

Statistical analysis

The study data underwent analysis using Microsoft Excel (version 2013) and GraphPad Prism 8.0 software. The Spearman rank correlation test was employed to evaluate the relationship between the condition variables and TL and BW. Furthermore, the Wilcoxon sign-ranked test, following the recommendation of Anderson and Neumann (1996), was utilized to examine the average relative weight (W_R) in comparison to 100. All statistical analyses adhered to the conventional significance level of 5% ($p < 0.05$).

Results

Population Structure

The statistical results for the length and weight measurements of a total of 507 female *C. nama* specimens, along with their respective 95% confidence limits (CL), are presented in Table 2. According to the Length Frequency Distribution (LFD), the smallest and largest species exhibited total lengths of 2.6 and 7.2 cm, correspondingly, demonstrated body weights ranging from 0.17 to 2.77 g. The frequency distribution of length (Fig. 2) showed that the most common TL length was between 4.99 and 5.99 cm.

Growth Pattern

The length-weight relationship (LWR) regression parameters with 95% confidence limits, the sample size (n = 507), the coefficient of determination (r^2), and the growth pattern of *C. nama* are shown in Table 3 and Fig. 3, respectively. For this species, the calculated b value (TL *vs.* BW) demonstrates an isometric growth pattern. Furthermore, Fig.3 also illustrates that there is a comparable developmental pattern in the b value of the length-length relationship (LLR) between TL and SL and TL and FL.

Condition factor

The values of the four condition factors—K_A, K_F, K_R, and W_R are presented in Table 4. The results of the Spearman rank correlation test indicate that the condition variables have significant relationship with TL and BW (Table 4). Nonetheless, the relative weight W_R for *C. nama* in the wetland habitat (Gajner *beel*) in Bangladesh did not deviate significantly from the value of 100 (p< 0.0001).

Table 2: Descriptive statistics on length (cm) and weight (g) measurements with their 95% confidence interval of *Chanda nama* in the wetland ecosystem (Gajner *beel*) Bangladesh.

Measurement	*n*	Minimum	Maximum	Mean±SD	$CI_{95\%}$
TL (cm)	266	2.6	7.2	4.677±0.654	4.598-4.756
SL (cm)		2	5	3.664±0.520	3.601-3.727
FL (cm)		2.3	5.8	4.109±0.569	4.040-4.177
BW (g)		0.17	2.77	1.046±0.448	0.992-1.101

TL, total length, SL, standard length; BW, body weight; GW; *n*, sample size; Min, minimum; Max, maximum; SD, standard deviation; CL, confidence limit

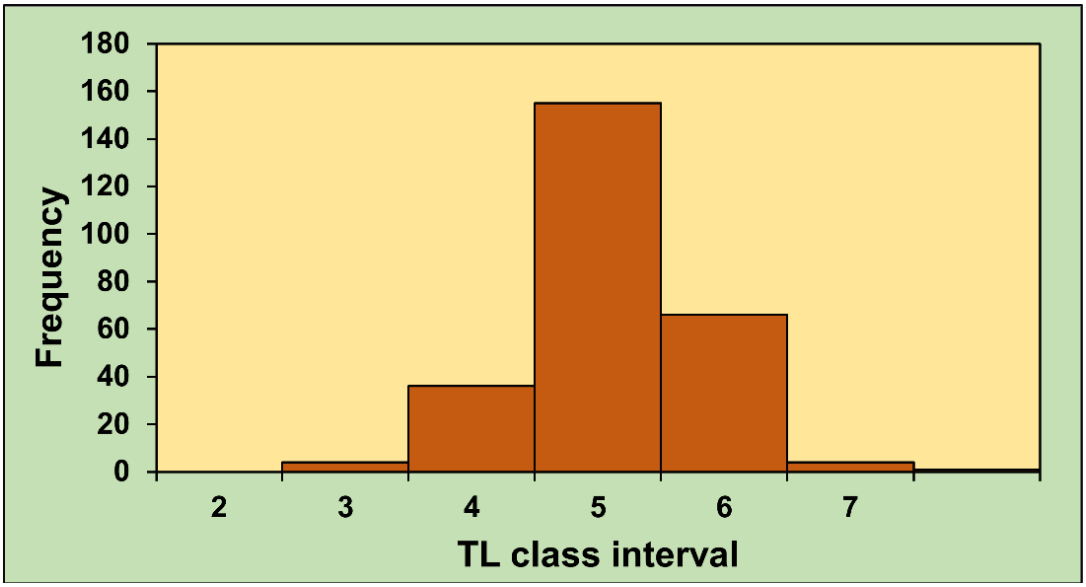

Fig. 2. Total length frequency distributions of *Chanda nama* in the wetland ecosystem (Gajneer *beel*), Bangladesh.

Table 3. Descriptive statistics of length-weight and length-length relationships (*LWR & LLR*) of *Chanda nama* in the wetland ecosystem (Gajneer *beel*) Bangladesh

Formula	n	Regression variables		±95% CL of *a*	±95% CL of *b*	r^2
		a	*b*			
BW = $a \times TL^b$	266	0.0083	3.089	0.0073 to 0.0094	3.007 to 3.170	0.9545
SL = $a + b \times TL$	266	0.0355	0.775	-0.0636 to 0.134	0.754 to 0.796	0.9525
FL = $a + b \times TL$	266	0.1144	0.854	0.0203 to 0.2085	0.834 to 0.873	0.9643

n, sample size; TL, total length; BW, body weight; SL, standard length; *a*, intercept; *b*, slope; CL, confidence limit for mean values; r^2, coefficient of determination

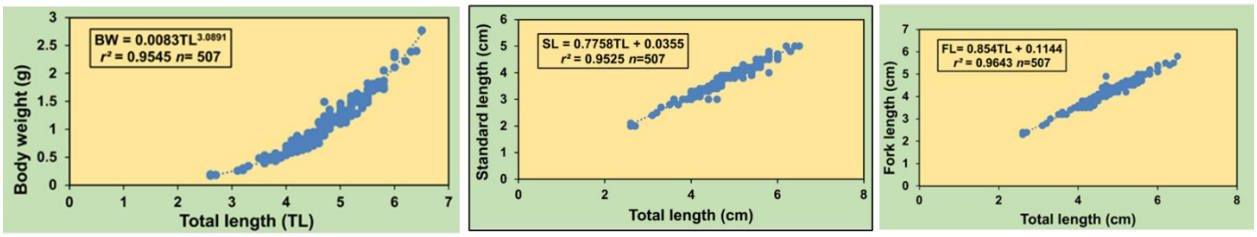

Fig. 3. Relationships between total length (TL) and body weight (BW), total length (TL) and Standard length (SL) and total length (TL) and fork length (FL) of *Chanda nama* in the wetland ecosystem (Gajneer *beel*), Bangladesh.

Table 4: Descriptive statistics on condition factor measurements and with their 95% CI and Relationships of condition factor with total length (TL) and body weight (BW) of *Chanda nama in* the wetland ecosystem (Gajner *beel*), Bangladesh.

Conditions	Minimum	Maximum	Mean±SD	CL 95%
K_F	0.77	1.43	0.961± 0.098	0.949 to 0.973
K_R	0.810	1.506	1.010 ± 0.102	0.998 to 1.023
K_A	0.0067	0.0125	0.0083± 0.0008	0.0082 to 0.0084
W_R	81.04	150.65	101.08± 10.28	99.84 to102.32
Relationships	**r_s values**	**95% CL of r_s**	***p* values**	**significance**
TL vs. K_F	0.1917	0.0695 to 0.3082	0.0017	**
TL vs. K_R	0.07631	-0.0479 to 0.1983	0.2148	ns
TL vs. K_A	0.07625	-0.0480 to 0.1982	0.2152	ns
TL vs. W_R	0.07631	-0.0479 to 0.1983	0.2148	ns
BW vs. K_F	0.3819	0.2708 to 0.4828	<0.0001	****
BW vs. K_R	0.2709	0.1521 to 0.3819	<0.0001	****
BW vs. K_A	0.2708	0.1521 to 0.3818	<0.0001	****
BW vs. W_R	0.2709	0.1521 to 0.3819	<0.0001	****

Condition factors *(K_A*, Allometric; *K_F*, Fulton's; *K_R*, Relative); r_s, coefficient of spearman rank correlation test values; *CL*, confidence limit; ns, not significant; ***most significant; and *P*, exhibitions the intensity of significance.

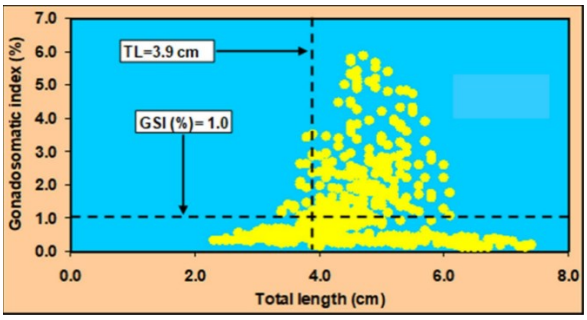

Fig. 4. Showing the GSI based L_m of female *Chanda nama* in the wetland ecosystem (Gajneer *beel*), Bangladesh.

Size at first sexual maturity (L_m)

Based on GSI (%) the L_m was 3.9 cm in TL for female *C. nama* when the GSI was 1.0%. The relationship between TL and GSI of female *C. nama* are shown in Fig. 4. The GSI rose sharply at around 3.9 cm TL. High GSI (1.0) was only recorded in females with TL >3.9 cm. Therefore, the size at first sexual maturity was considered to be 3.9 cm TL and individuals with a ≥0.5% could be roughly defined as mature female *C. nama*. Therefore, the size at first sexual maturity was considered to be 3.9 cm TL. Furthermore, the L_m of *C. nama* was determined to be 4.41 cm (95% CL = 3.30-5.88cm) in TL depending on the L_{max}. Based on the related L_{max} values, Table 5 displays the L_m values for this fish species from diverse water bodies throughout the globe.

Spawning period and peak spawning period

The spawning season of *Chanda nama* was estimated based on monthly changes of GSI which is shown in Fig.5. The GSI values were low in the month of November to March. However, the higher GSI was found during the month of April to October, which indicated the spawning season for *C. nama* in the Gajner *beel*. In addition, peak value of GSI was found in the month of June–July, which was the peak spawning season for this species.

Table 5: The calculated size at first sexual maturity (L_m) of *Chanda nama* from different habitats

Water body	L_{max} (cm)	L_m	95% CL	Reference
Gajner beel, Bangladesh	7.2	4.64	3.81-5.68	**Present study**
Mathabhanga River, Bangladesh	7.5	4.81	3.95-5.91	Hossain et al. (2021)
Mathabhanga River, Bangladesh	7.2	4.64	3.81-5.68	Hossen et al. (2020)
Gomti river, India	9.39	5.91	4.81-7.31	Sangma et al. (2019)
Begnas Lake, Nepal	8.06	5.14	4.21-6.32	Husen et al. (2019)
Dau Dam Thana Boola Khan, Pakistan	10.02	6.27	5.10-7.77	Khoso et al. (2018)
Dora Beel (wetland) of Assam, India	7.29	4.69	3.86-5.75	Sheikh et al. (2017)
Old Brahmaputra River, Bangladesh	8.1	5.16	4.23-6.35	Ahmed et al. (2019)

Discussion

Limited information exists regarding the reproductive characteristics of *C. nama* in the available literature, both from Bangladesh and other sources. The present study is aimed at offering a comprehensive description of the population structure, growth pattern, condition factor, size at sexual maturity, spawning and peak spawning season of *C. nama* in the wetland ecosystem (Gajner *beel*), northwestern Bangladesh. A total of 507 specimens of different body sizes were gathered by locally found equipment over the sampling period.

Individuals of *C. nama* with a total length of 2.6 cm were not able to collect throughout the sampling period for a number of reasons. These factors may have resulted in biases in the selection of fishing gear (Khatun et al. 2019), constraints in capturing small species within the fishing area (Hossain et al. 2015), a lack of small individuals (Azad et al. 2018).

Additionally, the maximum recorded length of *C. nama* in the study area was 7.2 cm, which is less than the reported maximum value of 11.0 cm TL (Menon, 1999) and lower than the length estimates of 7.5 cm stated by Hossain et al. (2021) as well as the equal length noted by Hossen et al. (2020) at Mathavanga River. The lengths documented by Sangma et al. (2019) and Husen et al. (2019) in the Gomti River in India and Begnas Lake, Nepal were 9.39 cm and 8.06 cm, respectively, higher than in the current study. Khoso et al. (2018) stated a length of 10.2 cm, whereas Sheikh et al. (2017) and Ahmed et al. (2019) found lengths of 7.29 cm and 8.1 cm, respectively, based on comparisons that were similarly higher than the current research. This length disparity might be ascribed to the selectivity of the fishing gear (Sabbir et al., 2020) or to the fact that fishermen did not visit sites with longer fish (Khatun et al. 2019). In the present study, the weight ranged from 0.17 g to 2.77 g. In comparison, Hossen et al. (2020) documentedthe weight range 0.1-3.2g which is greater than our investigation. Sheikh et al. (2017) and Ahmed et al. (2019) both reported weights of 4.02 g and 11.5 g, respectively that are also higher than our study.

The allometric coefficient *b* value of LWR (TL *vs.* BW) for *C. nama* was found to be 3.08 based on the results of the present investigation. This result falls within Tesch's (1971) anticipated range of 2.0-4.0 and Froese's (2006) expected range of 2.50-3.50. The *b* value of LWR suggests that *C. nama* has an isometric growth pattern ($b \leq 3$) in the Gajner

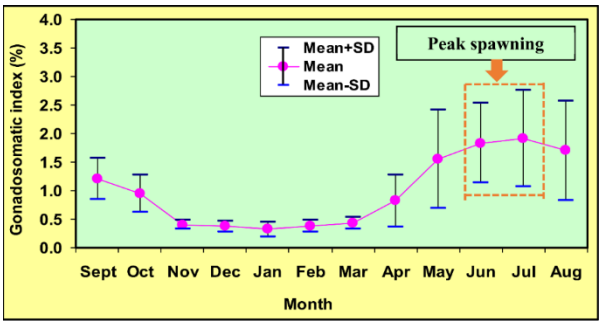

Fig. 5. Monthly changes of the GSI (%) for female *Chanda nama* in the Gajnar *Beel*, northwestern Bangladesh

beel, indicating that body weight increases proportionately to all dimensions. Hossain et al. (2021) revealed *b* values of 3.01 and Sangma et al., (2019) found *b* values of 3.08, nevertheless Ahmed et al. (2019) reported *b* values of 3.06 for male and 3.26 for female, all of which exhibit an isometric development pattern and seem alike to the results of our research. On the other hand, the *b* values 2.13 and 1.62 offered by Khoso et al. (2018) and Sheikh et al. (2017) suggest the negative allometric growth.

This investigation examined the physical and ecological condition of *C. nama* in Gajner *Beel* employing four condition parameters (K_A, K_F, K_R, and W_R). The Spearman rank correlation test findings demonstrate that only K_F displays a significant relationship with both TL and BW among the different condition variables that were tested.The values of K_A, K_F, K_R, and W_R was 0.77-1.43,0.810-1.506,0.0067-0.0125 and 81.04-150.65 respectively of *C. nama* in the Gajner *beel* and its surrounding ecosystems. Additionally, the results of the Wilcoxon signed rank test indicate that the average W_R did not differ from 100 (p<0.0001), indicating that predator population of Gajner *beel* maintains a balanced in terms of food accessibility for *C. nama*. In contrast, Hossain et al. (2021) found that the K_A range in the current research was 0.0056-0.0125, while the K_F range was 0.55-1.25. *C. nama* had a K_R range of 0.68-1.52 and a W_R range of 67.87-152.44 at the Mathavanga river. According to Islam et al. (2017), the K_F range for *C. nama* in the Brahmaputra River, Bangladesh was 0.77-1.16. Sangma et al. (2019) revealed the highest value of Fulton's condition factor 1.08 for *C. nama* in India. According to Sheikh et al., (2017), the relative condition factor for *C. nama* at Dora *beel* (wetland) in Assam, India, ranges from 0.60-1.52. According to Ahmed et al. (2019), the monthly K_F varied for both sexes, ranging from 1.63 to 2.09 in males and from 1.63 to 2.21 in females.

Determining the size at sexual maturity in fish is crucial for understanding the reasons for variations in sizes at maturity (Templeman, 1987). To describe the size at sexual maturity (L_m) of female *C. nama*, we employed the GSI model and the maximum TL. Based on GSI (%), the L_m was 3.9 cm in TL, and based on L_{max}, the Lm was 4.41 cm. In accordance with Hossain et al. (2021), L_m was reported as 4.4 cm TL, which is nearly consistent with our study. In contrast, Ahmed et al. (2019) reported Lm as ~3.0 cm SL in the Old Brahmaputra River, Bangladesh. Additionally, Grubh and Winemiller (2004) reported the size at sexual maturity of this species as 2.5 cm SL from a wetland in Tamil Nadu, India. According to King (2007), the differences in size at sexual maturity might be attributed to variations in environmental factors, particularly water temperature, population densities, and food availability.

Estimating the spawning period is crucial for understanding the timing of reproduction and migratory behavior in fish species (Wilding et al. 2000). Our research indicates that higher GSI values occurred between April to October, suggesting the spawning period for *C. nama* in the Gajner *beel*. The highest GSI values were recorded in June–July, marking the peak spawning season for this species. According to Ahmed et al. (2019), the spawning season of *C. nama* is reported from July to August. Several studies have also documented the spawning season of this species. For instance, Parween et al. (2000) reported the spawning season as July-November and February-August in Bangladesh, while Jones (1946), Gupta (1984), and Grubh and Winemiller (2004) documented June-August, April-May, and March-July, respectively, for the same in India. According to Sangma et al. (2019), the breeding season of this species is observed from June to August based on GSI values in Tripura, India. However, variations in the spawning season may be influenced by environmental variables such as water temperature, rainfall patterns, population density, and food availability (Ahamed and Ohtomi, 2012; Ahamed et al. 2014; Allen, 1966). These variables can impact the duration and timing of spawning periods in fish populations. Therefore, when examining the reproductive biology and spawning patterns of *C. nama*, it is essential to assess the impact of these environmental variables.

***Based on findings the following fishery management are suggested*:**

- The size at sexual maturity for *C. nama* in the Gajner *beel* was determined to be between 3.9 and 4.41 cm, suggesting that 50% of the population spawns at this size. Fish below this length should not be caught under any circumstances; however, fish beyond this size may be considered for exploitation.
- Implement sustainable fishing practices, such as the use of selective gear that minimizes bycatch and allows for the release of non-target species.
- Establish seasonal fishing bans or restricted areas to minimize disturbances during critical reproductive periods. Our findings revealed that the peak spawning season for *C. nama* takes place in June and July. To preserve this population during month of June-July, all fishing should be totally prohibited.

Conclusion

This study has furnished a comprehensive understanding of the population structure, growth pattern, condition factors, size at sexual maturity, and spawning and peak spawning of *C. nama* in the wetland ecosystem (Gajner *beel*), Bangladesh. The findings revealed that the L_m of *C. nama* ranges from 3.9-4.41, suggesting that fishing under this length should be completely prohibited. To ensure sustainable management and proper conservation of these fish species in their natural habitat, fishing should be banned during the breeding period. The outcomes of this study serve as an effective tool for fishery biologists, managers, and conservationists, providing insights for the initiation of early management strategies and regulations to sustainably conserve the remaining stocks of this species in the Ganjer *beel* wetland and surrounding ecosystem.

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Authors' contribution

Conceptualization, MYH and MMRK; Methodology, MYH and MMRK; Data collection and analysis, MMRK, TAL, MSK, OR and MAI; Draft, MMRK, TAL, MSK, OR and MAI; Review and editing, MYH. All authors have read and agreed to the published version of the manuscript.

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