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Corrigendum

Corrigendum to "Forecasting of Tilapia (Oreochromis niloticus) production in Bangladesh using ARIMA model"

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Proposed correction:

2.2.1. Model identification

$$X_t = \mu + \varepsilon_t + \theta_1\varepsilon_{t-1} + \theta_2\varepsilon_{t-2} + \ldots + \theta_q\varepsilon_{t-q} X_t = \mu + \varepsilon_t + \theta_1\ \varepsilon_{t-1} + \theta_2\ \varepsilon_{t-2} + \ldots + \theta_q\ \varepsilon_{t-q} \quad (1)$$

Here, X_t is the observed value at time t, μ is the mean of the time series, ε_t is the white noise error term at time t, and $\theta_1,\theta_2, \ldots,\theta_q\theta_1,\theta_2, \ldots,\theta_q$ were the parameters to be estimated.

$$X_t = \varphi_1 X_{t-1} + \varphi_2 X_{t-2} + \ldots + \varphi_p X_{t-p} + \varepsilon_t X_t = \varphi_1\ X_{t-1} + \varphi_2\ X_{t-2} + \ldots + \varphi_p\ X_{t-p} + \varepsilon_t \quad (2)$$

Here, X_t is the observed value at time t, $\varphi_1,\varphi_2, \ldots,\varphi_p\varphi_1,\varphi_2, \ldots,\varphi_p$ are the autoregressive parameters, and ε_t is the white noise error term at time t.

2.2.2. Estimation of parameters

$$MAPE = \frac{100\%}{n}\sum_{t=1}^{n}\left|\frac{e_t}{y_t}\right| \quad (6)$$

where e_t is the error term, y_t is the observation, and $\widetilde{y_t}$ is the forecast, and $e_t = y_t - \widetilde{y_t}$.

$$\mathrm{BIC} = T' \log(\sigma^2) + (p+q+1)\log T' \quad (8)$$

Here, σ^2 denotes the mean square error and T' indicates the number of observations used. The model with the lowest BIC value would be the best [28].

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