

# TILAPIA<sup>a</sup> VERSUS CARP SPECIES<sup>b</sup>: CONTRADICTING PERCEPTIONS OF FISHERMEN AND AUTHORITIES

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Inland fresh water fish species play a significant role as a source of protein to consumers, income to fishermen and as a part of biodiversity of fresh water bodies in Dry Zone, Sri Lanka. In the meantime, authorities prefer to promote carp species rather than *tilapia* in the area although fishermen demand more *tilapia* species. Therefore, it is high time to find the reasons for this gap of preference between authorities and fishermen. Accordingly, this research explored the factors affecting the perceptions of fisherman and authorities on the two fish species, using data collected from regional aquaculture extension officers (RAEO) and fishermen of Aluthdivulwewa tank of Galenbindunuwewa divisional secretariat division. In-depth interviews supported by structured questionnaires were carried out to collect data from fishermen (n=30) and regional aquaculture extension officers (n=07). Binary logistic regression method was used to elicit the factors affecting the choice of *tilapia* vs. carp by fishermen. However, it did not produce any result since 100% of fishermen stated their preference to *tilapia*. In contrast, 100% of RAEO preferred carp. Fishermen income, market demand, consumer preference, fishing effort and size compatibility (size of fish) of fish species were the variables used in the model measured at 5 point Likert scale. However, correlation analysis demonstrated strong ( $r \geq 0.8$ ), positive and significant ( $p < 0.05$ ) correlations between preference for *tilapia* by fishermen and market demand ( $r=0.8$ ), size compatibility ( $r=0.9$ ) and consumer preference ( $r=0.8$ ) while correlations were insignificant with fishing effort and income. This provides enough evidence to conclude that market demand, size compatibility and consumer preference are crucial factors for fishermen to prefer *tilapia* over carp and therefore, revision of present contradictory stocking policy could generate more social and economic benefits.

**Keywords:** Authorities, Carp species, Fishermen, Perception, *Tilapia*

<sup>a</sup>*Oreochromis mossambicus*, *Oreochromis niloticus*

<sup>b</sup>*Ctenopharyngodon idellus*, *Hypophthalmichthys molitrix*, *Hypophthalmichthys nobilis*, *Catla catla*, *Labeo rohita*, *Cirrhinus mrigala*, *Cyprinus carpio*