

**TRACK: INNOVATIONS IN SUSTAINABLE LIVESTOCK,
AQUACULTURE, AND HEALTH**

**Rice farmer's perception and knowledge on rice fish integration in some selected
areas of Kurunegala District**

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Rice-fish integration is a sustainable agriculture practice that involves the simultaneous cultivation of rice and fish in the same field. However, the success of rice-fish integration depends on the knowledge and perception of farmers towards this practice. This study aimed to explore the perception and knowledge of rice farmers on rice-fish integration in selected areas of the Kurunegala District. A total of 200 potential rice farmers were selected using a third-stage sampling procedure. Data collection was facilitated through a pre-tested questionnaire, and subsequent analysis was conducted using descriptive statistics. The results revealed that the majority of rice farmers were older than 60 years, with the largest group being those aged 50 or older, and the majority (84%) of the respondents were male. Although there was a low knowledge of rice-fish integration among farmers, only 60% of farmers are willing to practice rice-fish farming, while 14% did not accept. On average, respondents had a positive perception of integrated rice-fish farming, with a (mean score of 3.73). The study identified, the presence of fish in the rice field boost rice field fertility and lower fertilizer needs (mean score 4.01), waste and by-product from one subsystem are used as input on the other subsystem (mean score 3.17) and weeding should not be done with the use of herbicides (mean score 3.84) as major reasons to consider knowledge of farmers for rice-fish farming. Furthermore, the respondent's age and paddy production level were found to positively impact their preferences for practicing rice-fish farming. The study concluded that the rice farmers had moderate knowledge and positive perception on integrated rice and fish farming. There is a need to provide necessary support, such as irrigation facilities, adequate training and resources to help them to adopt this sustainable agriculture practice in Kurunegala District. Additionally, rice-fish farming initiatives should be targeted towards potential rice farmers experiencing low production and young farmers.

Keywords: *Integrated rice-fish farming (IRFF), Kurunegala District, Perception and knowledge, Training and targeted initiatives*