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**A community participatory approach for seed production of *Oreochromis niloticus* (Nile Tilapia) *Oreochromis niloticus* in Rice-fish integration systems**

*Oreochromis niloticus* (tilapia) has a unique place in aquaculture in Sri Lanka and their natural reproduction is an advantage. But both rice and fish farmers have a little knowledge on seed production of tilapia. Rice farmers in dry zone could produce tilapia

seeds in their field, which is known as rice-fish integrated farming. Farmers in Sri Lanka do not practice rice-fish integrated aquaculture and especially the fish seed production in paddy fields. Tilapia produced in paddy fields could be stocked in reservoirs, seasonal tanks or home garden ponds as they show good growth in these 3 aquatic systems.

The trial was carried out in triplicate in Tunkama area. Areas of the rice fields used were 198 m<sup>2</sup> and 90 m<sup>2</sup>. The culture period was 55 days starting with tillering stage up to beginning of ripening stage of rice. These fields were selected after a thorough examination for its suitability with respect to water supply and mud content. These fields were supplied with irrigated water only during the farming season. Water exchange was carried out once a week. A single trench was prepared in each paddy field and the size of the trench did not exceed 10% of the paddy field. Supporting canals however, were connected with this trench. Height of the bunds of paddy fields were increased and strengthened.

Stocking density and sex ratio used were 0.3 KG m<sup>-2</sup> and 3:1 (female: male) respectively. First fry were observed 25 days after stocking of the brooders. Total number of fry produced were 950 within 55 days. Farmers have observed an improvement of tillering, rice yield and pest control in these fields.