B-26 : RICE-FISH INTEGRATION : PADDY YIELDS IN PADDY CUM FISH INTEGRATED SYSTEM WITH POULTRY MANURE AS THE ONLY FERTILIZER

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Integrated farming systems are becoming popular especially due to waste recycling ability. In this experiment, paddy cum fish farming was performed with poultry manure as the only fertilizer for both rice and fish.

Experiment was conducted in 4 rice plots of $45m^2$ each. Each plot consisted of a pond refuge having an area of $2m^2$.Drains connecting the pond refuge with other area for fish movement amounted to 13.9240.8 m^2 per plot.

B.G. paddy varieties (379-2 and 194-1) were transplanted after attending to normal land preparation techniques. Paddy transplanting was done 14 days after the application of poultry litter at 1680kg/ha (DW basis) as a basal dressing. Subsequently 2 plots were fertilized with poultry litter at 840 kg/ha/week (high fertilizer) and the other two at 420 kg/ha/week (low fertilizer) and for 8 weeks.

Average yield from BG 379-2 under high fertilizer level was 7,200 kg/ha, while under low fertilizer level was 6,800 kg/ha. BG 94-9 yielded 6,200 kg/ha under high fertilizer level. According to Dept. of Census and Statistics (1988), average yield of paddy in Kandy District is 2804 kg/ha.

This study reveals that, in addition to other benefits of integration with fish, high paddy yield obtained with only organic fertilizer merits further experimentation.