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**Impact of Water Quality on Fish Production in Several Ponds of  
 Dinajpur Municipality Area, Bangladesh**

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**Abstract:** The fisheries sector is very important in Bangladesh. This study was conducted to assess the impact of water quality on fish growth and production in several ponds of the Dinajpur Municipality area. This study was conducted for eight months from March 2013 to October 2013. The study was carried out in 60 ponds of three water categories, such as clean water pond, slightly polluted water pond, and polluted water pond. In each water category, 20 ponds were selected. Different types of fish species such as Silver carp, Catla, Rui, Mrigal, Mirror carp, Grass carp, and Thai sharpunti, etc. were cultured, stocked and sometimes combinations of other species were also in the same pond. The mean values ranges of water quality parameters in three water categories in several ponds monitored during the study period were temperature 28-33°C; transparency 18-55 cm; pH 5.5-8.9; dissolved oxygen 7.13-7.81 mg/l; Carbon dioxide 10-23mg/l; alkalinity 20-125 mg/l respectively. The water quality greatly influenced the growth and production of fishes among the three categories significantly in several ponds. However, the average production rate of fish per year was the highest in the clean water ponds (1756.63 kg/acre), medium in the slightly polluted water ponds (1229.86 kg/acre), and the lowest in the amount in polluted water ponds (846.78 kg/acre). The study indicated that water quality significantly impacts the growth and production of fish in several ponds.

**Keywords:** Water quality, fish, production, pond, Dinajpur Municipality area

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