

# Growth Performance of the Nile Tilapia, *Oreochromis Niloticus* Cultured in Cages in Two Dams in the Bongo District of Ghana

E. H. Alhassan<sup>1</sup>, E. O. Kombat<sup>2\*</sup> and D. Karim<sup>1</sup>

<sup>1</sup>Department of Fisheries and Aquatic Resources Management, University for Development Studies, Tamale, Ghana

<sup>2</sup>Department of Applied Biology, University for Development Studies, Navrongo, Ghana

\*Corresponding Author: emmanuelkombat@yahoo.com

## Abstract

This study was carried out to compare the growth performance and survival rate of Nile tilapia, *Oreochromis niloticus* cultured in cages in two different dams in the Bongo District of the Upper East Region of Ghana. Three cages with the same structural characteristics were constructed in each of the dams as replicates. Each cage was stocked with 9500 all male *O. niloticus* fingerlings and fed with 48 % nourish plus feed thrice daily for a period of eight weeks. Twenty-five samples of the fishes were randomly collected bi-weekly from each cage and measurements such as standard length and body weight recorded. Other growth characteristics such as specific growth rate (SGR), feed conversion ratio (FCR), protein efficiency ratio (PER), mean weight gain (MWG), condition factor (K) and survival rate (SR) were estimated. The results revealed that, *O. niloticus* cultured in the Soe-Yidongo community dam recorded the highest growth performance in terms of final body weight, standard length, weight gain, specific growth rate, condition factor and protein efficiency ratio, and they were significantly different ( $p < 0.05$ ) from those recorded in the Bon-Gurigo community dam which was attributed to the variations recorded in the physicochemical parameters of the two dams. It was concluded that tilapia cultured in cages might be an important alternative livelihood strategy for poor people in rural communities in Ghana.