Yields and Economic Benefits of Tilapia (*Oreochromis niloticus*) and catfish (*Clarias gariepinus*) polyculture in ponds using locally available feeds.

E. O. Mac’Were¹, C.C. Ngugi¹, and K.L. Veverica²
¹Department of Fisheries
Moi University
PO Box 1125
Eldoret, Kenya

²Auburn University
Alabama 36849-5419 USA

19 July 2007

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Development of aquaculture in Africa is limited by cost and shortage of fish feeds, poor financial resources and knowledge base of small-scale farmers. Consequently use of on-farm resources for producing tilapia is an attractive means of developing low-cost aquaculture. This study compared yields and economic benefits of *Oreochromis niloticus* and *Clarias gariepinus* polycultured over a 180-day period in twelve 800 m² ponds limed and fertilized (5kg Phosphorus, 20kg Nitrogen per hectare) prior to receiving 1550 tilapia and 50 catfish each. Fish were fed twice daily at 2% body weight with Rice Bran, Pig Finisher, and a Formulated Diet feeds. Gross production in rice-bran fed fish was significantly lower (P < 0.05) with a gross yield of 4448kg, than both pig finisher (6575kg) and formulated diet (6359kg). Relative profitability analysis showed that Pig Finisher pellet was the best followed by Rice Bran at normal selling rice of US$1.29 (Kshs 90.00) per kg of fish. Pig Finisher and Rice Bran had lower Break Even Prices than Formulated Diet. Partial and full enterprise budgeting analyses, used here as tools to compare relative profitability of nutrient regimes, are essential to fish farmers and financial institutions willing to make investment decisions in fish farming.