## Notice of Publication



AQUACULTURE COLLABORATIVE RESEARCH SUPPORT PROGRAM

## RESEARCH REPORTS

Sustainable Aquaculture for a Secure Future

Title: Economic Analysis of Nile Tilapia Production in Ghana

**Author(s):** Aloyce R. Kaliba

University of Arkansas at Pine Bluff, AR, USA

Steve Amisah

Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

Linus Kumah

Ministry of Fisheries, Accra, Ghana

Kwamena K. Quagrainie

Purdue University, West Lafayette, IN, USA

Date: August 18, 2008 Publication Number: CRSP Research Report 07-230

The CRSP will not be distributing this publication. Copies may be obtained by writing to

the authors.

**Abstract:** Economic profitability of Nile tilapia (*Oreochromis niloticus*) production in Ghana

was analyzed using a dynamic model that simulates individual fish growth and takes fish population dynamics in the pond into account. The results suggest that the current practiced mixed-sex tilapia culture with catfish predation was economically sustainable.

However, to increase returns on investments, extension efforts should be geared

towards developing a Nile tilapia production system that is based on a hand-sexed allmale-

tilapia culture. Other fundamentals include pond studies to determine optimal pond size, availability of affordable feed and quality fingerlings. Under an improved production system, profits are high enough to justify investment through borrowed

capital.

This abstract was excerpted from the original paper, which was in the Quarterly Journal of International Agriculture, Vol. 46(2): 105-117.

**CRSP RESEARCH REPORTS** are published as occasional papers by the Program Management Office, Aquaculture Collaborative Research Support Program, Oregon State University, 418 Snell Hall, Corvallis, Oregon 97331-1643 USA. The Aquaculture CRSP is supported by the US Agency for International Development under CRSP Grant No.: LAG-G-00-96-90015-00 and by collaborating institutions. See the website at pdacrsp.orst.edu>.