NOTICE OF PUBLICATION

RESEARCH REPORTS TITLE XII POND DYNAMICS/AQUACULITURE COLLABORATIVE RESEARCH SUPPORT PROGRAM

Title:

Optimal resource allocation by fish farmers in Rwanda

Author(s):

Carole R. Engle, Ph.D.

Department of Aquaculture and Fisheries University of Arkansas at Pine Bluff

1200 North Univ Drive

Box 4912

Pine Bluff, AR 71611

Date:

14 April 1997

Publication Number:

CRSP Research Report 97-104

Price:

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

the authors.

Abstract:

Although many small-scale fish farming projects around the world promote fish production as a source of low-cost protein, increasing evidence demonstrates fish to be an important cash crop, even for limited-resource farmers. A mathematical programming model was developed from survey data of Rwandan farmers to determine optimal resource allocation on subsistence farms in Rwanda. The specific objective of the study was to determine farm plans that maximize returns to a representative Rwandan farm family's resources, subject to constraints of the farm family's proteinic and caloric requirements. Soybeans, sweet potatoes, and maize were selected to meet household nutritional requirements. Fish production was selected as the principal cash crop, in most cases lending support to the evidence that fish is more important as a cash crop than as a primary protein source in Rwanda

This abstract was excerpted from the original paper, which was published in the Journal of Applied Aquaculture, 7(1)1997:1-17.