NOTICE OF PUBLICATION

POND DYNAMICS / AQUACULTURE COLLABORATIVE RESEARCH SUPPORT PROGRAM

RESEARCH REPORTS

Sustainable Aquaculture for a Secure Future

Title: Effect of chicken manure additions on fish production in ponds in West Java, Indonesia

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Date: 18 April 1988 Publication Number: AquaFish Research Report **88-08**

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Abstract: Results of experiment in Cycle III of the Pond Dynamics/Aquaculture CRSP are reported here. Two experiments were conducted: one lasted 156 days and the other lasted 149 days. During both experiments four levels of dried chicken manure (12.5, 25, 50 and 100 g/m^2/wk) were added to 0.02 ha ponds. There were three ponds in each treatment. Results of the two experiments were similar. Yield of Nile tilapia (*Oreochromis niloticus)* at final harvest increased linearly with increasing fertilizer application from about 900 kg/ha in the lowest treatment to approximately 2300 kg/ha in the highest. Increased algal productivity and an apparent increase in detritus accompanied increasing fish yield. Analyses of nitrogen and phosphorus suggested that higher algal productivity and fish yields could be obtained by improving the fertilizer regime so that N and P are available in these ponds in proportions required by pond mircroflora.

This abstract was excerpted from the original article which was published as *CRSP Research Report 88-8* (1988) by the Program Management Office of the Pond Dynamics/Aquaculture Collaborative Research Support Program (PD/A CRSP).

CRSP RESEARCH REPORTS are published as occasional papers by the Program Management Office, Pond Dynamics/Aquaculture Collaborative Research Support Program, Office of International Research and Development, Oregon State University, Snell Hall 400, Corvallis, Oregon 97331 USA. The Pond Dynamics/Aquaculture CRSP is supported by the US Agency for International Development under CRSP Grant No. DAN-4023-G-SS-2074-00.