



# PD/A CRSP NINETEENTH ANNUAL TECHNICAL REPORT

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## **A MANUAL OF FERTILIZATION AND SUPPLEMENTAL FEEDING STRATEGIES FOR SMALL-SCALE NILE TILAPIA CULTURE IN PONDS**

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Final Report*

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### **ABSTRACT**

This study was conducted at the Asian Institute of Technology from January to June 2001 to summarize the PD/A CRSP work on Nile tilapia (*Oreochromis niloticus*) pond culture in Thailand and thus to develop a manual of fertilization and supplemental feeding strategies for small-scale Nile tilapia culture in ponds. The manual consists of eight sections. Section 1 gives a brief introduction to PD/A CRSP work and Nile tilapia culture; section 2 introduces pond preparation; section 3 examines different sources of pond inputs and quality; sections 4 and 5 focus on fertilization and supplemental feeding strategies, respectively; section 6 presents methods to control overpopulation of Nile tilapia; section 7 introduces pond management; and section 8 gives a simple economic analysis to select the suitable strategy. The aims of the manual are to provide simple guidelines of fertilization, supplemental feeding, and pond management for small-scale Nile tilapia pond culture and to provide simple extension and training materials to extension workers, trainers, and well-educated farmers. We expect that small-scale fish farmers in Asian countries, especially in Southeast and South Asia, will benefit from this manual to produce Nile tilapia through effectively using organic and inorganic fertilizers and feeds to increase fish production, achieve higher economic returns, and reduce environmental impacts.

