
WATER HARVESTING AND AQUACULTURE
FOR RURAL DEVELOPMENT

SINGLE POND SYSTEM FOR SUSTAINABLE
PRODUCTION OF *OREOCHROMIS NILOTICUS*



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INTRODUCTION

Farmers can grow mixed-sex tilapia for food and still produce their own fingerlings in a single pond (Figure 1). The system requires few inputs and works well on subsistence farms. Farmers using this system may no longer need to depend on government or private hatcheries for fingerlings.

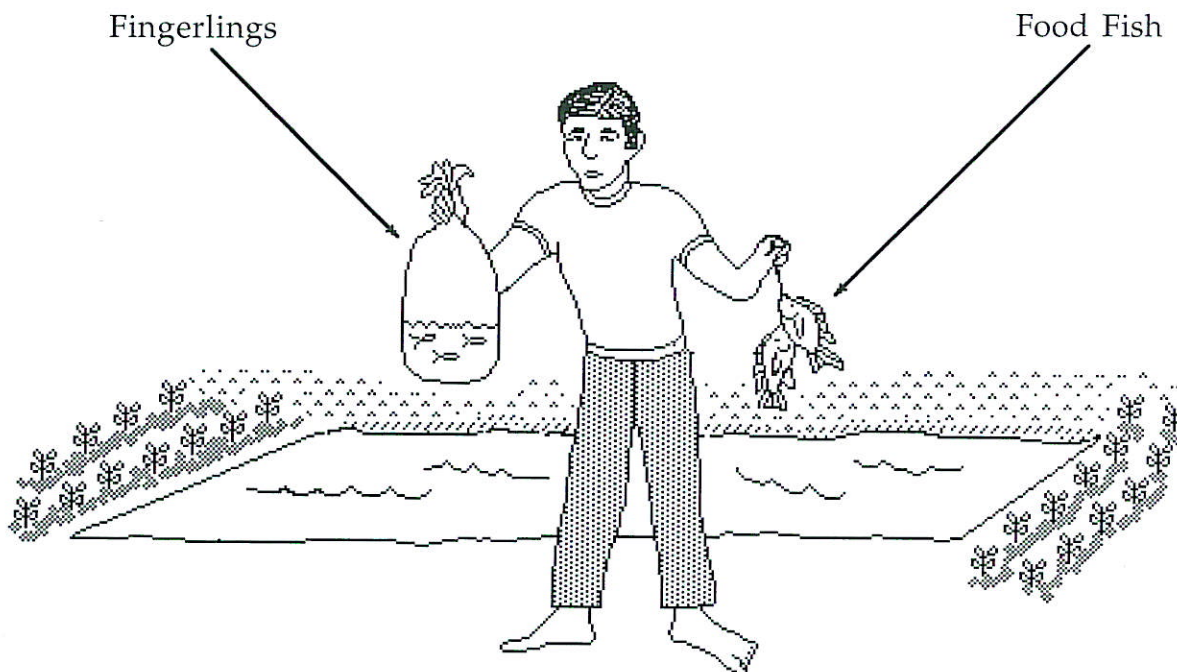


Figure 1: One pond can produce food fish and fingerlings.

PROCEDURE FOR POND MANAGEMENT

- 1) Stock mixed-sex, same-age tilapia fingerlings of 1 to 3 g (2 to 4 cm) at a rate of 1 fish per m^2 in a prepared grow-out pond. Do not stock fingerlings larger than 5 g as they will quickly reproduce and the offspring will cause overcrowding and stunting of the stocked fish. For information on the production of 1 g, same-age tilapia fingerlings refer to the manual "Production of 1-Gram, Mixed-Sex *Oreochromis Niloticus* Fingerlings in Earthen Ponds," in this series.
- 2) Culture the fish 4 to 6 months using feeding and fertilization practices. Manuals describing these practices are available in this technical series. Fingerlings will mature and reproduce in 2 to 5 months. Reproduction may occur within 2 months in warm climates when larger fingerlings (5 g) have been stocked; cooler climates and smaller fingerlings may delay reproduction for up to 5 months.