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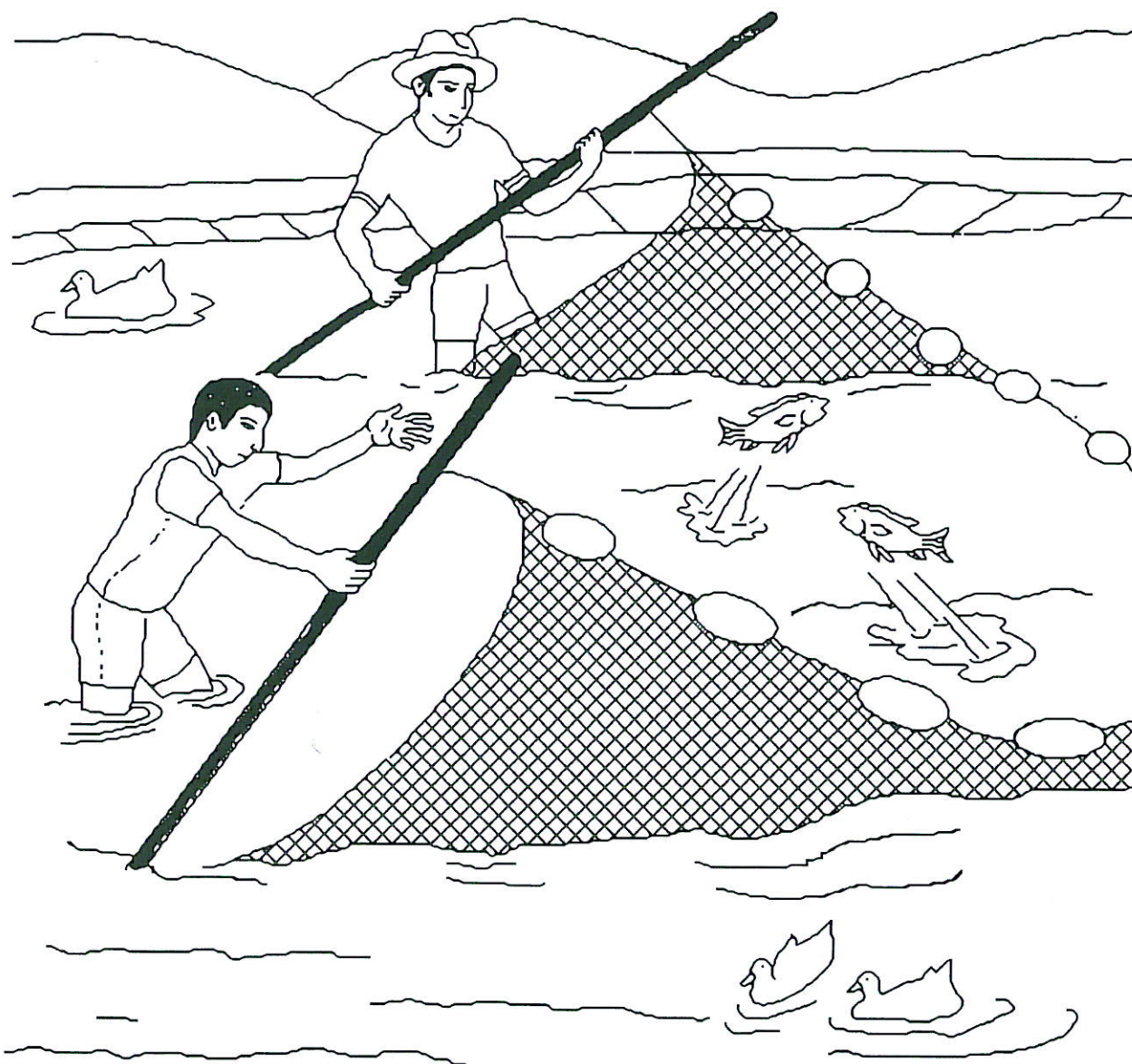
WATER HARVESTING AND AQUACULTURE  
FOR RURAL DEVELOPMENT

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PRODUCTION OF 1-GRAM, MIXED-SEX  
*OREOCHROMIS NILOTICUS* FINGERLINGS IN  
EARTHEN PONDS

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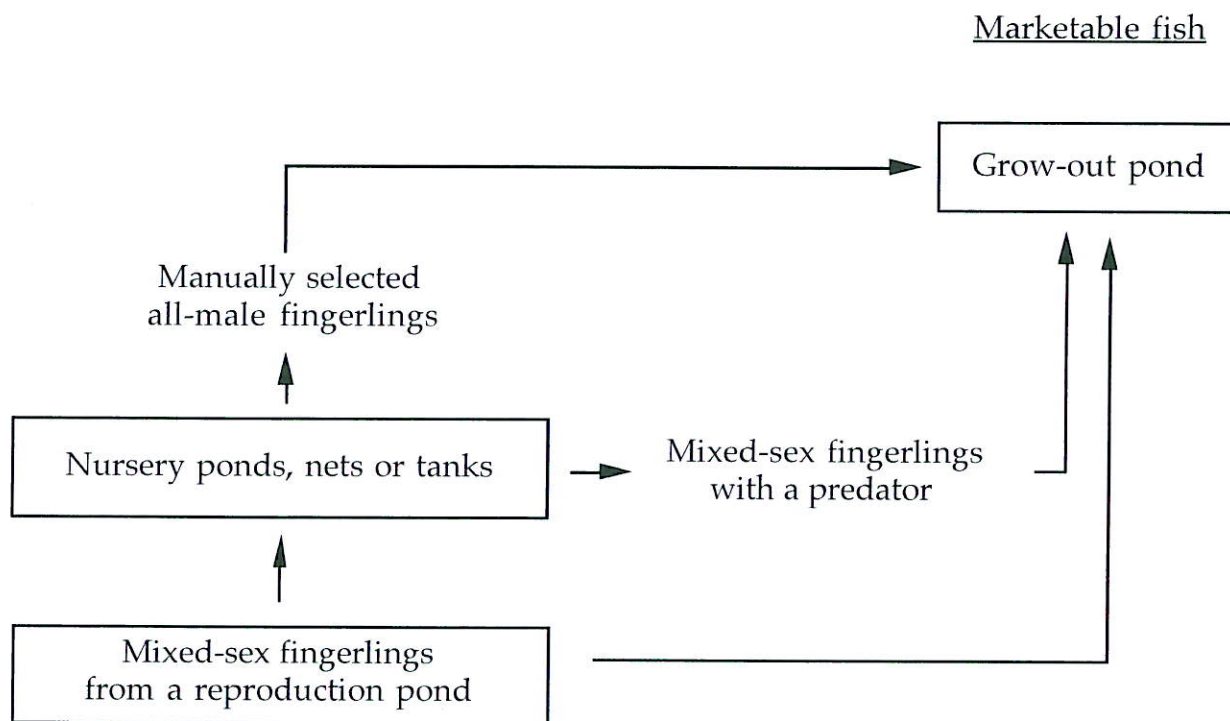
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INTERNATIONAL CENTER FOR AQUACULTURE  
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## INTRODUCTION

Grow-out ponds stocked with mixed-sex tilapia fingerlings of different ages will yield large numbers of small tilapia at harvest because some of the stocked fish become sexually mature and reproduce soon after stocking. Stocking a grow-out pond with immature mixed-sex, same-age fingerlings will permit growth of both sexes to 80 to 150 g before females reach sexual maturity and produce offspring. Furthermore, immature, mixed-sex, same-age fingerlings can be stocked into nursery ponds at high densities, grown to 30 to 40 g, and the males separated from the females by visual examination of the genital papilla for transfer to grow-out ponds and subsequent culture to 200 to 400 g. Production of immature, mixed-sex, same-age fingerlings can be accomplished by frequent partial harvests of the reproduction pond, and will be the topic of this manual (Figure 1).



**Figure 1:** Flow chart depicting how mixed-sex tilapia fingerlings can be used to grow marketable fish.

## HOW DOES PARTIAL HARVESTING WORK IN TILAPIA REPRODUCTION PONDS ?

Tilapia fingerlings obtained from ponds which are not specifically managed for reproduction are usually not the same age. The older, larger fingerlings prey on the younger, smaller fry and reduce the number of fingerlings suitable for stocking into grow-out or nursery ponds. Age variability can be controlled, and the number of marketable fingerlings produced can be greatly increased through frequent partial pond harvest using nets (Figure 2).