
WATER HARVESTING AND AQUACULTURE FOR RURAL DEVELOPMENT

INTRODUCTION TO FISH CULTURE IN PONDS



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INTRODUCTION

A pond is a body of standing, as opposed to free-flowing, water that is small enough to be managed for fish culture. Fish production in farm ponds can provide protein and profit for farmers. Fish such as oreochromis and carp are easy to culture and good yields are possible if a management plan is followed (Figure 1). This manual provides simple, practical guidelines for fish culture in ponds.

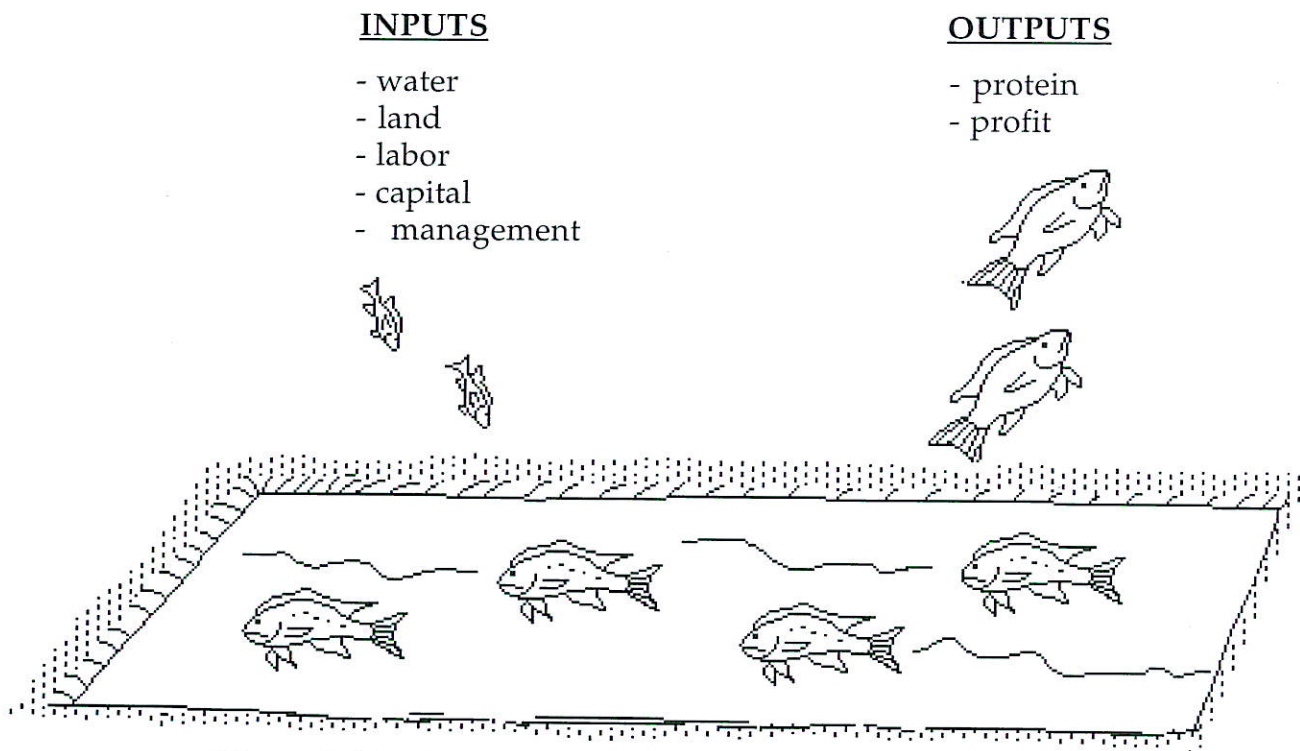


Figure 1: Ponds can provide protein and profit for farmers.

POND SITE SELECTION AND CONSTRUCTION

In most cases, pond size is limited by topography, availability of inputs and construction costs. Construction costs for ponds less than 100 m² in surface area are high relative to the weight of fish harvested, and their construction is not recommended. Ponds larger than one hectare are hard to manage and expensive to build.

The site selected for pond construction should be free from flooding and close enough to other farm activities so that the stored pond water is available for multiple uses such as stock watering and supplemental garden irrigation. Common pond sites are small valleys with gradually sloping sides, and flat areas on hillsides or plains (Figure 2). Rainfall, springs and streams are often sources of water for ponds. Water should be free of pesticides and chemicals that can kill fish or harm humans and livestock, and should be available year-round.

Ponds may be constructed without expensive machinery using animal power and/or hand labor. This does, however, greatly increase construction time. Pond dikes should be firmly compacted during construction to avoid seepage problems and possible collapse while the pond is full (Figure 3).