
WATER HARVESTING AND AQUACULTURE
FOR RURAL DEVELOPMENT

INTRODUCTION TO POLY CULTURE
OF FISH



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INTRODUCTION

Polyculture is the practice of culturing more than one species of aquatic organism in the same pond. The motivating principle is that fish production in ponds may be maximized by raising a combination of species having different food habits. The mixture of fish gives better utilization of available natural food produced in a pond. Polyculture began in China more than 1000 years ago. The practice has spread throughout southeast Asia, and into other parts of the world.

HOW DOES POLYCULTURE WORK?

Ponds that have been enriched through chemical fertilization, manuring or feeding practices contain abundant natural fish food organisms living at different depths and locations in the water column. Most fish feed predominantly on selected groups of these organisms. Polyculture should combine fish having different feeding habits in proportions that effectively utilize these natural foods (Figure 1). As a result, higher yields are obtained. Efficient polyculture systems in tropical climates may produce up to 8,000 kg of fish per hectare per year.

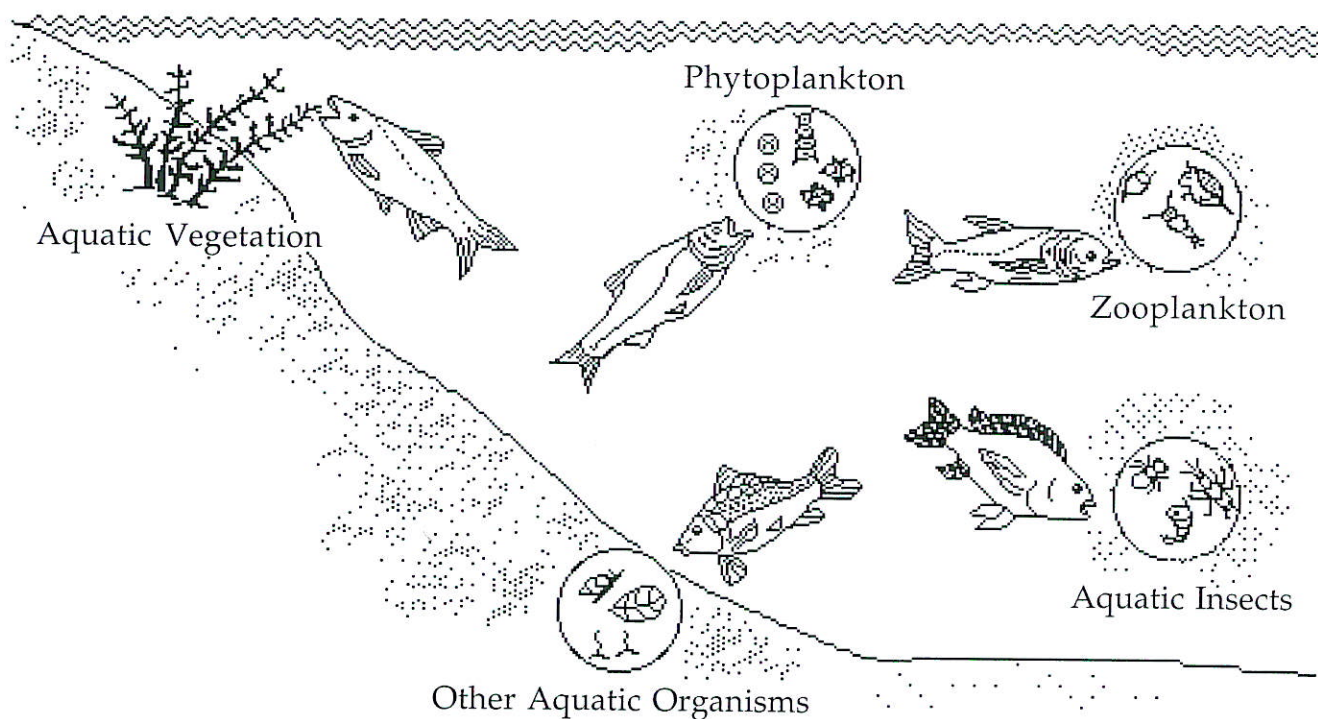


Figure 1: Polyculture utilizes natural foods efficiently.