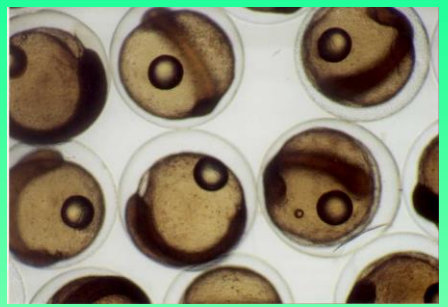
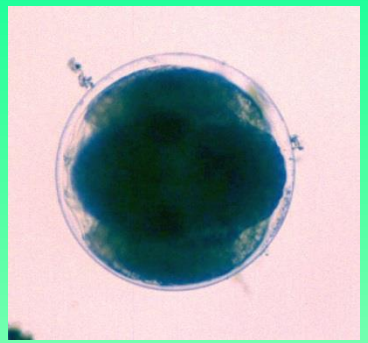
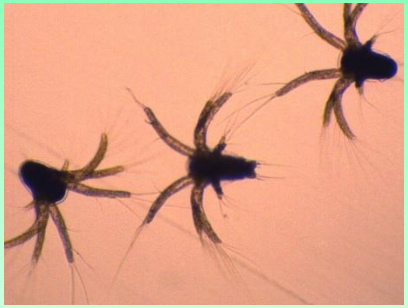

Overview
(Marine Culture)
Dr. Majid Makky Taher

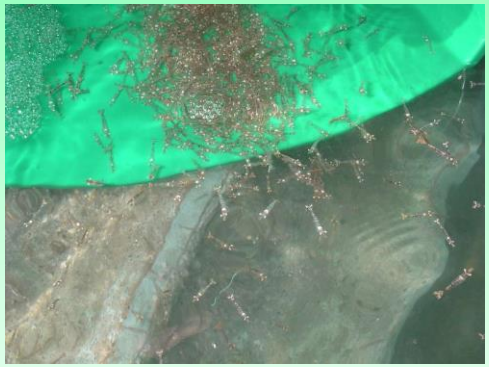

What is the Meaning
of Culture
Reproduction (Increasing)
and Rearing or one of them

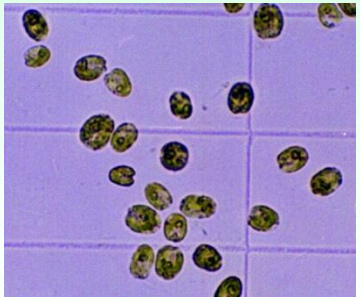


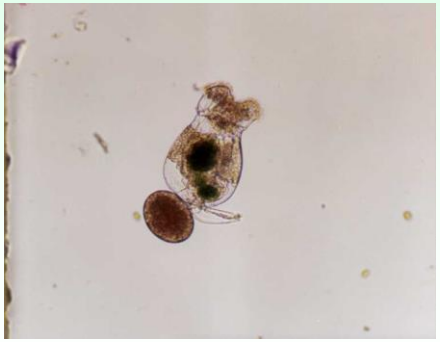




Reproduction (Hatcheries) Artificial Breeding





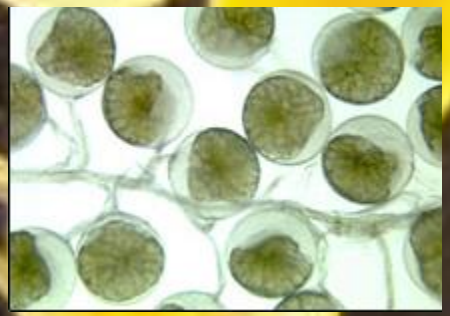
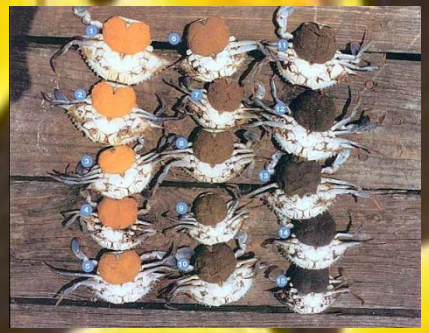


Life Cycle of any reproduced animal is very important

Crab as example









Culture Designs

1- Ponds
2- Cages
3-Pins
4- Coastal Enclosures
5- Bath-Ways
6-Closed Systems

Ponds

Earthen, Concrete, Plastic, Fiberglass …… etc.

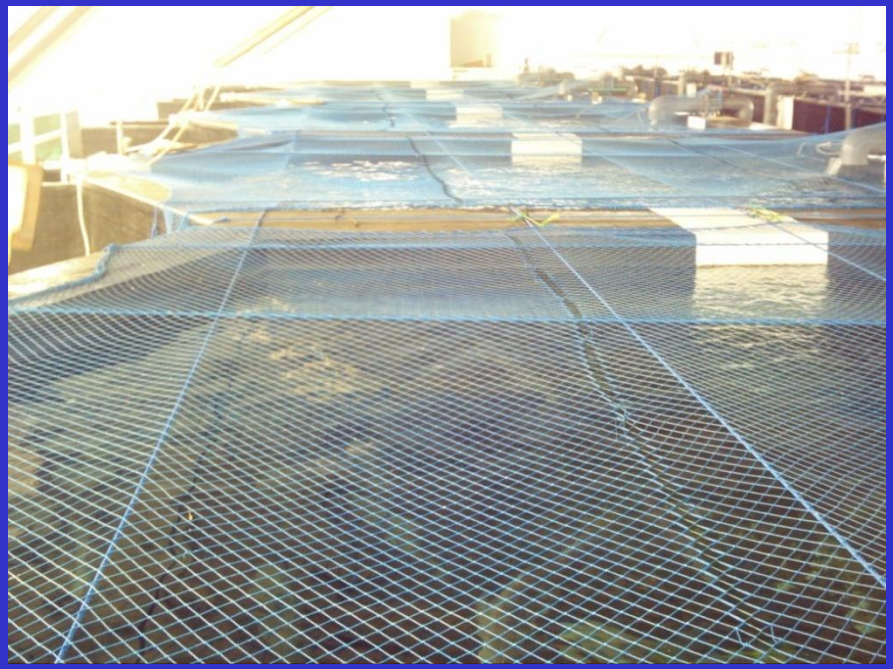
Different Shapes

Earthen Ponds

Circular Fiberglass Ponds

Different Fiberglass Ponds

Concrete Ponds



Square glasses Ponds

Circular Plastic Pond

Cages (Singing and Floating)
Shapes (Circular, Square, …… etc)

Bath-Ways

Coastal Enclosures

Culture History

In China Before 4000 years

Give any person one fish
(feeding for one day)

Learn him how cultivate this fish
(feeding for ever)

The beginning by cultivating fishes in rice fields

Till now using this technique in Southeast Asia Countries especially for producing fingerlings or small fishes (50-150) g

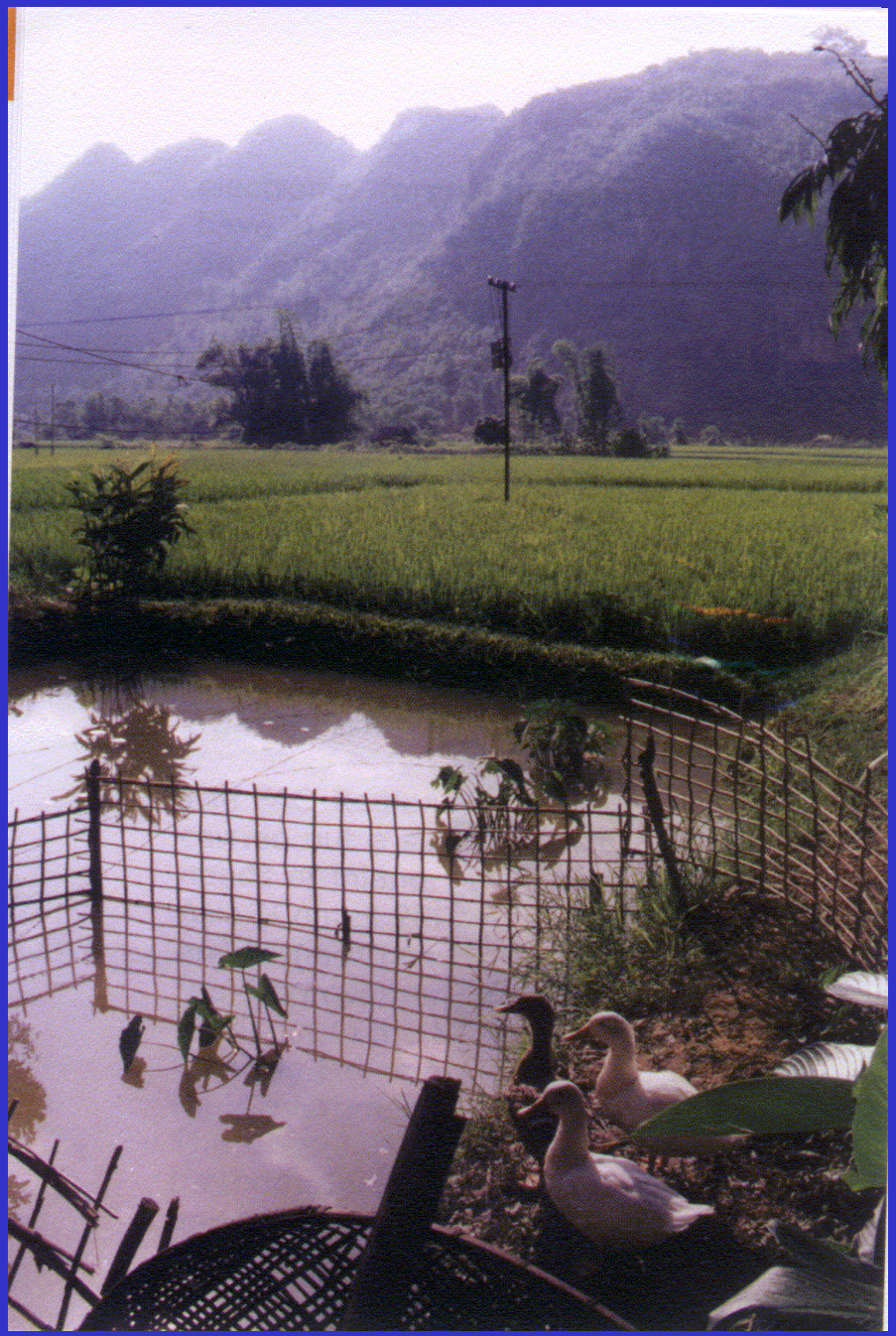
Benefits of Aquaculture

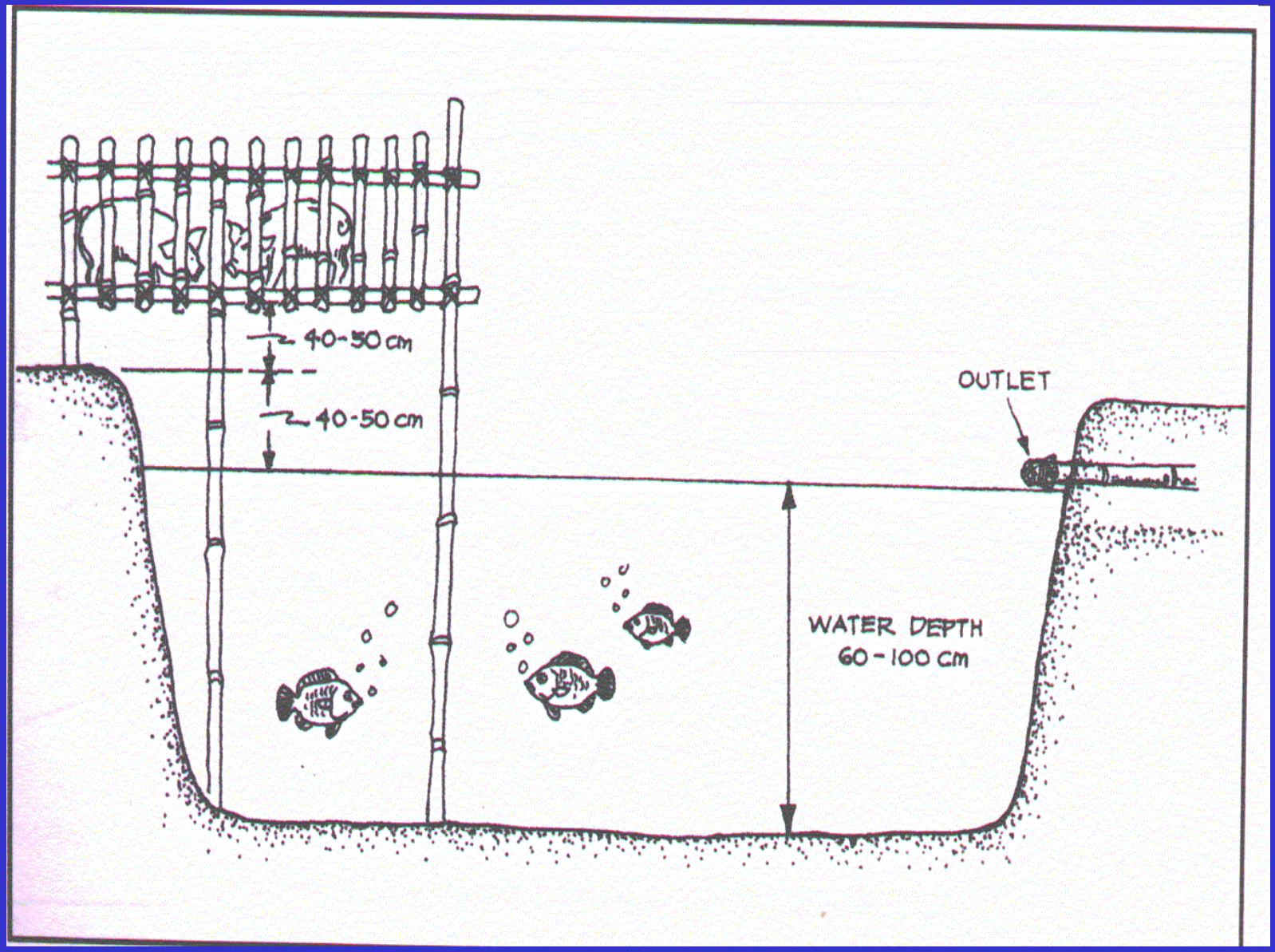
1- Food Source

More than 30% of aquatic animals from aquaculture

2- Play an important role in the economy of non-developing countries

More than 90% of production come from small farms for small families




40-50 cm
40-50 cm
OUTLET
WATER DEPTH
60 - 100 cm

3-Conservation of some threatened species

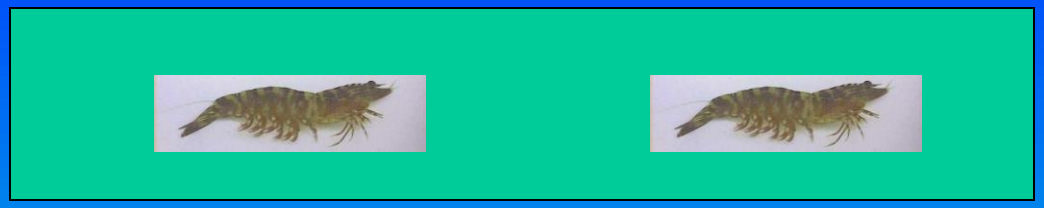
← Sturgeon

← Marine Turtles

4- Presence of fresh fishes all time of the year for consumers

5- Increasing of natural fish stock by releasing fingerlings of important fishes

Culture Systems



1-Extensive System

2-Semi-Intensive System

3-Intensive System

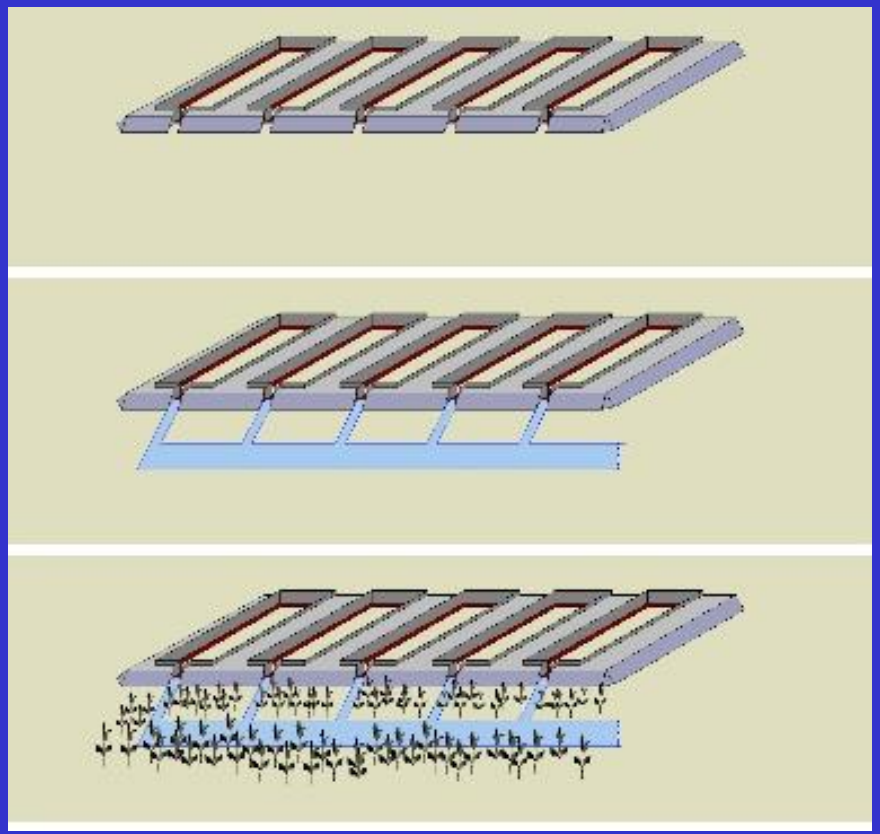
4-Highly Intensive System

Extensive	Semi-Intensive	Intensive	Highly Intensive
Little Cost	Medium Cost	High Cost	Very High Cost
Intensive distance	Medium distance	Little distance	Very little distance
Natural food	Natural and artificial foods	Artificial foods	High value artificial food
Little production	Medium production	High production	Very High production
Poor reward	Medium reward	High reward	Very high reward

Environmental Effects of Aquaculture

1-Destroying of Mangrove

2- Eutrophication



3- Escapement of reared species to the environment

4- Hormones and anti-oxidation and antibiotics in artificial foods

5- Increasing problems with fishermen

(they want fishing near floating cages to catch natural fishes collected out nets to fed on artificial food)