



FAO Regional Training on the Principles of Cage Culture in Reservoirs

Issyk-Kul, Kyrgyzstan, on 22-24 June 2011

# Fish Cage Construction

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# Fish Cage Construction

Types of Cages  
Material Selection for Cages  
Design of Cages  
Components of Floating Cages  
Construction of Floating Cages



# Types of Cages

Floating Cages  
Submersible Cages

# Types of Cages

## Floating Cages



# Types of Cages

## Submersible Cages



# Material Selection for Cages

- Durable
- Nontoxic
- Rustproof
- Elastic



# Material Selection for Cages

## Common Materials for Cage Construction

- Wood
- Steel
- Plastic



# Materials for Cage Construction

## Wooden Cages





# Materials for Cage Construction

## Steel Made Cages



# Materials for Cage Construction

## Plastic Made Cages



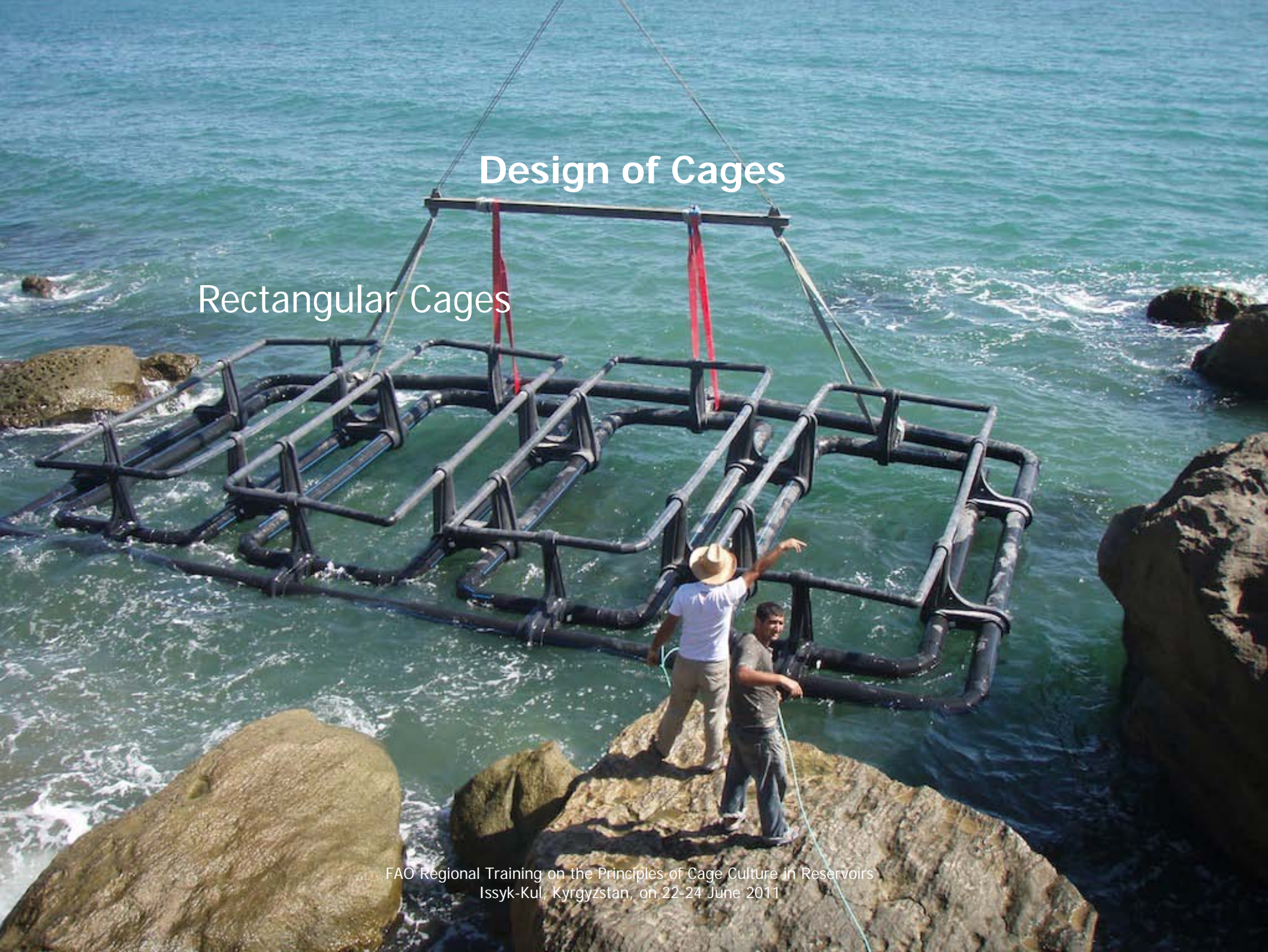
# Design

## Circular Cages



# Design of Cages

## Rectangular Cages



# Design of Cages

## Rectangular Cages



# Design of Cages

## Polygonal Cages



# Components of Floating Cages

HDPE Pipes  
Filling Material for Pipes  
Brackets  
Stoppers  
Nets for Fish Cages



# Components of Floating Cages

## High Density Polyethylene (HDPE) Pipes

- Available in Market
- Flexible
- Easy to Install
- Robust
- Light





# Components of Floating Cages

## High Density Polyethylene (HDPE) Pipes



# Components of Floating Cages

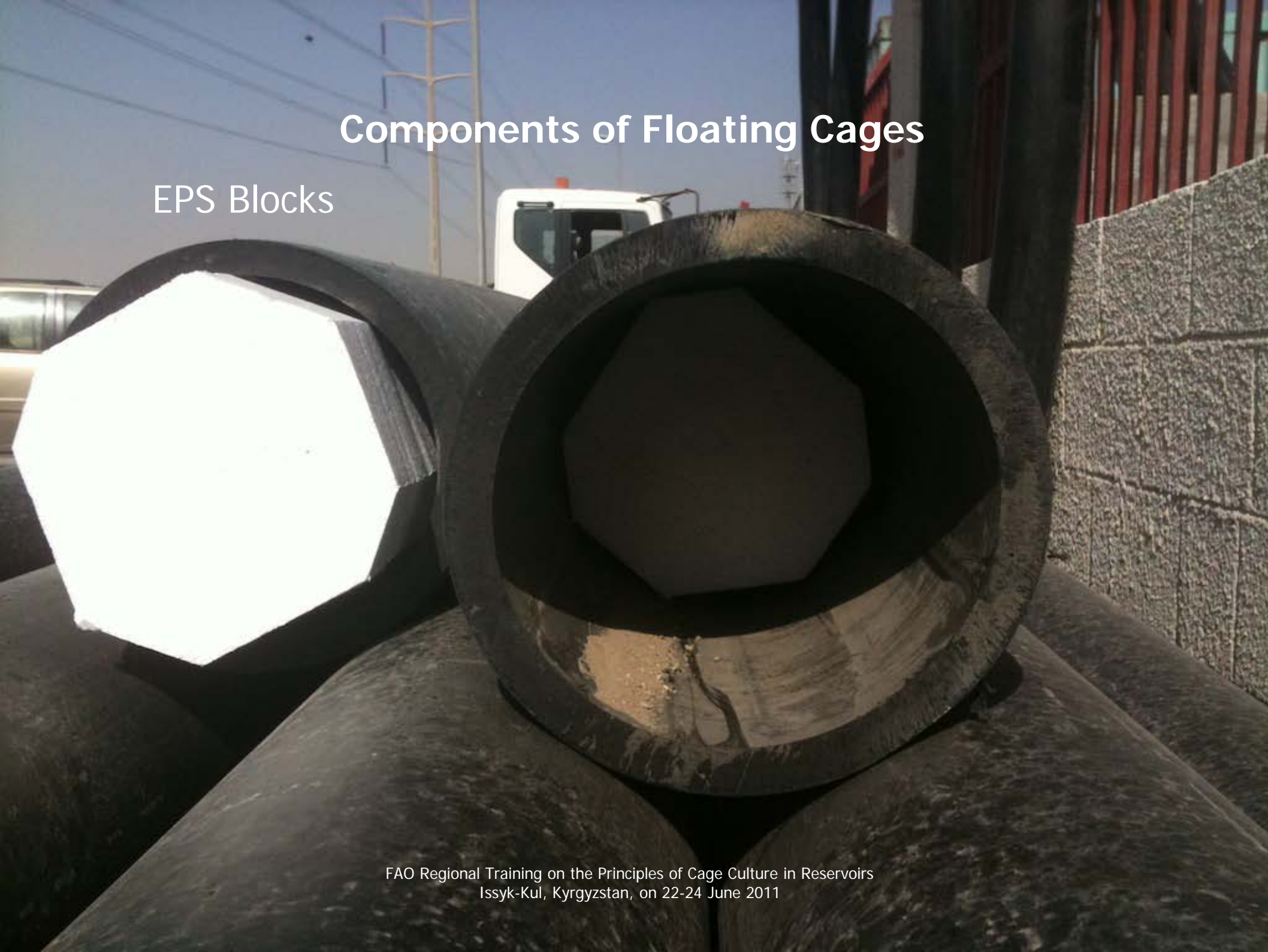
## Filling Material For Pipes

- EPS (Expanded Polystyrene)
- Light
- Robust
- Available in Market



# Components of Floating Cages

EPS Blocks



# Components of Floating Cages

EPS Blocks

# Components of Floating Cages

## Brackets

- Material of Brackets
  - \* Steel
  - \* Plastic
- Plastic Brackets
  - \* Injection
  - \* Rotomoulded



# Components of Floating Cages

Brackets



## Components of Floating Cages

Brackets

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Brackets



# Components of Floating Cages

Brackets

# Components of Floating Cages

Brackets



# Components of Floating Cages

Stoppers

## Components of Floating Cages

Stoppers

## Components of Floating Cages

Stoppers



## Components of Floating Cages

### Nets for Fish Cages

- Nylon Nets
- UHMWPE (Dyneema)
- Knotted Nets
- Knotless Nets
- Mesh Type
- Mesh Size
- Twine Size

# Components of Floating Cages

Nets for Stocking Fishes

# Components of Floating Cages

Rigging Nets





An underwater photograph showing a large number of fish swimming inside a white plastic cage. The cage is made of a diamond-shaped mesh. The water is clear and blue. The fish are densely packed, and their movements create ripples in the water. The cage structure is visible in the foreground, creating a grid pattern over the fish.

## Components of Floating Cages

Protection Nets

# Components of Floating Cages

Protection Nets

# Construction of Floating Cages

Assembling  
Welding  
Towing  
Mooring

# Construction of Floating Cages



# Construction of Floating Cages



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# Construction of Floating Cages



**Thanks!**