

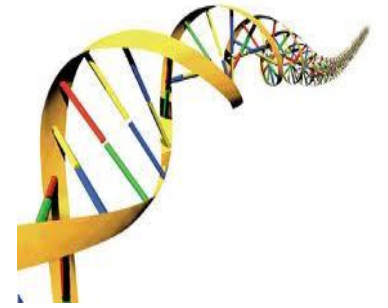


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# Genetics in support of fisheries and aquaculture management

## **WELCOME AND INTRODUCTIONS**



# CONTEXT OF TRAINING COURSE

- CONSERVATION
- MANAGEMENT
- SUSTAINABILITY





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Policy makers

**Science Policy**  
**Conservation**  
**Interface**  
**Biodiversity**

Knowledge-exchange  
Species  
Scientists  
Ecology  
Evidence  
Environment  
Collaboration  
Partnership  
Natural-capital  
Ecosystem  
Knowledge-transfer  
Communication

Managing  
natural  
aquatic  
resources is  
complex



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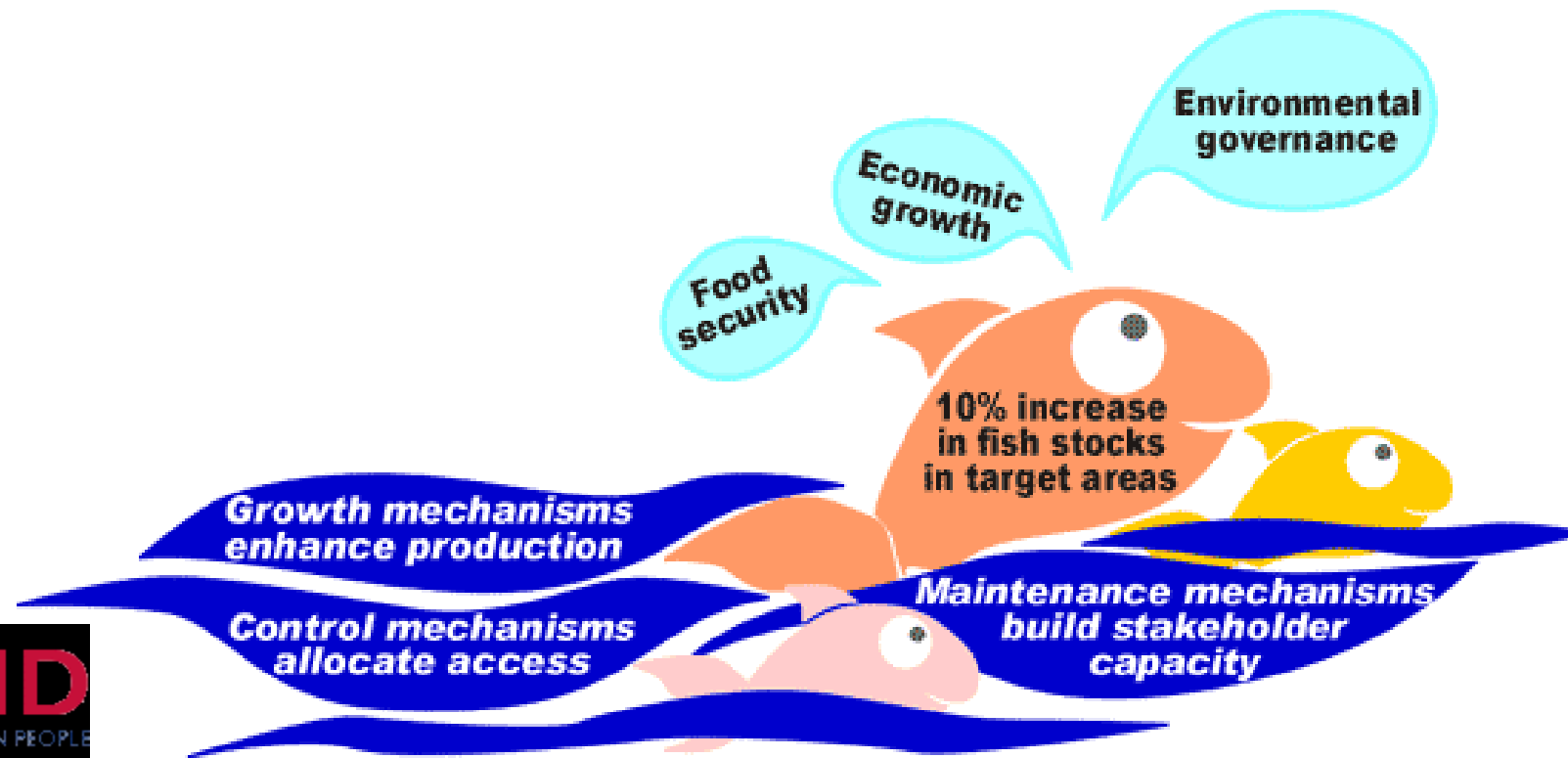
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# Drivers of policy : numerous and sometimes conflicting

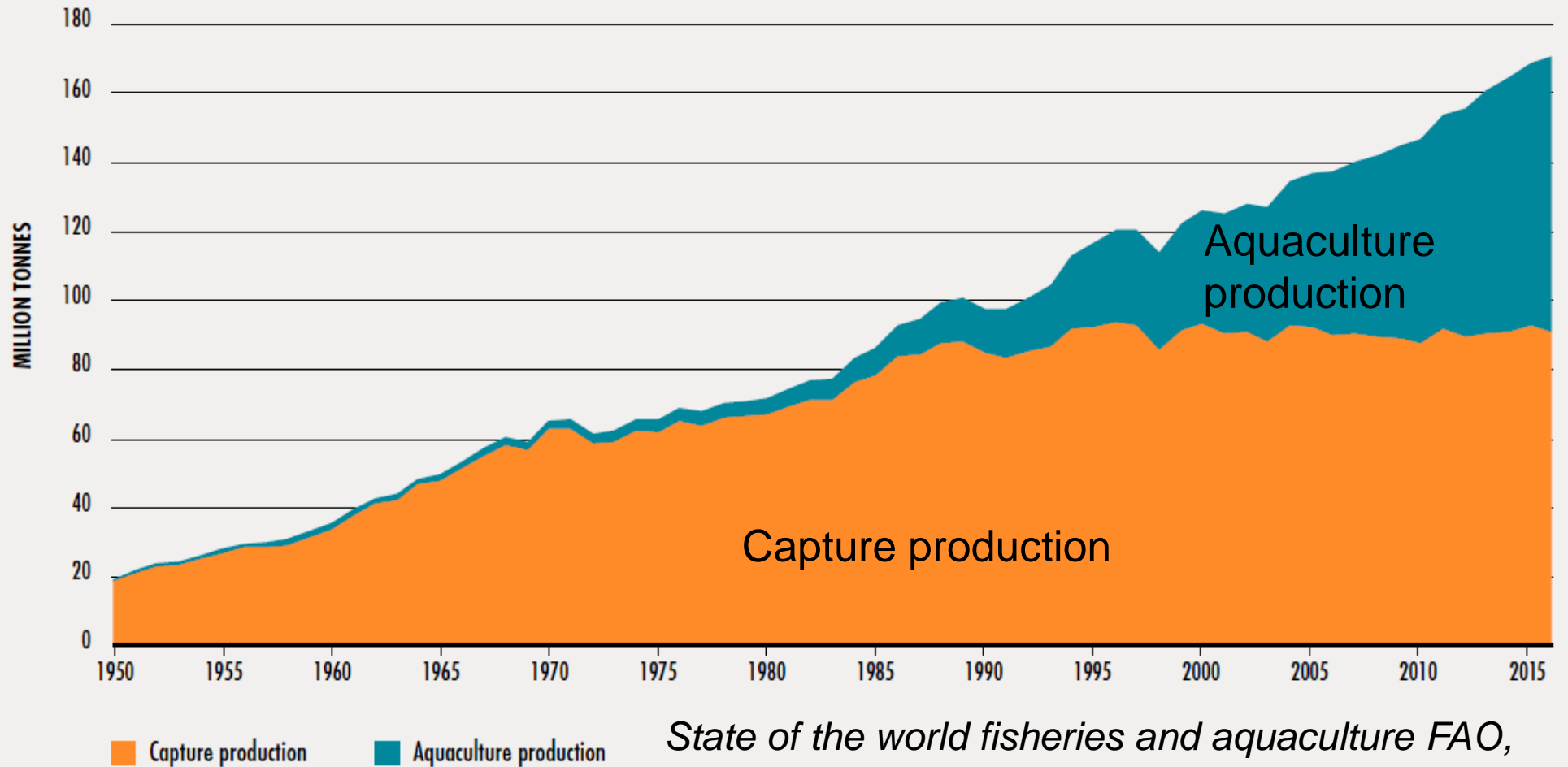
- *Economy and livelihoods*
- *Governance and policy*
- *Conservation of Biodiversity*
- *Ecosystem services*

# The need to be Responsive and Relevant



# Global aquaculture production is now higher than capture fisheries

FIGURE 1  
WORLD CAPTURE FISHERIES AND AQUACULTURE PRODUCTION



*State of the world fisheries and aquaculture* FAO, 2018



# Why now?

- Role of ICES Expert Group – Application of Genetics in Fisheries and Aquaculture (WGAGFA)
- Technological and conceptual advances – tractable, cost-effective applications
- The need for new thinking and integration across time - scales and biological levels
- Vital role of the **genetic** component of aquatic resources

# Who for?



- Range of expertise and backgrounds
  - PhD students and Postdoc working in genetics/genomics
  - Fisheries scientists/ecologists – varying expertise
- In common:
  - *How and why can genetics help us manage and conserve aquatic natural resources?*





# Course instructors and participants

- INSTRUCTOR INTRODUCTIONS
- PARTICIPANT INTRODUCTIONS
  - Name and affiliation
  - Current role/activities
  - Why attend the course?



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# Host welcome and local plans Dr Rita Castilho



**CCMAR**  
Centro de Ciências do Mar