



# SUMMER SCHOOL

**FROM AUGUST 30<sup>TH</sup>  
TO SEPTEMBER 3<sup>RD</sup>**

This project receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 773330 (GAIN)





# ECOLOGICAL TRANSITION IN AQUACULTURE

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## *GAIN: our vision*

**GAIN overarching goal : promote the ecological intensification of aquaculture in the EU and EEA.**

Our vision goes **beyond sustainable intensification**, including:



**increase in production  
volumes**



**higher quality of  
aquatic products**



**increase in profitability**

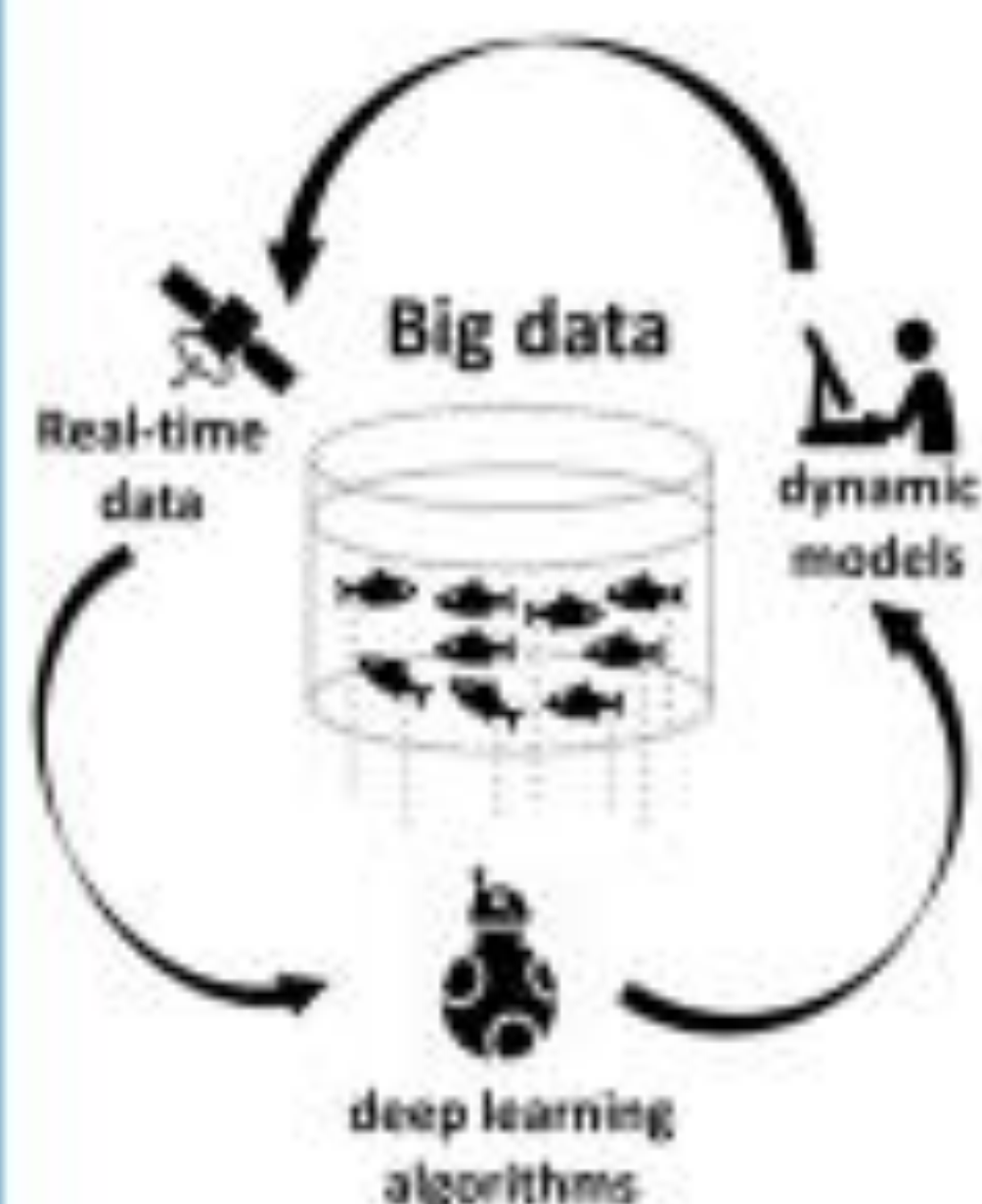


**decrease environmental load  
of aquaculture**



# GAIN: Green Aquaculture INTensification in Europe

## Precision aquaculture



## Reuse of mortalities, secondary products and waste water



Novel feeds, including FPH

Peptones, collagens, gelatines.

Organic fertilizers

RAS biofilter based on shells from shellfish canning industry

EISI

Composite Indicator:

- LCA
- Fish welfare
- Socio-economic



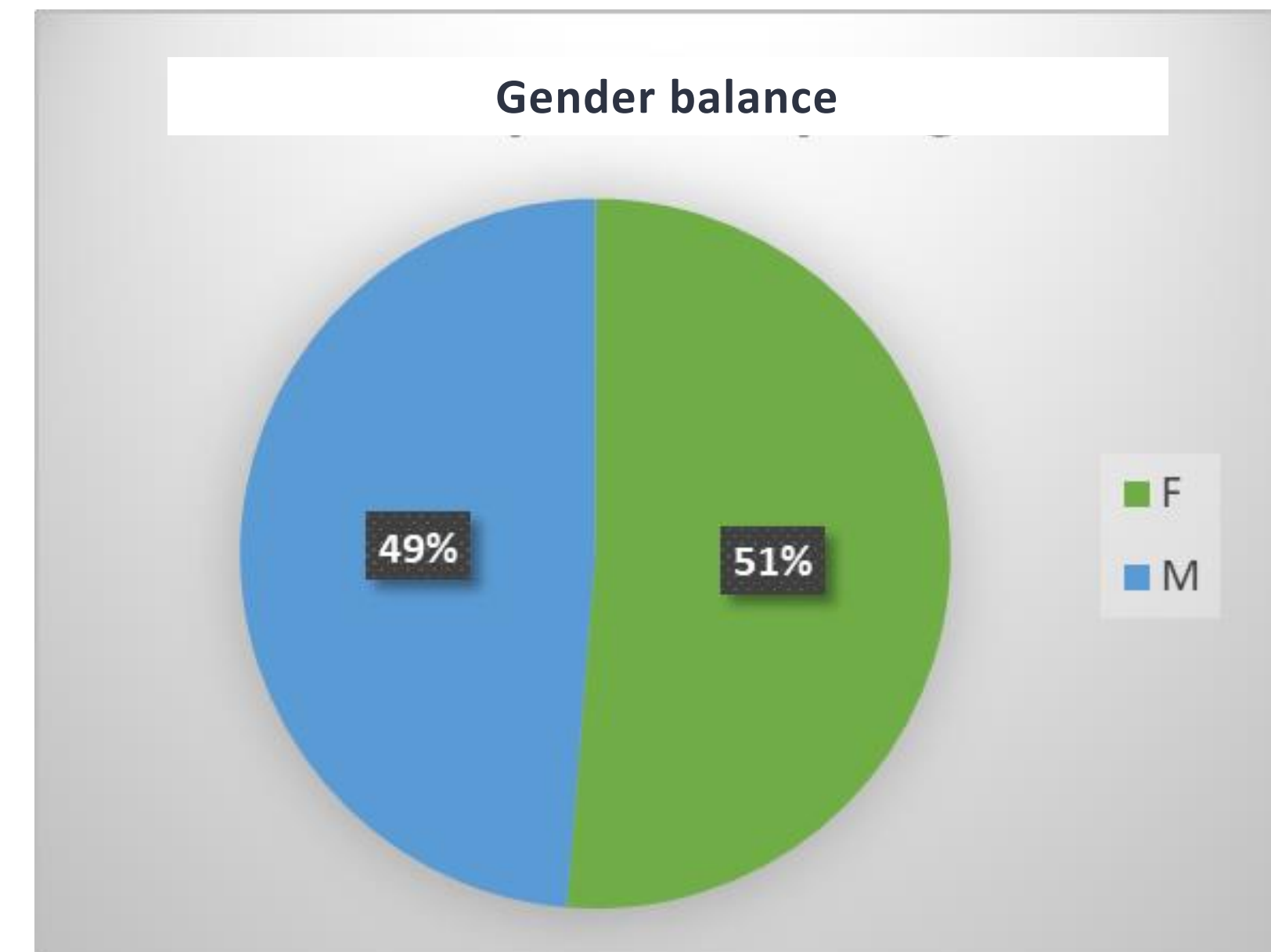
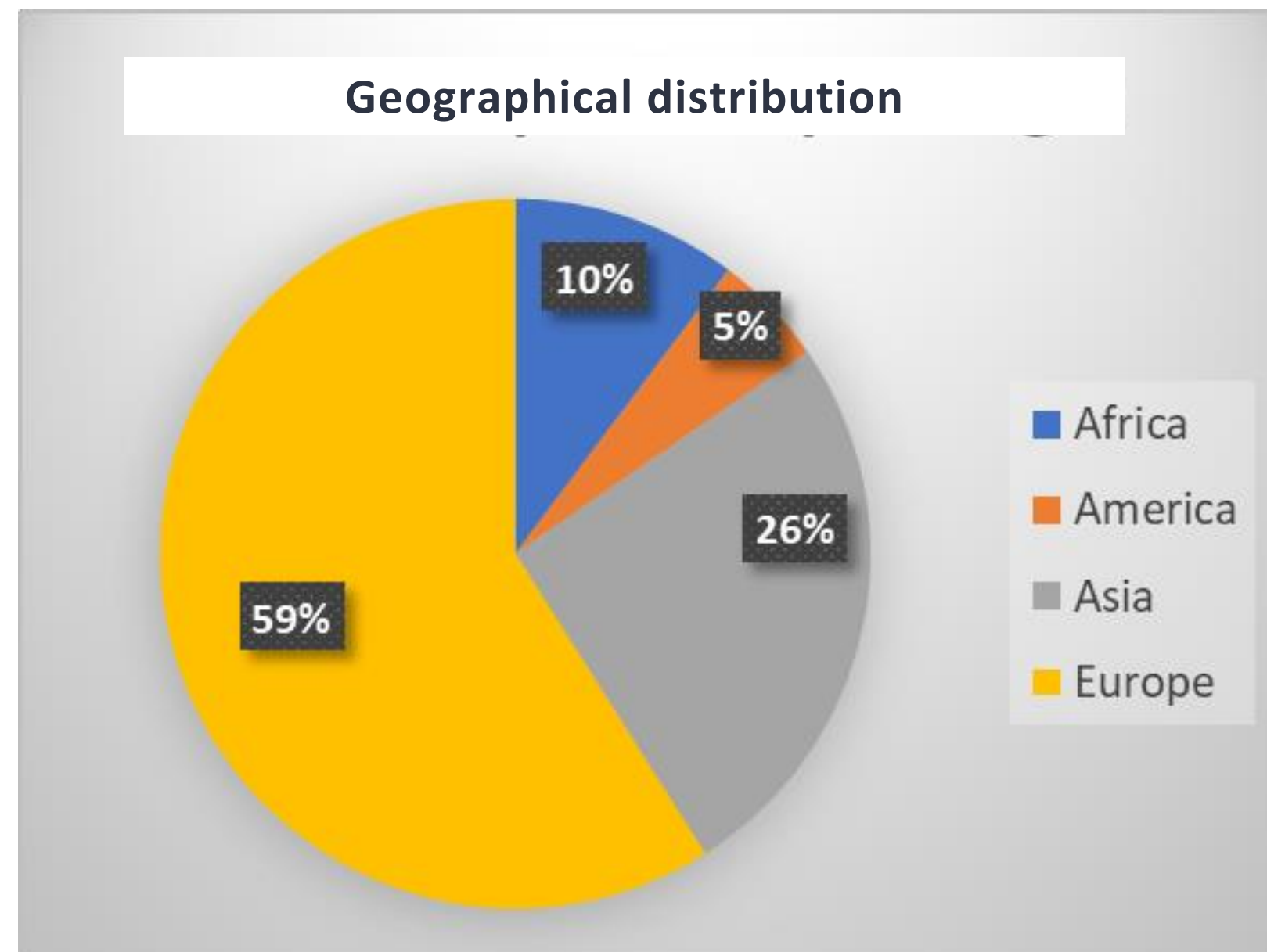
## The GAIN Summer School at a glance

	<b>Monday August 30<sup>th</sup> - Day 1</b>
<b>9.00 – 13.30</b>	<b>H2020 for the Ecological Transition of Aquaculture</b>
<b>14.30 – 16.30</b>	<b>2 Parallel Sessions - “Virtual Happy Hour”</b>
	<b>Tuesday August 31<sup>st</sup> - Day 2</b>
<b>9.15 – 13.30</b>	<b>Precision Aquaculture and the GAIN Information Management System</b>
	<b>Wednesday September 1<sup>st</sup> - Day 3</b>
<b>9.15 – 13.30</b>	<b>Enhancing Circularity In The Aquaculture Sectors</b>
	<b>Thursday September 2<sup>nd</sup> - Day 4</b>
<b>9.15 – 13.30</b>	<b>Sustainability Assessment</b>
<b>14.30 – 16.30</b>	<b>LCA Hands-on session</b>
	<b>Friday September 3<sup>rd</sup> - Day 5</b>
<b>9.15 – 13.30</b>	<b>Policies and Markets - A Global Perspective</b>

# WE HAVE A QUALIFIED, WORLDWIDE AUDIENCE!

**39 Participants, from 4 continents**

**An optimal gender balance**



Monday August 30 <sup>th</sup> - Day 1 - morning		
H2020 for the Ecological Transition of Aquaculture		
9.00 – 9.30	Welcoming and registrations	
9.30 - 9.45	Welcome, introduction to the School	Roberto Pastres Ca' Foscari University of Venice, Italy
9.45 –10.15	Ecological Intensification in China	Changbo Zhu South China Sea Fisheries Research Institute, China
10.15 – 10.20	5' Break	
10.20 - 10.50	Intelligent Management Systems for Integrated Multi Trophic Aquaculture (H2020 IMPAQT)	Frank Kane Marine Institute, Ireland
10.50 - 11.20	Intelligent fish feeding through integration of enabling technologies and circular principles (H2020 iFishIENCi)	Tamàs Bardòcz AquaBioTech Group, Malta
11.20 – 11.40	Break	
11.40 - 12.10	New technologies tools and strategies for a sustainable, resilient and innovative European Aquaculture (H2020 New Tech Aqua)	Alessio Bonaldo University of Bologna, Italy
12.10 -12.40	Increasing circularity and lowering waste of Integrated Multi Trophic Aquaculture (H2020 ASTRAL)	Elisa Ravagnan Norce, Norway
12.40 – 12.45	5' Break	
12.45 - 13.15	The Deep Ocean project	Jon Grant Dalhousie University, Canada
13.15 – 13.30	Day 1 closure and take-home messages	Roberto Pastres Ca' Foscari University of Venice, Italy

<div>Monday August 30<sup>th</sup> - Day 1 -afternoon</div> <div>H2020 for Ecological Transition of Aquaculture</div> <div>2 Parallel sessions</div> <div>“Virtual Happy Hour”</div> <div>3 minutes x participant</div>		
14.30 - 16.30	Group 1. Precision Aquaculture	Chair: Roberto Pastres Ca’ Foscari University of Venice, Italy
14.30 –16.30	Group 2. Novel feeds, welfare & circular processes	Chair: Luis Conceição SPAROS - Portugal

Let us start!