

Best Practices in Aquaculture - use cases across Production Systems and Regional approaches.

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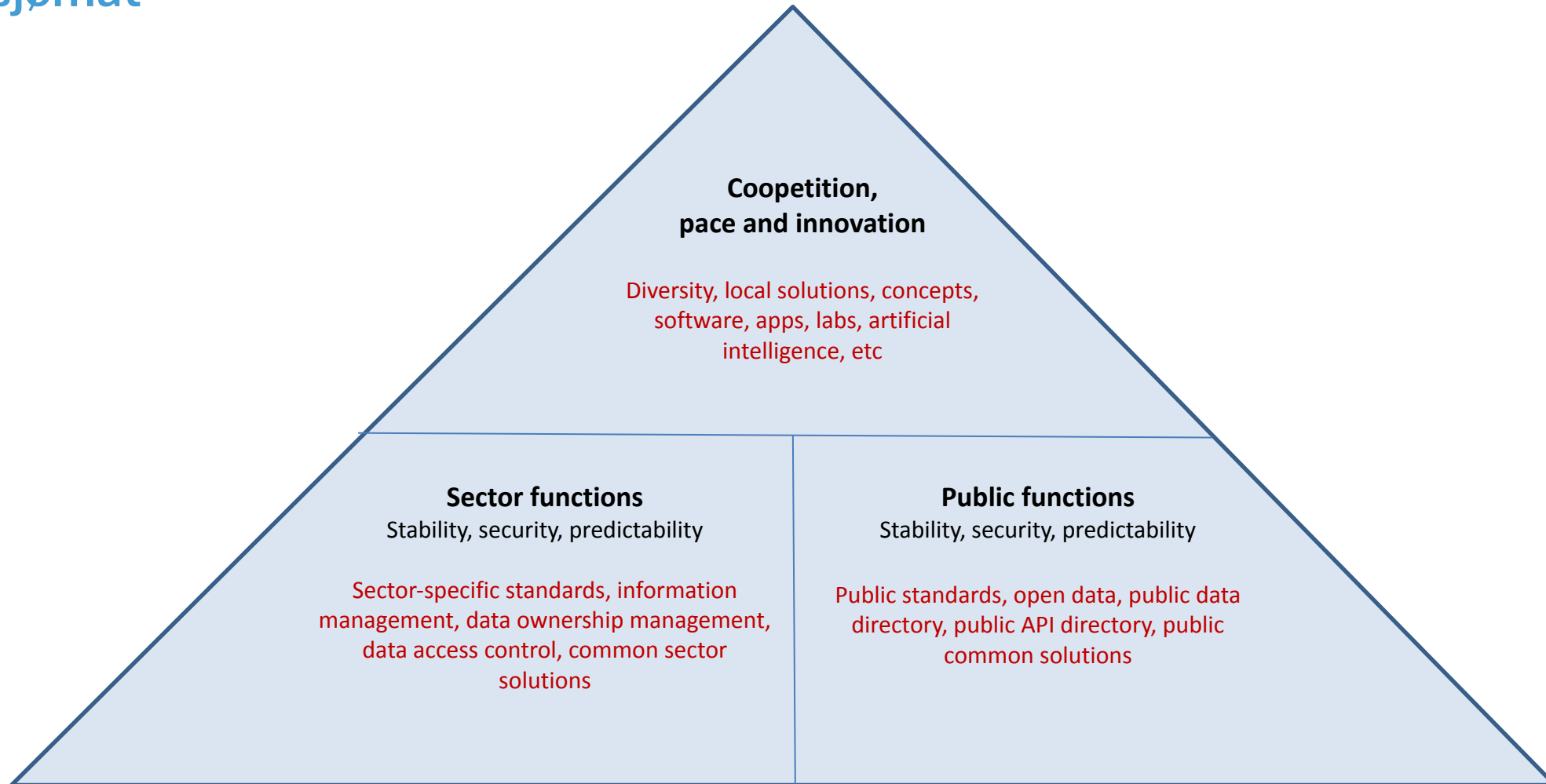
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OPS Seafood

Edvard Pedersen
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Member of steering group

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PerformFish benchmarking system

Giovanna Marino

ISPRA

Sustainable Aquaculture Area

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PerformFISH KPI system: a MMFF best practice



55

Key Performance Indicators

Extensive Industry Consultation

15 for hatchery



5 for pre-grow



35 for grow-out



Four overarching KPI categories



35 Technical Performance Indicators (T-KPI) for ranking

biological performances of batches and technical efficiency.



14 Environmental Performance Indicators (ENV-KPI) to assess

the impact of farming practices on the preservation of biodiversity and habitats, the use of natural resources, water, space and energy use, and its ecological footprint.



9 Welfare Performance Indicators (W-KPI) to

assess welfare at different life stages and in relation to different culture systems and husbandry practices.



2 Economic Performance Indicators (E-KPI) for

estimating productivity and efficiency of aquafarms.

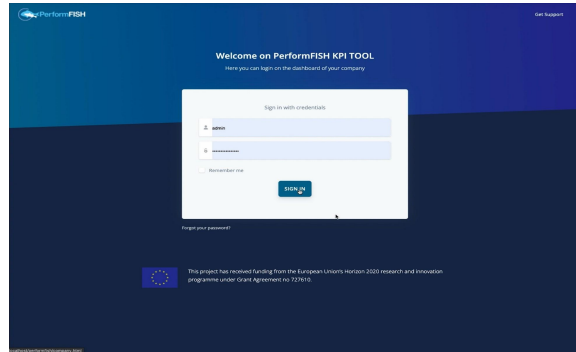
Informative & smart KPIs

- Build on farm data collected in routine cycles
 - Linked to sustainability and farm efficiency (growth, health, feed, welfare, environment...)
 - Simple to measure - easy to understand
-
- A unique data collection system
 - Glossary, Analytics
 - SOP – Manual of Users
 - 10 Training courses



First benchmarking system designed, shared and adopted by the aquaculture industry, Producer Associations to analyse in an anonymous way –efficiency, performances and sustainability of aquaculture practices

PerformFISH KPI system – *v. beta* (SinaNET)



KPIs for Sector aquaculture performance and sustainable farming

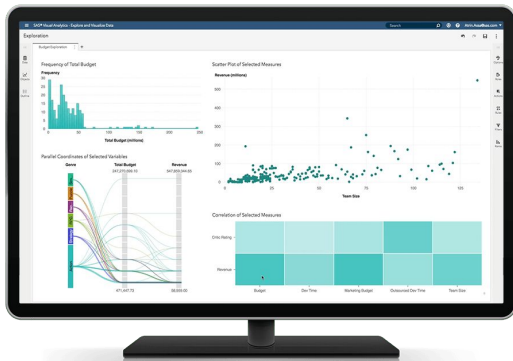
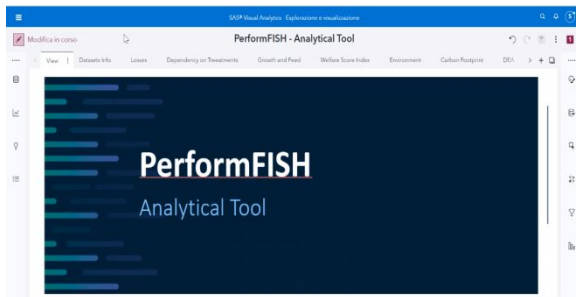
Data source
20 companies
28 farming sites

KPI Database
>400 batches
>60.000 records

Web KPI-tool

Welfare tool

LCA tool



KPI Sustainability Report – Public tool to build market reputation and communicate to consumers, to increase transparency, to report on environmental sustainability, animal welfare and resource of efficiencies of marine fish farming and carbon footprint of aquaculture product (vs other systems)





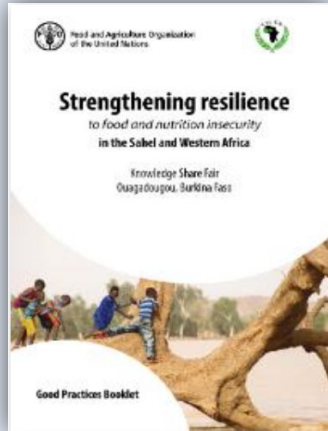
Best practices at the General Fisheries Commission for the Mediterranean (GFCM) of the FAO

Houssam Hamza & Linda Fourdain
FAO

Aquaculture Officer & AZA Establishment, GIS application and statistical analysis specialist

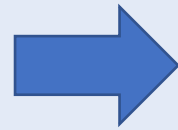
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Knowledge and good practices sharing

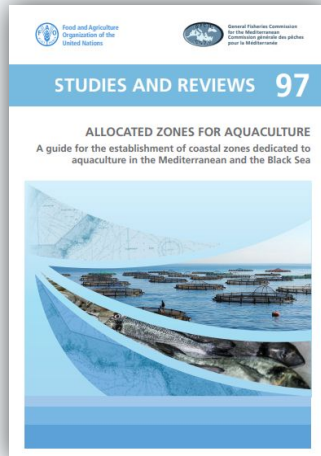
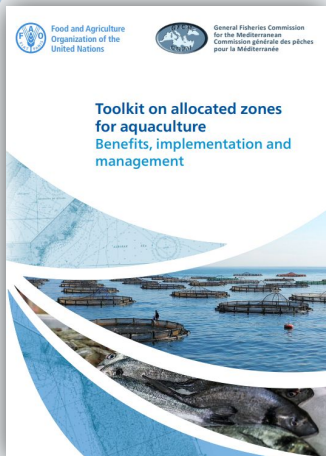


What is a good practice? A good practice is a successful experience that has been tested and replicated in different contexts and can therefore be recommended as a model. It deserves to be shared, so that a great number of people can adapt and adopt it.

Good practices
Methodology



KOPE - knowledge
sharing platform on
resilience



AZA, EMP, GIS, carrying capacity



**Aquaculture Demonstrative Centre
ADC**



Three main objectives:

- Research and develop aquaculture techniques and technologies
- Showcase best practices in aquaculture
- Train specialists from local and national administrations, academia and the private sector



AQUAPEF

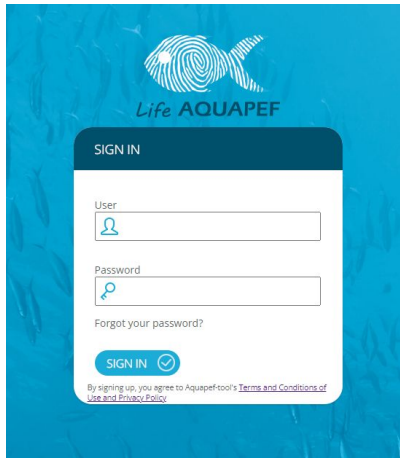
Implementation of Product Environmental Footprint pilot in aquaculture product

Saioa Ramos

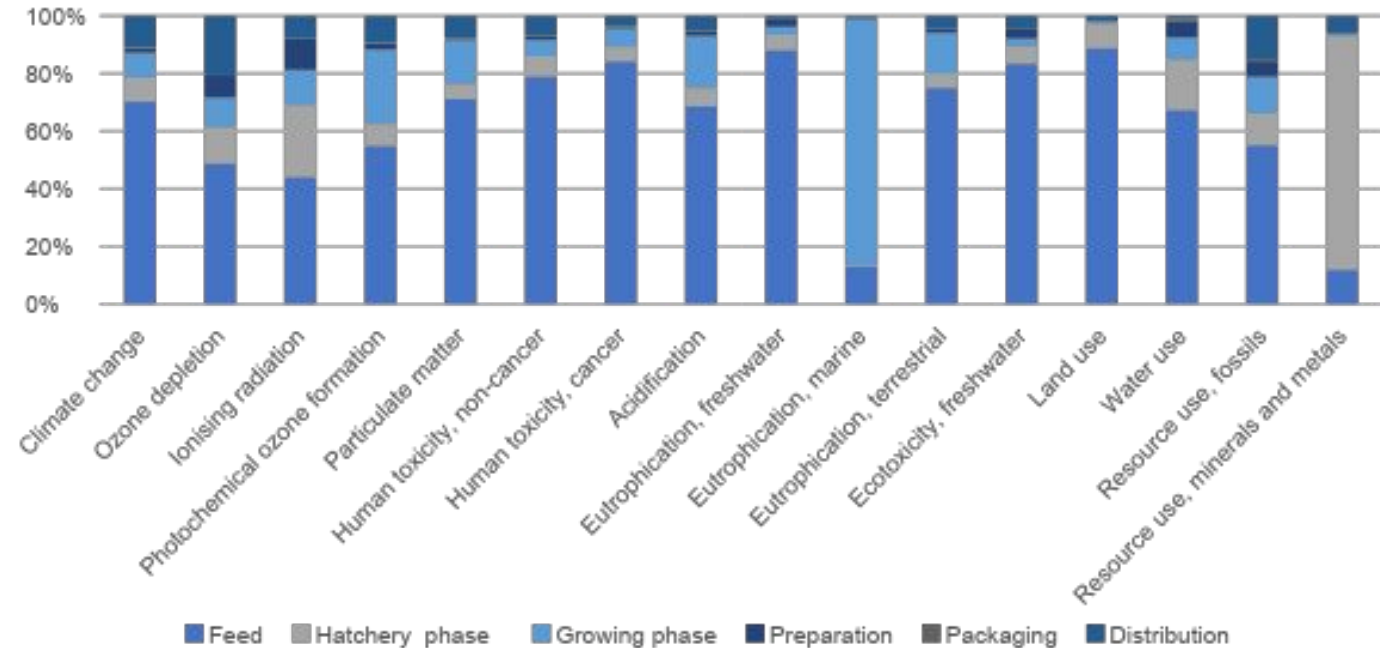
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Researcher, Efficient and Sustainable Process Dept.

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AQUAPEF TOOL:
easy-to-use tool for the
calculation of the PEF



EXPECTED IMPACTS

- Demo in 3 different farms and replicated in 8 other aquaculture sector along the Project.
- Tool ready to be used by Mediterranean Seabass and Seabream farms (\pm 600 farms).
- Commercialization: reach $>$ half of the farms 5 years after the end of the project.
- Transfer of the methodology to other European aquaculture systems (Salmon, sole, etc.).