- Fostering sustainable development in Faroese fisheries and aquaculture through provision of knowledge services and participation in international research projects to transfer knowledge to and from the Faroe Islands.
- To act as a communication hub for marine resource companies and inform the public about issues relating to these.

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- Research projects on next generation proteins and development of low-trophic species (macro-algae, mussels, oysters, IMTA etc.) and fisheries management
- Public outreach

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NEXTGEN PROTEINS

FarFish

AquaVitae

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Ocean Cluster Faroes Members

HIDDENFJORD

OCEAN RAINFOREST

VESTMANNA SEAFOOD

FRAMHERJI

VAÐHORN EST. 1973

VARÐIN

SYNTESA KNOWLEDGE TO VALUE

BAKKAFROST ESTABLISHED 1968

MOWI

NAD SEAFOOD

NORÐFRA

Sp/f MEKANOR

Fiskaaling Aquaculture Research Station of the Faroes

FELAGIÐ LÍNUSKIP

VINNUHÚSIÐ HOUSE OF INDUSTRY

M/S SANDSHAVIÐ Sp/f 31.01.2011

PETUR LARSEN Since 1971

VARÐIN PELAGIC

FRÓÐSKAPARSETUR FØROYA

MIÐNÁM Á KAMBSDALI

HAVSTOVAN FAROE MARINE RESEARCH INSTITUTE

An introduction to the ClimeFish Project

ACAF Arctic climate adaptation networking webinar with Greenland and Faroe Islands, 10. May 2021

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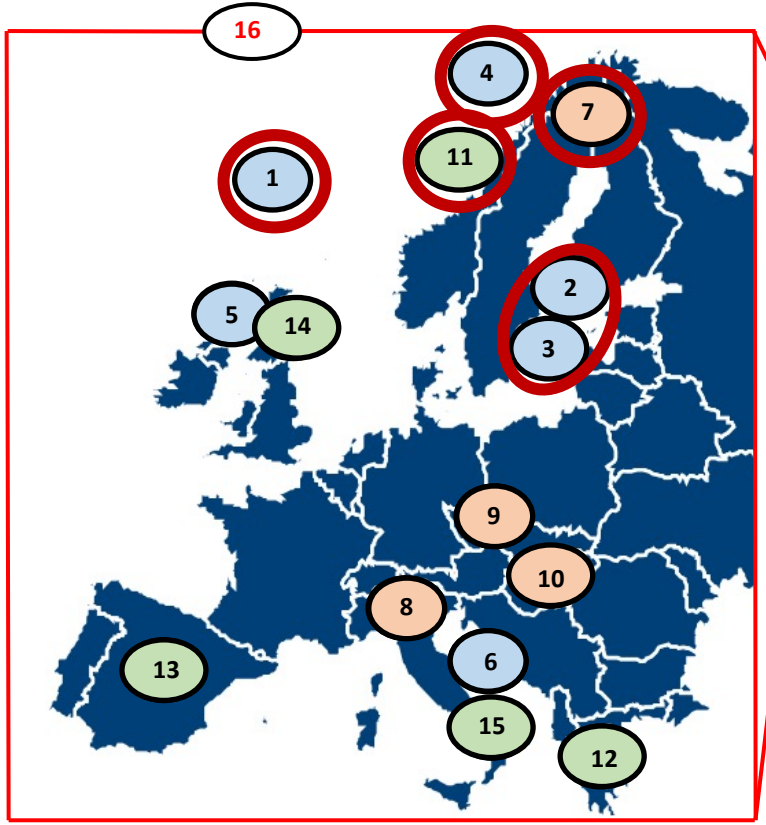
ClimeFish Case Studies in 3 sectors

Fisheries

Aquaculture

Lakes and ponds



European level

Bottom up

Case study level

Stakeholder input
- level and severity

Scientific knowledge
and literature

Risk Matrix

Impact	Likelihood: Unlikely	Likelihood: Possible	Likelihood: Likely
Negligible (0)	No	No	No
Minor (1)	Minor	Moderate	Moderate
Moderate (2)	Moderate	Major	Major
Major (3)	Moderate	Major	Severe
Extreme (4)	Major	Severe	Severe

Opportunity Matrix

Impact	Likelihood: Unlikely	Likelihood: Possible	Likelihood: Likely
Negligible (0)	No	No	No
Minor (1)	Minor	Moderate	Moderate
Moderate (2)	Moderate	Major	Major
Major (3)	Moderate	Major	Transformative
Extreme (4)	Major	Transformative	Transformative

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This project has received funding from the European Union´s Horizon 2020 research and innovation action under grant agreement no. 677039

Shared Impacts on Aquaculture

Growth/size variabilty and mortality

- Growth rates and yields
- Increased size variability
- Changes to growing season
- Increased mortality

Escapees, predation and HABs

- Increased Escapees / Detachment
- Increased predation
- HABs and jellyfish blooms
- Occurrence of pathogens

Suboptimal conditions

- Increased fouling
- Anoxic conditions
- Accessibility and human safety issues
- Infrastructure deterioration

Suitability of sites

- Change site productivity
- Conflicts of space and farm allocation
- Harvesting closures

Changes in productivity

- Changes in production capacity
- Changes in feed conversion rates
- Increased production costs

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Shared Impacts on Marine Fisheries

Species composition

- Northwards shift of species – Marine
- Increased stocks i.e. Mackerel, Whiting and Hake,
- Decreased stocks i.e. Herring, Cod, endemic species
- Emerging species: e.g. Seabass in WoS, invasive

Species phenology and growth

- Alterations year-class
- Food availability
- Growth rates

Distribution and fisheries dynamics

- Catch composition
- Spatial distribution
- Deployment of gear and catch efficiency

Quota allocation, licenses and TAC

- Increased complexity in negotiations
- Overfishing of shared stocks
- Choke Species

Production dynamics

- Longer distance to fishing grounds
- Reduced safety
- Damaged infrastructure
- Reduced fishing days / Increased costs

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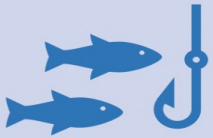
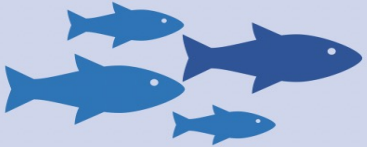
Cross-Sectorial Impacts



Species Composition

Food Availability and Phenology



Growth Rates

Safety

Damage and Deterioration to Infrastructure

Water Quality

Management and Governance

Operational Costs

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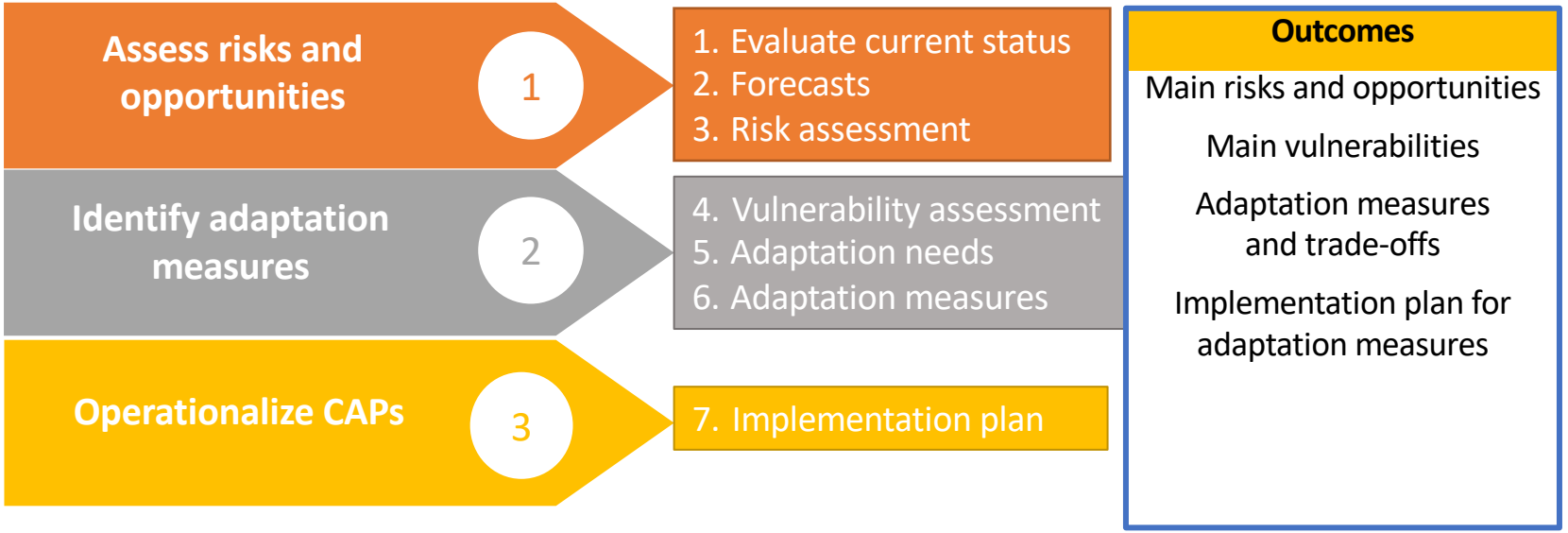
International standard - Guidelines for creating Climate Adaptation Plans (CAPs)

Good practice recommendations for making Climate Adaptation Plans for fisheries and aquaculture

CEN Workshop Agreement CWA 17518:2020



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Pham et al. Climatic Change 2021

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Climatic Change (2021) 164: 62
https://doi.org/10.1007/s10584-021-03041-z

Guidelines for co-creating climate adaptation plans for fisheries and aquaculture

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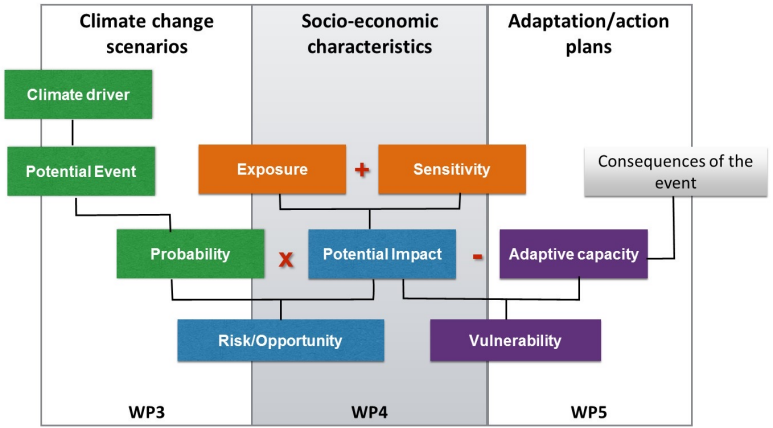
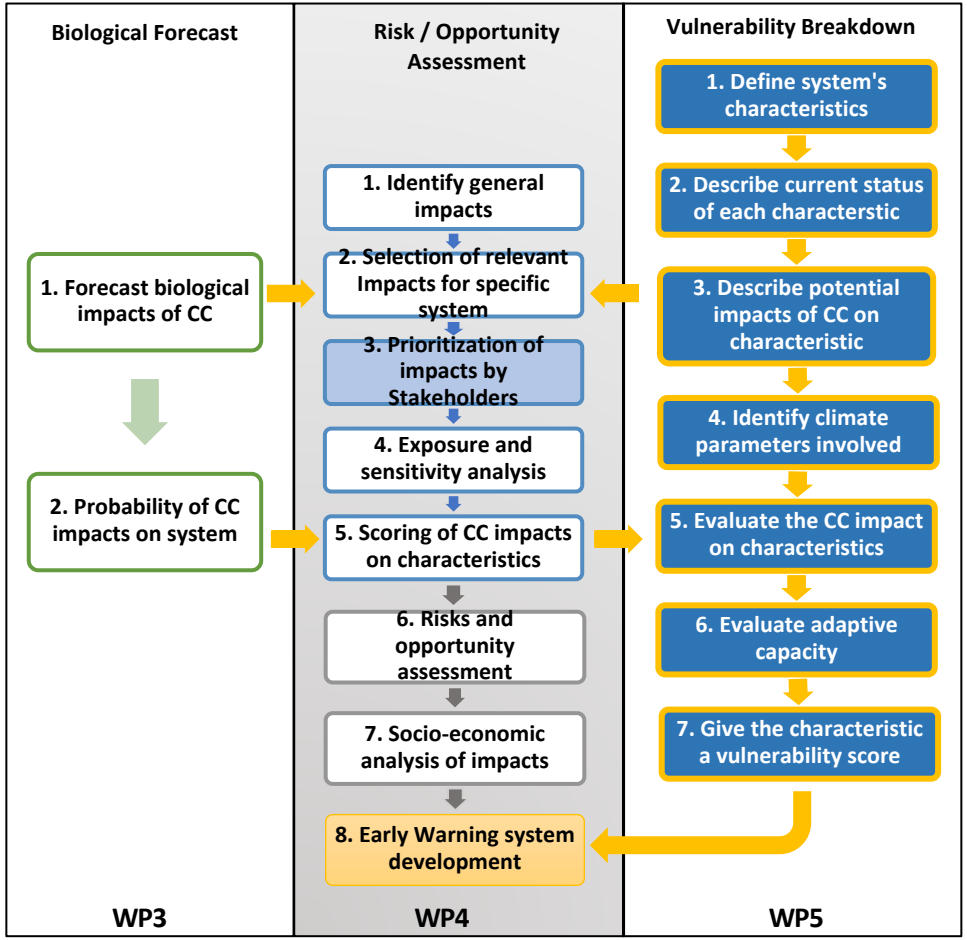
Thank you for your attention!

Risk and opportunities Assessment – Steps and Method





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