



## THE FISHMPABLUE APPROACH

# Adopting a Governance Toolkit for Small-Scale Fisheries in Mediterranean MPAs

Kate Hogg & Nathan Bennett

Webinar 9<sup>th</sup> Oct 2019



# Welcome

## Speakers:



**Kate Hogg** is a consultant joining us from Italy. Kate is a specialist in marine protected area governance and small-scale fisheries management. Contact: [kehogg@gmail.com](mailto:kehogg@gmail.com)



**Nathan Bennett** is joining us from Vancouver Canada where he works as a social scientist at the University of British Columbia. He is a leading specialist in ocean governance and small scale fisheries management Contact: [Nathan.bennett@ubc.ca](mailto:Nathan.bennett@ubc.ca)

Both Kate & Nathan have been directly part of the FishMPABlue project team.

## Interaction:

We would like this to be as interactive as possible and will end the session with a Q&A session. Please type your questions in the Q&A box. Any other issues please make use of the chat box or raise your hand.

# Aim

## Aim:

We would like you to be familiar with:

- the concepts of marine governance and management
- how governance thinking can be applied to understand and improve MPAs
- the FishMPABlue approach and governance toolkit that you can adopt in your MPAs to strengthen your management of small scale fisheries
- with some lessons learned from case studies





# Overview of Webinar

- Introduction to the FishMPABlue Project
- What is environmental governance?
- How can governance thinking be applied to improve MPAs?
- What is the FishMPABlue2 Governance Toolkit?
- What lessons have we learned and how can you use it?
- Questions? Comments? Debate?



# What is FishMPABlue2?

# FishMPABlue2 Project

## FishMPABlue2:

Is the follow on to FishMPABlue. It has been running for the last 36 months and is reaching its conclusion at the end of October.

## Partners:

8 partners - Federparchi, MedPAN, CoNISMa, WWF Adria, ECOMERS University of Nice, WWF-Med, APAM & IUCN

7 Associates – GFCM/FAO, Croatian and Spanish Ministry of Environment, Slovenia Institute for Conservation, MedWet, French MPAs Agency, RACSPA



# FishMPABlue2 Project

## The Objectives:

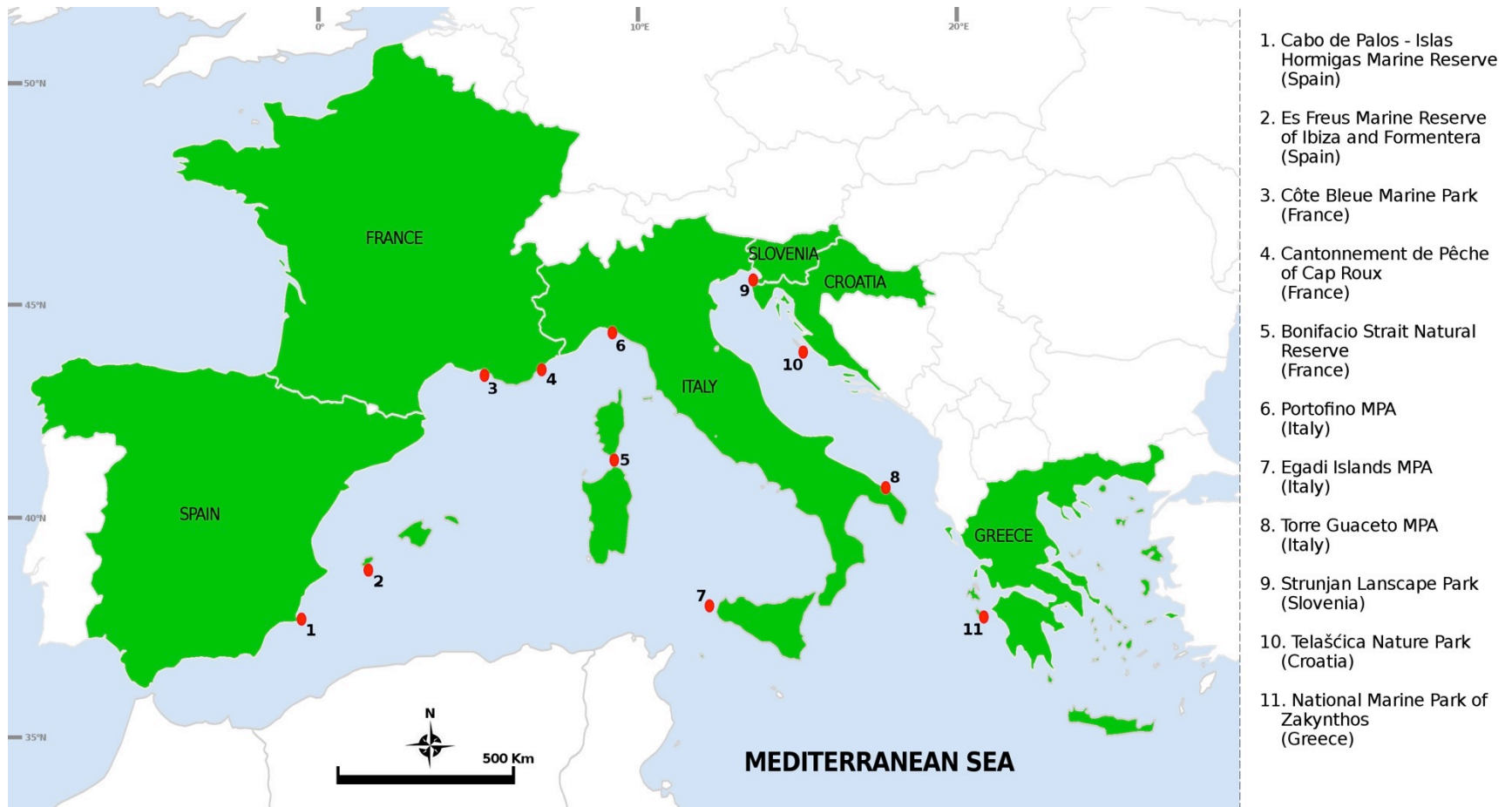
The overarching goal was to understand the relationship between SSF and MPAs in the Mediterranean Sea

To apply and test a governance toolkit in Mediterranean MPAs to demonstrate the effectiveness of these governance tools to help strengthen the management capacities and networks of MPAs

Testing in different MPAs they aimed to generate lessons learnt and refine these tools:

- allowing the toolkit to be shared with other MPAs in the Mediterranean and beyond
- and for the recommendations yielded to be adopted into national and international fisheries and MPA policy

# Project pilot sites





# What is environmental governance?

# Environmental Governance

The aim of environmental governance is to shape individual behaviors or societal actions to produce beneficial outcomes for the environment and for society.

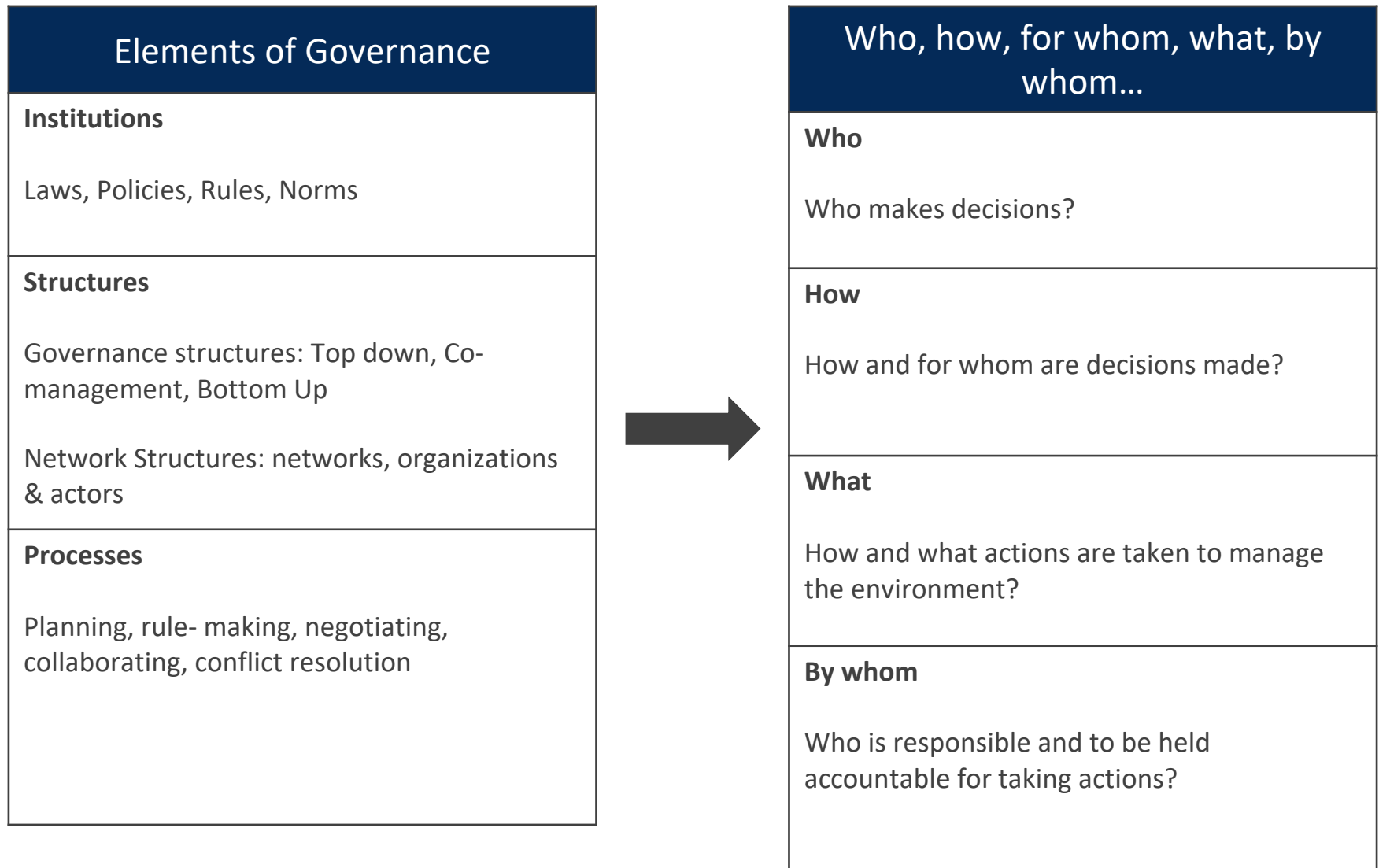
Environmental governance is the institutions, structures and processes that determine who makes decisions, how and for whom decisions are made, how and what actions are taken and by whom to manage the environment.



@M.Mbari / MedPAN

(Bennett & Satterfield, 2018)

# Environmental Governance



(Bennett & Satterfield, 2018)

# Governance vs Management

**Governance** ....is about... the structures, institutions and processes that determine **who** makes decisions, **how and for whom** decisions are made, **how and what** actions are to be taken and **by whom** to manage the environment.

**Management** ...is about...**what** is done in pursuit of environmental sustainability or conservation objectives, it can be understood as the resources, plans, and actions that result from the functioning of governance.

(Lockwood 2010: Bennett & Satterfield, 2018)

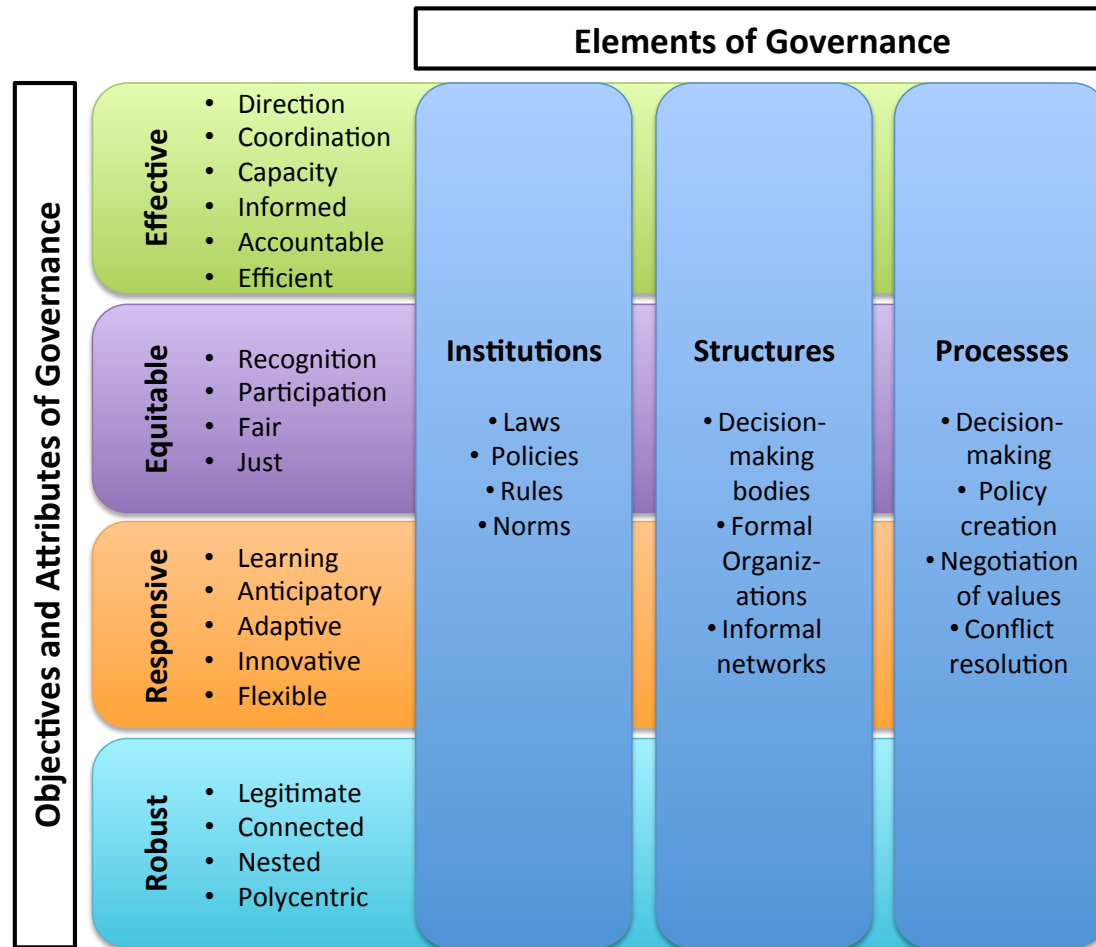


# Environmental Governance Objectives

Objectives of Governance
<b>Effective</b>  To be ecologically effective. This requires direction, coordination, sufficient capacity, well informed, and accountable
<b>Equitable</b>  To be socially equitable. This requires recognition of all stakeholders, being participatory, fair, and just
<b>Responsive</b>  To be responsive to changing circumstances. This requires being adaptive, innovative, flexible, anticipatory, and learn through doing
<b>Robust</b>  To be robust or persist over time e.g. to be legitimate, connected, nested within and between institutions on different levels

(Bennett & Satterfield, 2018)

# Bringing it All Together to Understand Environmental Governance



Bennett & Satterfield (2018). Environmental governance: A practical framework to guide design, evaluation, and analysis. Conservation Letters. Open Access.

# Applying Governance Thinking to Understand and Improve Marine Protected Areas

# Descriptive Governance Assessments

Descriptive analysis of MPA governance institutions, structures, and processes

## **Institutions**

- Regional directives or international agreements
- National policies (for MPAs, fisheries, marine planning, etc.)
- Local norms and rules

## **Structures**

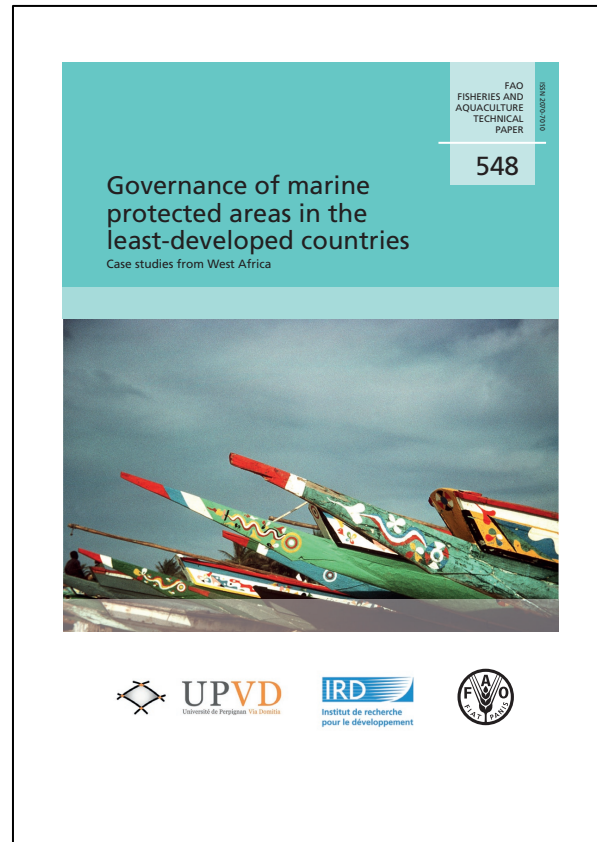
- Governance type - government-led, community-led, or collaborative management
- Composition of decision-making bodies
- Networks of actors and organizations involved in decision-making

## **Processes**

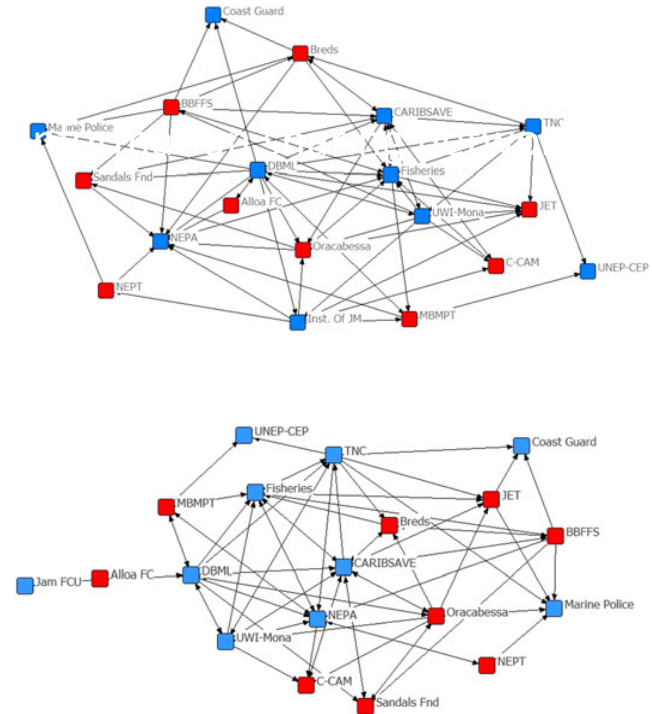
- Planning, implementation and management phases
- Decision- and rule-making processes
- Negotiation and conflict resolution processes
- Coordination and collaboration processes



# Examples: Understanding Governance of MPAs



(Weigel et al, 2011)



Received: 22 August 2016 | Revised: 22 February 2017 | Accepted: 3 March 2017  
DOI: 10.1002/aqc.2775

WILEY

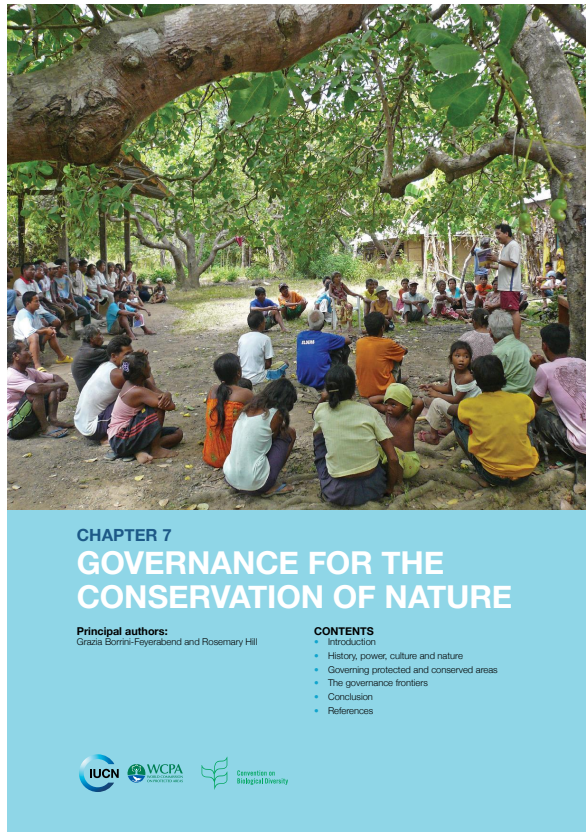
## RESEARCH ARTICLE

Examining horizontal and vertical social ties to achieve  
social-ecological fit in an emerging marine reserve network

Steven M. Alexander<sup>1,2</sup> | Derek Armitage<sup>3</sup> | Peter J. Carrington<sup>4</sup> | Örjan Bodin<sup>2</sup>

# Evaluative Governance Assessments

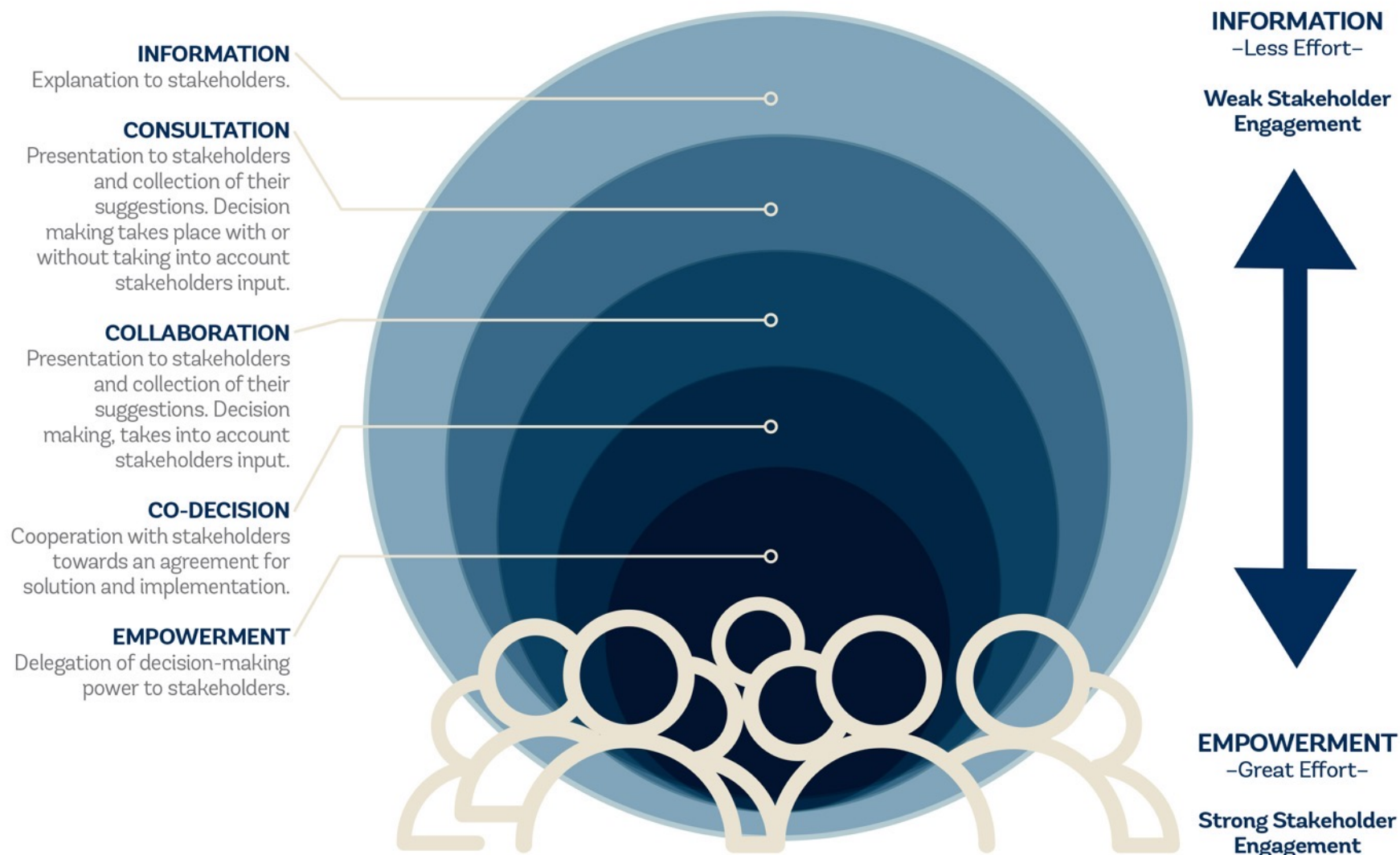
Evaluation against normative criteria for governance processes



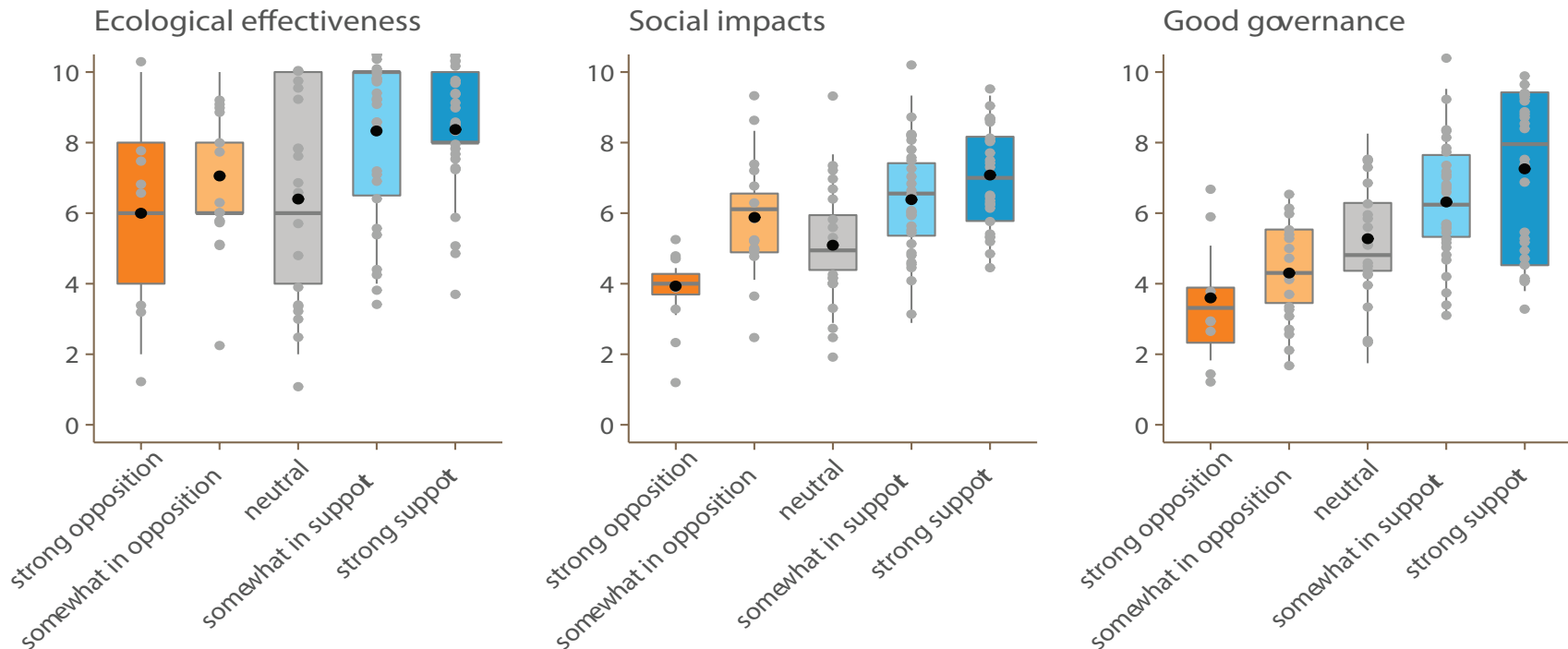
- Public participation
- Consensus orientation
- Strategic vision
- Responsiveness
- Effectiveness
- Efficiency
- Accountability
- Transparency
- Equity
- Rule of Law

(IUCN, 2015)

# Example: Degree of Participation



# Example: Does Good Governance Matter for Conservation?



**YES!**

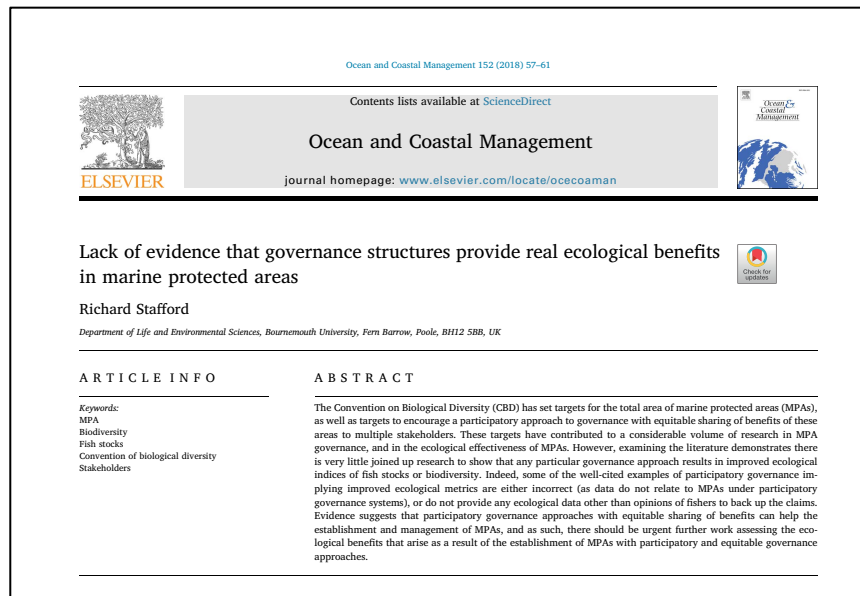
IT IS STRONGLY ASSOCIATED WITH LOCAL SUPPORT FOR CONSERVATION.

(Bennett et al, 2019)



# Analysis of Outcomes of Governance

Analysis of substantive ecological or social outcomes of different governance configurations

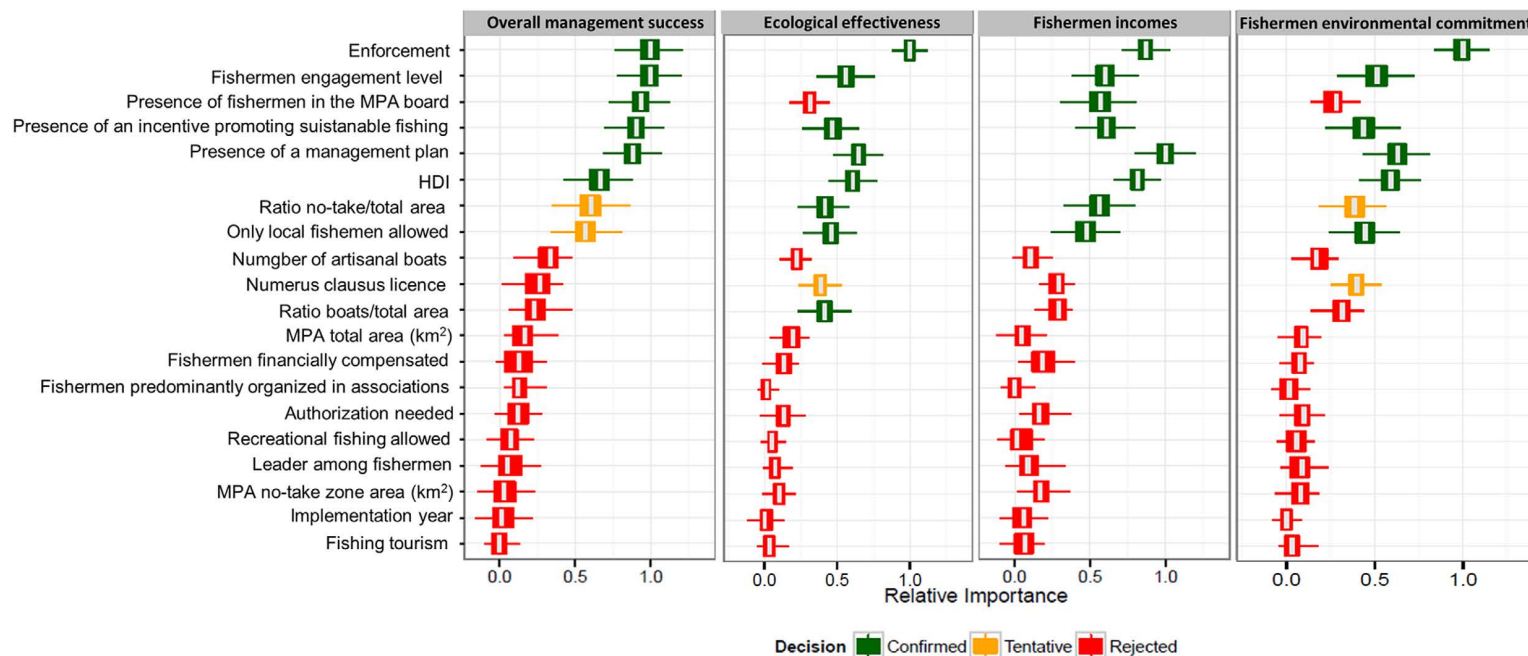


(Stafford, 2018)



(Jones, 2014)

# Example: Understanding Key Features of MPA Success



## SCIENTIFIC REPORTS

OPEN

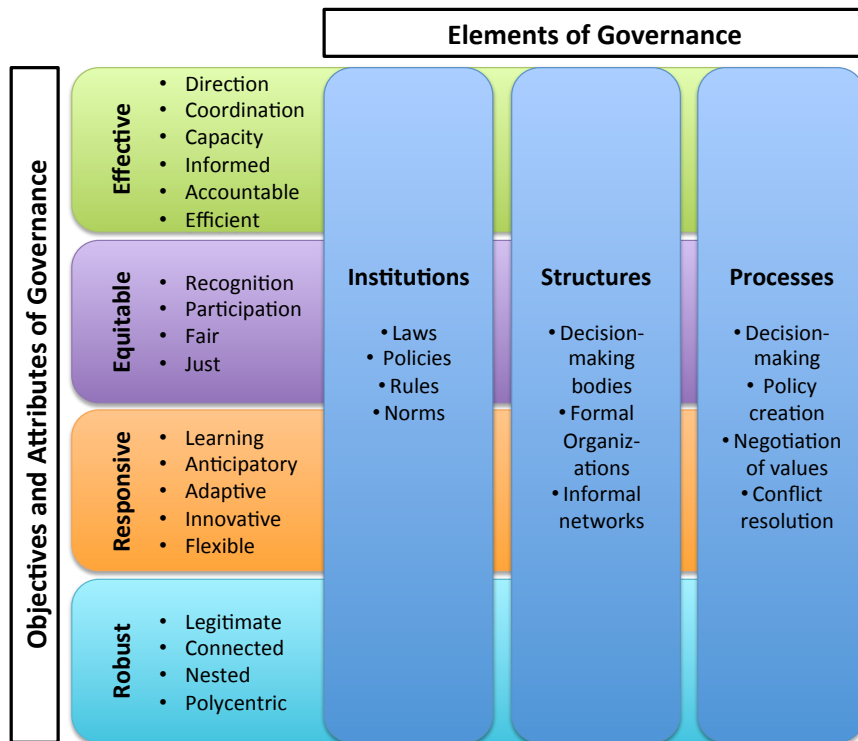
**Five key attributes can increase marine protected areas performance for small-scale fisheries management**

Received: 04 July 2016  
Accepted: 04 November 2016  
Published: 01 December 2016

Antonio Di Franco<sup>1,2</sup>, Pierre Thiriet<sup>1,\*</sup>, Giuseppe Di Carlo<sup>3</sup>, Charalampos Dimitriadis<sup>4,5</sup>, Patrice Francour<sup>1</sup>, Nicolas L. Gutiérrez<sup>6</sup>, Alain Jeudy de Grissac<sup>7</sup>, Drosos Koutsoubas<sup>8</sup>, Marco Milazzo<sup>2,9</sup>, María del Mar Otero<sup>7</sup>, Catherine Pianté<sup>9</sup>, Jeremiah Plass-Johnson<sup>1</sup>, Susana Sainz-Trapaga<sup>10</sup>, Luca Santarossa<sup>11</sup>, Sergi Tudela<sup>10,†</sup> & Paolo Guidetti<sup>1,2</sup>

(Di Franco et al, 2016)

# Take away messages



A better understanding of governance can improve MPAs.

Governance and management are different!

Governance thinking can be applied to MPAs in three ways:

- descriptive assessments of current governance practice,
- evaluations of the achievement of different objectives and attributes of governance,
- analysis of the relationship between governance and environmental and/or social outcomes.

(Bennett & Satterfield, 2018)

What is the FishMPABlue2  
governance toolkit?



# The toolkit



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Download your copy of the toolkit  
here: <https://bit.ly/2Tt9Vja>

# The FishMPABlue Approach

During the first phase of FishMPABlue a list of measures and interventions were identified that could improve SSF management in MPAs

In FishMPABlue2 the first step was for each participating MPA to establish a **Local Governance Group** creating a stable cooperation platform including MPA management and local professional fishers (or their representatives)

These Local Governance Groups were responsible for working together to identify the particular needs of their MPA and SSF sector and select which tools from the toolkit to implement and test in order to address the local issues

The FishMPABlue2 team worked in parallel to the Local Governance Cluster to test these measures in the 11 MPAs – assessing their effectiveness ecologically, economically and socially

The key thing to note is that in some cases this was the first time fishers were formally engaged in taking management decisions to improve their situations’- representing a positive step towards **co-management**

**After testing the toolkit has been refined and updated**

# The toolkit

- a INVOLVEMENT IN DECISION MAKING;**
- b ENFORCEMENT STRENGTHENING;**
- c KNOWLEDGE AND OWNERSHIP;**
- d IMPROVE SSF ENVIRONMENTAL SUSTAINABILITY;**
- e IMPROVEMENT OF SSF PROFITABILITY.**

# The toolkit

## ACTIVITIES SELECTED BY THEME

by the 11 Local Governance Cluster in the framework of the FishMPABlue2 project

MPA	a INVOLVE- MENT IN DECISION MAKING	b ENFORCE- MENT STREN- GTHENING	c KNOWLEDGE & OWNERSHIP	d IMPROVE SSF ENVIRONMEN- TAL SUSTAI- NABILITY	e IMPROVEMENT OF SSF PROFI- TABILITY
EGADI ISLANDS MPA					
TORRE GUACETO MPA					
PORTOFINO MPA					
ZAKYNTHOS NATIONAL MARINE PARK					
ES FREUS MARINE RESERVE					
CABO DE PALOS MARINE RESERVE					
CAP ROUX FISHERIES RESERVE					
CÔTE BLEUE MARINE PARK					
BONIFACIO STRAIT NATURAL RESERVE					
STRUNJAN LANDSCAPE PARK					
TELAŠĆICA NATURAL PARK					

# The toolkit

THEME	TOOL	MPAs THAT IMPLEMENTED THE TOOL
<b>a</b> INVOLVEMENT IN DECISION MAKING	<b>TOOL 1:</b> Create collaborative platforms to engage fishers in decision making	<b>11</b> Bonifacio Strait Natural Reserve, Cabo de Palos Marine Reserve, Cap Roux Fisheries Reserve, Côte Bleue Marine Park, Egadi Islands MPA, Portofino MPA, Es Freus Marine Reserve, Strunjan Landscape Park, Telašćica Nature Reserve, Torre Guaceto MPA and Zakynthos National Marine Park
<b>b</b> ENFORCEMENT STRENGTHENING	<b>TOOL 2:</b> Increase surveillance by MPA staff and improved infrastructure  <b>TOOL 3:</b> Increase surveillance through fishers' direct involvement  <b>TOOL 4:</b> Increase surveillance through the cooperation with relevant authorities	<b>5</b> Côte Bleue Marine Park, Es Freus Marine Reserve, Strunjan Landscape Park, Telašćica Nature Reserve, Zakynthos National Marine Park  <b>6</b> Cabo de Palos Marine Reserve, Egadi Islands MPA, Portofino MPA, Strunjan Landscape Park, Telašćica Nature Reserve, Zakynthos National Marine Park  <b>4</b> Cap Roux Fisheries Reserve, Côte Bleue Marine Park, Telašćica Nature Reserve, Torre Guaceto MPA
<b>c</b> KNOWLEDGE & OWNERSHIP	<b>TOOL 5:</b> Engage fishers in monitoring activities  <b>TOOL 6:</b> Raise the awareness of fishers, MPA managers and the local community	<b>5</b> Bonifacio Strait Natural Reserve, Egadi Islands MPA, Portofino MPA, Strunjan Landscape Park, Torre Guaceto MPA  <b>5</b> Egadi Islands MPA, Zakynthos National Marine Park, Cabo de Palos Marine Reserve, Strunjan Landscape Park, Cap Roux Fisheries Reserve
<b>d</b> IMPROVE SSF ENVIRONMENTAL SUSTAINABILITY	<b>TOOL 7:</b> Reduce fishing effort  <b>TOOL 8:</b> Modify/substitute fishing gear  <b>TOOL 9:</b> Set-up SSF Code of conduct	<b>3</b> Portofino MPA, Torre Guaceto MPA, Zakynthos National Marine Park  <b>3</b> Bonifacio Strait Natural Reserve, Strunjan Landscape Park, Telašćica Nature Reserve  <b>1</b> Egadi Islands MPA
<b>e</b> IMPROVEMENT OF SSF PROFITABILITY	<b>TOOL 10:</b> Add value to local fisheries products  <b>TOOL 11:</b> Promote new commercial species  <b>TOOL 12:</b> Support Pescatourism	<b>1</b> Côte Bleue Marine Park  <b>1</b> Zakynthos National Marine Park  <b>1</b> Telašćica Nature Reserve



# The toolkit

a

## Involvement in decision making

The level of uncertainty in managing natural resources is a real and permanent issue that all MPA managers face. It is necessary to examine conservation problems hand-in-hand with the societal contexts in which they are found. To do this successfully requires giving consideration to the local interests of resource users and wider community and also their perceptions and knowledge of natural resources and how they should be managed. Engaging stakeholders, primarily fishers, in the management of marine resources and MPAs is extremely beneficial as it facilitates representation of diverse views and values; provides local knowledge and solutions tailored to specific contexts; prepares the ground for more effective implementation of policies for long-term management; and helps legitimise MPA governance in the eyes of all involved.

**Participative processes: provide different stakeholders and interest groups the opportunity to participate in and influence decision making; encourage ownership of the MPA; and assure cooperation in the implementation of decisions and management.**

Good communication channels and open on-going dialogue are necessary to overcome distrust between stakeholders. Creating platforms and channels for communication offers an opportunity for a much needed two-way dialogue: helping fishers feed their experiential knowledge into management decision making; and allowing managers to explain decisions taken and how fishers' information has been used to make the decisions. In addition these stable platforms can be taken one step further and developed into formalised co-management committees where fishers can be empowered and along with other actors share decision-making power.

Exchange visit is to allow MPA managers and other stakeholders to benefit from lessons learnt from successful experiences at the Telašćica Nature Park, Croatia. © M. Mabari / MedPAN



## CREATE A PERMANENT AND FORMAL COOPERATION PLATFORM TO ENGAGE FISHERS IN DECISION MAKING

### TESTED IN:

Bonifacio Strait Natural Reserve, Cabo de Palos Marine Reserve, Cap Roux Fisheries Reserve, Côte Bleue Marine Park, Egadi Islands MPA, Es Freus Marine Reserve, Strunjan Landscape Park, Telašćica Nature Park, Torre Guaceto MPA and Zakynthos National Marine Park

### COST:

Low

### TIME NEEDED:

Medium

### STAKEHOLDER INVOLVEMENT:

Medium

### PERCEIVED EFFECTIVENESS:

High impact

### TEST AND OUTCOMES:

There are several ways to set up a collaborative platform depending on the overall objective, with varying levels of participation and legitimacy. For example: working groups that unite to discuss specific needs of an MPA, or legally recognised co-management bodies where all participants play an equal role in the decision-making process.

The demand and desire for increased involvement in decision making processes is evident as all 11 pilot sites within the FishMPABlue2 project selected to implement governance tools and measures within the "Increase fishers' engagement" theme. This theme included tools/measures discussed in other sections of this report, such as fishers engaged in surveillance and in monitoring activities. The main method chosen to increase the involvement of fishers in the decision-making process was the creation of collaborative platforms.

In the FishMPABlue2 project, all MPAs were already engaging fishers to some degree, yet through the initiative they took an additional step to better engage fishers in decision making through the formal establishment of a LGC. The LGC was a formalised joint committee composed mainly of MPA managing bodies and local fishers' representatives who were responsible for the main decisions concerning the implementation of the FishMPABlue2 project pilot action. In some cases, this was the first time fishers had been involved beyond just being informed while attending meetings and were actively engaged in decision making.

Eight of the 11 MPAs opted to take the LGC a step further and implement governance tools focused on increasing fishers' engagement through the strengthening of existing and development of new cooperation platforms that would permit improved two-way dialogue, following different strategies:

**Regular meetings:** in 7 MPAs<sup>1</sup>, these platforms were used to ensure regular meetings with all relevant stakeholders, allowing fishers to have greater involvement in the management of the MPAs and to discuss and decide upon several new strategies to improve governance, including territorial rights, and introduction of an agreed upon and formalised SSF "Code of conduct". In some of the cases where committees existed but were no longer meeting or only infrequently, specific support was offered to strengthen their role through the organisation of more regular meetings with clearly defined objectives.

**Strengthening fishers' organisations:** in Telašćica Natural Park, efforts were made to strengthen an existing fisheries organisation (a Fisheries Local Action Group - FLAG) through actions that increased the capacity of fishers and representatives, supporting these organisations in the application for relevant funds (e.g. European Maritime and Fisheries Fund - EMFF), and offering support to fishers to participate in or contribute to other SSF-related organisations such as the Low Impact Fishers of Europe - LIFE network.

These regular meetings have helped build relationships and trust and also developed a shared vision for the MPAs in question, and the fishers reported that they perceived a much better relationship with the management bodies and the decision taken.

<sup>1</sup> Es Freus Marine Reserve, Cabo de Palos Marine Reserve, Côte Bleue Marine Park, Bonifacio Strait Natural Reserve, Torre Guaceto MPA, Egadi islands MPA, Zakynthos National Marine Park

# The toolkit

## CASE STUDY

### CREATING FORMALISED LOCAL GOVERNANCE CLUSTERS

The analysis of the specific interests and needs of each stakeholder group allowed managers to plan strategies that can be adopted to work with stakeholders in other MPAs throughout the Mediterranean. The MPA managers were advised to take some time analysing the stakeholders to ensure that those people invited to participate really were the most appropriate representatives possible, and that these people were willing and committed to acting as a communication channel between their sector and the committee. Each MPA created a committee that included representatives from the MPA management bodies and local fisheries sector. In some cases, where appropriate, other actors were incorporated in the committee, including researchers, local NGOs, and representatives of other business sectors such as scuba diving or tourism. Once all the actors were identified, they agreed to sign a formal commitment to say that

they agreed to participate in and to meet the expectations of the committee. The next step after signing the formal commitment was for the Local Governance Cluster (LGC) to meet regularly and begin a participatory process to assess the needs of the MPA and the local community. By involving all the actors it was assured that the actual needs of the community were well understood. The LGC then followed a process to assess which of the tools in the governance toolkit would best help address the issues identified and meet the interests and needs of the local community. Once identified, the LGC committed to finding

suitable ways to implement and test the tools. The analysis of the specific interests and needs of each stakeholder group allowed the MPA to plan better strategies that could improve the effectiveness of the MPA whilst at the same time ensuring greater support for the MPA and compliance with the newly agreed upon initiatives.



The Local Governance Cluster created in Telašćica Nature Park, Croatia. © J. Grbin



Fisher in Torre Guaceto Marine Protected Area, Italy. © M. Mabari / MedPAN



## TIPS FOR ENGAGING FISHERS IN DECISION MAKING

equitable participation and empowerment of the different stakeholders.

**Invest time to identify & characterise stakeholders and ensure they are good representatives.** Attention must be given to the selection of representatives from all sectors, to ensure that they are representative of the whole sector, that they understand the responsibility of representing the views of the whole sector (not just their own interests), and that they report back any key messages, decisions and information to those they are representing.

**Capacity building.** Each stakeholder group involved must be provided with some capacity building to increase their training and experience with participatory processes that will ensure more

**Build a foundation.** A foundation built from transparent and accountable trustful relationships can create an excellent starting point for a long term working relationship between MPA management bodies and stakeholders.

**Be reliable, consistent and neutral.** Neutral facilitators should be used; if the MPA facilitates meetings they need to receive some facilitation training.

**Encourage equal participation.** Ensure that both men and women (who fish &/or are involved in satellite activities of the sector/functioning of the family fishing business) are represented and that groups that are often marginalised are given equal opportunities to participate.

**Identify a common ground.** Develop with the stakeholders a common and shared vision for the ideal state of the MPA, which manages stakeholders' expectations for what can realistically be achieved, but sets contextually suitable goals.

# What lessons have we learned?

# Case Study 1: Voluntary Code of Conduct

Egadi Islands MPA located in Sicily, Italy.  
Established 1991. 540km<sup>2</sup>

Fishers are from 3 small islands and a town on Sicily creating challenges for enforcement, Significant fishing pressure and lack of cohesion and engagement

Through FishMPABlue2, the local governance group of Egadi MPA attempted to improve the cohesion of the fishing sector designing a voluntary “Code of Conduct” that included guidance for monitoring the MPA



@A. Remy / WWF Med



# Case Study 1: Voluntary Code of Conduct

On July 5<sup>th</sup> 2018 the fishers gathered to sign the code of conduct, and have been active in supporting the MPAs monitoring

Now continued effort is required from the MPA to make sure fishers are well engaged and keep the code of conduct going for the long term



@A. Remy/ WWF Med

# Case Study 2: Loving the unlovable

Zakynthos National Marine Park, Greece.  
Established 1999

The Marine Park has in recent years received more and more unwanted visitors in the form of invasive species, in particular, two species of rabbitfish (*Siganus luridus* and *Siganus rivulatus*)

These invasive species are outcompeting local and endemic species, overgrazing algae and altering the natural balance of the ecosystem generating concern in all stakeholders

Through FishMPABlue2 the local governance group agreed on a strategy to promote the consumption of these invasive species



@C.Amico / WWF Med




# Case Study 2: Loving the unlovable

Fishers were directly engaged and encouraged to target these species. To ensure no time and money lost for the fishers, the MPA also ran a publicity campaign, producing flyers, organising cooking events with local chefs, recipe cards


The overall verdict from the events was that these new species are desirable


Finding cunning ways to encourage consumers to start buying these species can help promote their sale

Finally they are also exploring alternative ideas for using these rabbitfish as aquaculture feed




**Κατανάλωσε τη νόστιμη αγριόσαλα και προστατέυσε τη θαλάσσια βιοποικιλότητα!**  
Consume the tasteful spinefoot fish and protect marine biodiversity!





Η άσπρη αγριόσαλα και ο γερμανός είναι δυο φυτοφάγα ψάρια που έχουν εισβάλει στη Μεσόγειο από την ερυθρά θάλασσα διαμέσου της διαρύνσης του Σουέζ. Σήμερα έχουν καταλάβει τις ελληνικές θάλασσες και απειλούν τους πληθυσμούς των φυτοφάγων ενδημικών ειδών όπως η Σάλλα και ο Σκάρος. Η κατανάλωση των ψαριών αυτών συμβάλλει στην προστασία της βιοποικιλότητας ενώ παράλληλα ενισχύει το εισόδημα των επαγγελματιών παρακτινών ολιγών. Μάλιστα τα ψάρια αυτά θεωρούνται εκλεκτός μεζές στην Κυπριακή κουζίνα με τιμές πώλησης όπως του σαργού και του ροφού (25-30 ευρώ το κιλό).

The dusky and the marbled spinefoot (rabbitfish) are two herbivores fish originating from the Red Sea that have invaded the Mediterranean Sea through the Suez Canal. Nowadays, they are thriving in Greek Seas threatening the populations of the native herbivores such as the salemia fish and the parrotfish. Consumption of the rabbitfish can assist in protecting biodiversity and complementing the income of small scale artisanal fishermen. Yet, the rabbitfish is considered as an



Τα ψάρια θα πρέπει να καθαρίζονται από τα εντόσθια όσο πιο σύντομα γίνεται ενώ, το τριπλό με αλάτι ή το ξέπλυμα με ελαφρύ απομακρύνει την έντονη μυρωδιά. Με μαρινάδα (π.χ. λάδι, πορτοκάλι, αλάτι, σκόρδο) της επόχλης σας (για 20 με 30 λεπτά) μπορεί επίσης να δώσει ένα διαφορετικό γευστικό αποτέλεσμα.

Prior to cooking, the intestines should be removed as soon as possible while rubbing the fish with salt or pouring vinegar all over it will remove any intense smell. By marinating the fish for 20 to 30 min (e.g. olive oil, orange juice, salt and garlic) you can achieve maximum taste results.

**FISHMPABLUE 2**

Αλιεία και Θαλάσσιες Προστατευόμενες Περιοχές, μια συνεργασία για τη βιώσιμη αλιεία στη Μεσόγειο

Fishermen and Marine Protected Areas, a partnership for sustainability in the Mediterranean

[www.nmp-zak.org](http://www.nmp-zak.org)

Interreg  
Mediterranean  
FishMPABlue 2


**Μια παραδοσιακή Κινέζικη συνταγή**

Καθαρίστε και ξεπλύνετε τα ψάρια (4 ψάρια 300-350gr το καθένα) και μετά στεγνώστε κάθε πλευρά σε απορροφητικό χαρτί. Τηγανίζουμε τα ψάρια σε προθερμασμένο αντικαλχητικό τηγάνι σε μια κουταλιά της σούπας λάδι για 4 με 5 λεπτά από κάθε πλευρά μέχρι να χρυσαφίσουν. Στο ίδιο τηγάνι σπάρουμε το τζίντζερ (2 κομμάτια) και μια κουταλιά του ταγιαού πολτοποιημένο σκόρδο μέχρι να μαλακώσουν. Έπειτα προσθέτουμε 3 πράσα κομμένα σε χοντρά κομμάτια και σπάρουμε για άλλα 2-3 λεπτά και μετά προσθέτουμε 80ml ζωμό κοτόπουλου. Τοποθετήστε το μαγειρεμένο ψάρι πάνω από τα πράσα και σιγοβράστε για ακόμη 1-2 λεπτά σε μέτρια φωτιά, αφήστε τα ψάρια να απορροφήσουν τη γεύση από το μίγμα των πράσων.


**A traditional Chinese recipe**

Clean and rinse the fish (4 fish of 300-350gr each), pat dry with kitchen paper. Preheat a frying pan with 1 tablespoon of oil, pan-fry the fish on both side for about 4-5 minutes under medium heat or till slightly golden brown. Using the same pan add in ginger (2 pieces) and 1 teaspoon of minced garlic, sauté till fragrant before adding the sliced leeks. Add the leeks (3 stalks) and continue to stir-fry for another 2 - 3 minutes until soft and add in 80ml of hot chicken broth. Place the cooked fish on top of the leeks and simmer for another 1 minute on medium low heat, carefully give it a quick stir in between to let the fish absorb the flavour from the leeks mixture. Dish up and serve with hot steamed rice.


Marbled spinefoot



Άσπρη αγριόσαλα



















































Γερμανός



Dusky spinefoot

# Feasibility & Effectiveness of tools

	THEME	TOOL	COST	TIME NEEDED	LOCAL STAKEHOLDERS INVOLVEMENT	PERCEIVED EFFECTIVENESS	MPAS THAT IMPLEMENTED THE TOOL
a	INVOLVEMENT IN DECISION MAKING	Create collaborative platforms to engage fishers in decision making	 LOW COST	 MEDIUM TIME	 MEDIUM STAKEHOLDERS INVOLVEMENT	 HIGH IMPACT	11 RNBB, Cabo, Cap Roux, PMCB, Egadi, Portofino, Es Freus, Strunjan, Telašćica, Torre Guaceto and Zakynthos
		Increase surveillance by MPA staff and improved infrastructure	 MEDIUM COST	 LONG TIME	 MEDIUM STAKEHOLDERS INVOLVEMENT	 HIGH IMPACT	5 PMCB, Es Freus, Strunjan, Telašćica and Zakynthos
b	ENFORCEMENT STRENGTHENING	Increase surveillance through fishers' direct involvement	 MEDIUM COST	 LONG TIME	 HIGH STAKEHOLDERS INVOLVEMENT	 HIGH IMPACT	6 Cabo, Egadi, Portofino, Strunjan, Telašćica, Zakynthos
		Increase surveillance through the cooperation with relevant authorities	 MEDIUM COST	 LONG TIME	 MEDIUM STAKEHOLDERS INVOLVEMENT	 HIGH IMPACT	4 Cap Roux, PMCB, Telašćica, Torre Guaceto
		Engage fishers in monitoring activities	 MEDIUM COST	 MEDIUM TIME	 HIGH STAKEHOLDERS INVOLVEMENT	 MEDIUM IMPACT	5 RNBB, Egadi, Portofino, Strunjan, Torre Guaceto
c	KNOWLEDGE & OWNERSHIP	Raise the awareness of fishers, MPA managers and the local community	 MEDIUM COST	 MEDIUM TIME	 MEDIUM STAKEHOLDERS INVOLVEMENT	 MEDIUM IMPACT	5 Egadi, Zakynthos, Cabo, Strunjan, Cap Roux
		Reduce fishing effort	 MEDIUM COST	 LONG TIME	 HIGH STAKEHOLDERS INVOLVEMENT	 MEDIUM IMPACT	3 Portofino, Torre Guaceto, Zakynthos
		Modify/substitute fishing gear	 MEDIUM COST	 LONG TIME	 HIGH STAKEHOLDERS INVOLVEMENT	 MEDIUM IMPACT	3 RNBB, Strunjan, Telašćica
d	IMPROVE SSF ENVIRONMENTAL SUSTAINABILITY	Set-up SSF Code of conduct	 MEDIUM COST	 LONG TIME	 HIGH STAKEHOLDERS INVOLVEMENT	 MEDIUM IMPACT	1 Egadi
		Add value to local fisheries products	 LOW COST	 MEDIUM TIME	 HIGH STAKEHOLDERS INVOLVEMENT	 MEDIUM IMPACT	1 PMCB
		Promote new commercial species	 LOW COST	 SHORT TIME	 LOW STAKEHOLDERS INVOLVEMENT	 MEDIUM IMPACT	1 Zakynthos
e	IMPROVE SSF PROFITABILITY	Support Pescaturism	 MEDIUM COST	 LONG TIME	 HIGH STAKEHOLDERS INVOLVEMENT	 MEDIUM IMPACT	1 Telašćica

Cost, Time & Stakeholder involvement needed to implement each tool and perceived effectiveness

# Feasibility & Effectiveness of tools

## Perception of the tools:

- having selected the tools themselves stakeholders had improved willingness to implement the toolkit
- felt to have potential to positively effect fish stocks, habitat health, fish catch, and fishers' income
- 67% of fishers reported that the new set of management measures had enhanced their relationship with the management board in the MPA

**A positive perception can promote pro-environmental behaviour and improve support for the MPA**



Quiz Time:

Which tool(s) would be the most  
useful for meeting you MPAs  
needs?

[PollEv.com/katiehogg622](https://www.pollEv.com/katiehogg622)



# Which tool(s) would be most useful for meeting your MPAs needs?



# Concluding thoughts

The toolkit can be a useful instrument for any MPA manager wanting to improve his/ her MPA's effectiveness through better cooperation with local stakeholders

A key message is to understand the importance of honest and open dialogue with small-scale fishers and other stakeholders

FishMPABlue2 results show cooperation with local small-scale fishers can bring unexpected benefits for the MPA managing body

It is hoped that this vision is shared with all of you listening





# Thank you. Questions?



WE & THE FISHMPABLUE TEAM  
Thank you for joining today



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