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Deliverable D1.1

Executive report on the stakeholder Hub: attributes, tools and feedback

24/03/2019



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www.farfish.eu

Executive Summary

In this ‘Executive report on the Stakeholder Hub: attributes, tools and feedback”, we describe the state of the art of the Stakeholder’s Hub in the FarFish project. Some of the main questions we try to respond on are related to how the Stakeholder Hub has been designed and implemented, and how gaps and needs in arenas for stakeholder interaction are being matched.

This executive report is the first deliverable of Work Package 1 (WP1 - Stakeholder interaction). It summarises the process followed to develop the main tool for engaging stakeholders, at least on a preliminary stage. The Stakeholder Hub is focussed on a multi-level, multi-stakeholder platform, the focal point for policy-makers, NGOs, scientists, fisheries associations, processing organizations, trade companies and other relevant stakeholders.

It provides a description of the communication flows within the first project stage about participants and stakeholders to enhance interaction between them, providing an updated list of the key stakeholders gathered to date. Finally, it describes the process of tailoring the Hub, summarizing the steps and tips followed until present time, focussing on the Case Study kick-off meeting that is planned in two months from the publication of this report.



List of acronyms

ACRONYM	MEANING
CFP	Common Fishery Policy
CMM	Conservation and Management Measures
CS	Case Study
DSF	Decision Support Framework
DSS	Decision Support Software
EBK	Experience Based Knowledge
FITI	Fisheries Transparency Initiative
FPA	Fisheries Partnership Agreements
IUU	Illegal, Unreported and Unregulated Fishing
JSC	Joint Scientific Committee
MCS	Monitoring, Control and Surveillance
MIR	Management Recommendation
MSY	Maximum Sustainable Yield
OT	Outcome targets
RFMO	Regional Fisheries Management Organization
RFMS	Responsive Fisheries Management System
RBM	Result-Based Management
UNCLOS	United Nations Convention on the Law of the Sea
SH	Stakeholder Hub
ST	Stakeholder Template
SFPA	Sustainable Fisheries Partnership Agreements
SMEFF	Sustainable management of External Fishing Fleets
WP	Work Package



Table of Contents

1	INTRODUCTION	6
1.1	OBJECTIVE	7
1.2	BACKGROUND	8
2	INTEGRATING BEST PRACTICES: STAKEHOLDER ENGAGEMENT IN SFPAS	12
2.1	PUBLIC AWARENESS AND FISHERIES POLICY WITHIN SFPAs	12
2.2	MAIN CHALLENGES IN SFPAs	14
2.2.1	<i>Sustainability</i>	14
2.2.2	<i>Fisheries governance</i>	14
2.2.3	<i>Social justice and equity</i>	15
3	HOW FARFISH HUB WORKS: COMMUNICATION FLOW	17
3.1	COMMUNICATION PROTOCOL.....	18
3.2	KEY PARTNERS AND INDIVIDUALS	20
3.3	IMPLEMENTING THE HUB ON THE FIRST CS LAUNCHING	22
4	CONCLUSIONS AND DISCUSSIONS	26
5	REFERENCES	27
	ANNEX 1. STAKEHOLDER TEMPLATE TO BE FILLED BY CS LEADERS.....	29



1 Introduction

Authorities, operators, research institutions, industry, policy-makers, NGOs, other interest groups are the key stakeholders to reach the main project purposes in the FarFish project.

The following objectives of WP1 are: (i) Ensure effective participatory processes for producing outputs; (ii) Mobilize relevant experience-based knowledge to be integrated into the Work Packages (WPs); (iii) Apply visualization materials and tools for structured dialogue with multilevel stakeholders; (iv) Facilitate the interaction in developing Management Recommendations (MRs); (v) Reinforce capacity-building and outputs uptake after the final completion; (vi) Evaluate different management scenarios and decisions. CETMAR have designed the Stakeholder Hub (SH) to accomplish WP1 objectives.

The Hub is the main tool designed for stakeholders' engagement within the project. It works as an umbrella including all the processes and activities taken to involve stakeholders. The contribution of stakeholders is essential within the project for addressing the FarFish challenges and opportunities through the development of the FarFish Decision Support Framework (DSF) and MRs. The facilitation of the SH will combine face-to-face events (e.g. workshops, seminars, Case Study (CS) meetings) and e-communication (e.g. the website, social media and web learning tools) to optimize resources. To ensure that the Hub is designed taking into account the needs of the project; also, it is being implemented as a stepwise approach.

The Hub is connected to on-going actions, as the Fisheries Transparency Initiative (FiTI), a country-centred multi-stakeholder group, bringing together representatives of government, private sector and civil society. The FiTI promotes a trust-based multi-stakeholder environment for collective action in favour of better fisheries management though a global approach. Three of the FarFish CS, Senegal, Seychelles and Mauritania, are voluntarily involved and some of them have been advancing in the FiTI standards implementation.

The SH has a multi-level structure where the following activities are integrated:

- Identification of the sector specific core problems named by the stakeholders
- Selection of arena for problem-solving and implementation of adaptive strategies
- Selection of the most relevant actors for the case specific challenges
- Specification of information flow for structured dialogue
- Specification of communication tools to ensure participation and representativeness

There are many barriers hindering communication and information flow among individuals and institutions. FarFish needs to deal with cultural, lingual and institutional barriers. To overcome that impediment, the SH is being designed as the main tool for gathering and involving the comprehensive range of stakeholders in FarFish, as an open and live platform.



1.1 Objective

WP1 brings together the resources and competences of different stakeholders to support improvements on fisheries management by: (i) allowing for adaptiveness of the management system in particular contexts; (ii) gathering insights from the main players in the area; (iii) addressing constraints identified in other WPs; and (iv) providing feedback on intermediate and final outputs by measuring the applicability of each management strategy.

The aim of this report is to describe and analyse the SH activities. Through this, we ensure transparency and accountability in our co-creation with stakeholders. Furthermore, the report contributes to the debates on participative perspectives on fisheries management.

The literature has identified that the stakeholders' rationale is characterized by plurality and bounded interests; therefore, the Hub is the arena for:

- Mapping the stakeholders' knowledge;
- Balancing cooperation and competition;
- Providing input to research and management tools in different feedback loops.

The SH builds on good practices and lessons learned through previous engagement with fisheries stakeholders at regional, national and European Level. The Hub facilitates the link among core actors, selection of arenas for problem-solving and implementation of adaptation strategies. The adaptive approach of the SH is accomplished through several levels of interaction what FarFish builds on a proven track record of participatory approaches combining two strategies:

1. To bring stakeholder knowledge and resources into research design and implementation
2. To shape management actions though structured interactions

Leading the Result-Based Management (RBM) principles, a well-documented procedure for engaging all relevant participants in a bottom-up MRS formulation, three are the most important actors i.e. authorities, operators and auditors.

To ensure stakeholder buy-in and to avoid micro-management it is necessary to integrate in each CS the commitment and user responsibility all over the interaction process (Table 1). Depending on development and evolution degree on each CS, we will take into account different levels of involvement as follows:

- Consultation and design: The stakeholder involvement is increased from consultation to design of proposed strategies to mitigate threats and utilize opportunities.
- Validation: stakeholders are called to determine if the information provided has value. The results of the validation could be used to evaluate the reliability, adequacy and consistency of the information previously provided.
- Implementation: FarFish will be using the co-creation approach to ensure relevance and acceptance of the functionality, when it will be appropriate and where the strategies may be implemented.



The FarFish DSS will be developed and tested through the project period in close cooperation with stakeholders. This diversified approach, along with guidelines on how best to involve stakeholders in processes related to fisheries management under a sustainable and bottom-up approach, will serve as an important part of the co-creation process in the project. This is essential to ensure good decisions and avoid *stakeholder fatigue*. Several interactions will be carried out within the iterative processes and we have to optimize the times we contact stakeholders to avoid their fatigue. It is important for future initiatives to utilize a similar approach.

Table 1. Degree of co-creation in FarFish scientific WPs

WPs	Approach	Degree of stakeholder engagement
WP2 WP7	Information & Consultation	Different stakeholders groups participate in one/two way/s communication/s of FarFish outcomes
WP5 WP6	Validation & Collaboration	Stakeholders' perform as reviewers and/or advisors of the models and their inputs
WP3 WP4	Co-creation	A transdisciplinary stakeholder interaction to generate knowledge and legitimacy. It is accompanied by scientific acceptability, policy relevance and social robustness

1.2 Background

In recent years, the Common Fisheries Policy (CFP) reforms have to some extent addressed problems and criticism related to the external policy of EU fisheries in non-European waters. In 2002, the external fisheries policy was revised under the second CFP reform, implementing the so-called Fisheries Partnership Agreements (FPAs) granting EU vessels fishing opportunities within the waters of third countries, based on principles of sustainability and support for third state development [1]. This step eliminated joint ventures between EU companies and third state companies. The most recent CFP reform in 2014 replaced FPAs with Sustainable Fisheries Partnership Agreements (SFPAs). SFPAs were meant to emphasize democratic principles and human rights and stress sustainability, as EU fishing vessels will only catch surplus catch, as described in UNCLOS, Article 62.

The new CFP requires EU vessels to only catch surplus catch in the SFPAs countries; that is, where maximum sustainable yield (MSY) is not fully exploited. In order to achieve this, suitable amount of scientific information is needed on the target species, the fisheries themselves and the ecosystem. Such data are rarely accessible for different reasons; it will serve as a major obstacle to achieving this goal of the CFP.

Other notable limitations towards fulfilling this component of the CFP include insufficient enforcement, compliance and monitoring of effort of both foreign and domestic fleets. Without the relevant biological data, stock assessment methods to set quotas and without sufficient enforcement and compliance, the new reforms relating to SFPAs, will not result in any improvements of the current state of EU fisheries in third country waters.



In order to create sustainable MRs, it is necessary to understand the fishery as a whole, not just individual EU vessels operating in these waters. There is therefore a strong need for increased flow of information and cooperation between the EU, the contracting country and other operators from non-EU countries; if it is done effectively, it will benefit all parties and ensure long-term fisheries profits.

FarFish contains interactive tailored actions at EU and CS levels including meetings, panel discussions, hands-on prototype testing, training, knowledge transfer, among others [2], thus lowering the threshold for stakeholder participation through the lifetime of the project and beyond. Co-creation approach will prepare the ground for co-management when developing and implementing the MRs in the FarFish CSs.

The stakeholder engagement is crucial for the FarFish project. The SH facilitates the necessary interactions when it comes to the specific WPs and their tasks. Stakeholders' involvement in FarFish is responsive to the needs of each WP. The Hub gathers insights of stakeholder requirements, perceptions and intentions through transparency-enabling infrastructures.

FarFish is organised into eight WPs. Beyond the WP1 that is specifically allocated to stakeholder interaction in designing solutions, there is stakeholder involvement required in all WPs. WP2 is devoted to analysing the current situation of the fisheries resources and stock assessment in the case studies; WP6 is providing recommendations relating to data-sampling and stock assessment methods, using visualisation and decision support tools for implementing MRs; WP7 addresses capacity building and dissemination. WP8 is to facilitate sufficient project management within FarFish. WPs 3-5 are to implement the RFMS in the CS (Figure 1).

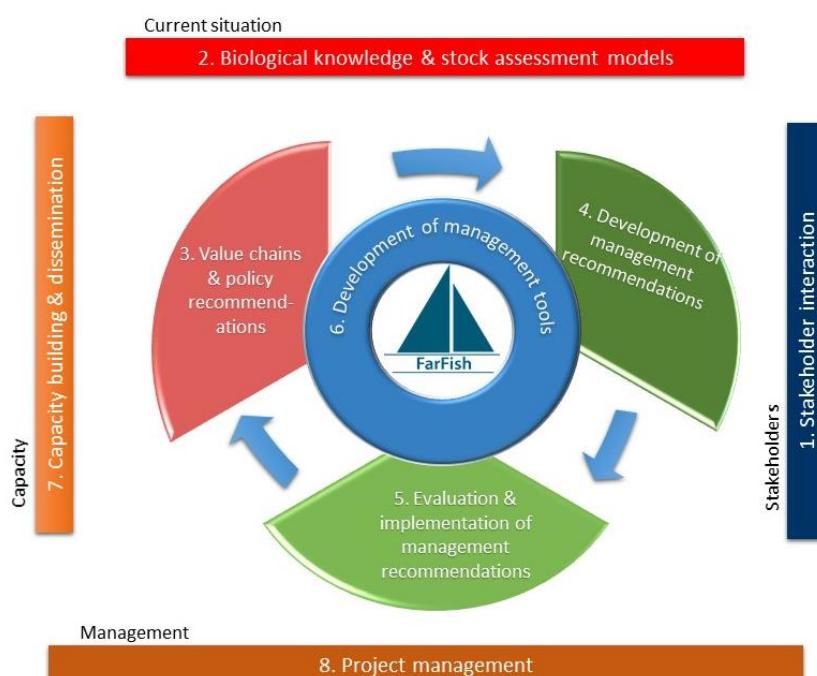


Figure 1. FarFish WPs structure



The Responsive Fisheries Management System (RFMS) approach [3, 4, 5] is at the core of the project, providing the guidelines for making MRs for EU fleets fisheries taking place in international and SFPA waters. The guidelines will be developed and tested/valuated in all of the FarFish CSs. RFMS involves three agents: i) the authority, which is a democratically accountable entity entrusted with the final resource management responsibility. It oversees the RFMS processes and issues MR invitations, which include the specification of measurable objectives (Outcome Targets- OTs) (WP3). It can approve or reject operators' MR proposals; ii) the operator, which is an organised group of resource users (e.g. an association of fishermen with rights in a given fishery). It develops, proposes and implements MRs, which includes strategies for achieving OTs and for documenting the effectiveness of chosen means (WP4); iii) the auditor, which is an independent agent with capacity to audit MR performance. It reviews documentation, evaluates the extent to which OTs have been achieved, and submits the audit to the authority and operator(s) (WP5).

As a particular type of co-management, RFMS is distinctive in that it entrusts resource users with new management responsibilities. To enable the authority to develop trust and operators to develop the required organizational capacity, the scope and legal position of these responsibilities may be extended over time. The system should be flexible as possible, adaptive and have the potential to catalyse improvements in fisheries management. Implementing the RFMS in data-poor fisheries, where monitoring, control and surveillance (MCS) is limited has advantages, especially if we are able to involve stakeholders in the decision-making-process (management decision) giving them a sense of ownership and responsibility from the first stages. It is therefore crucial for the optimal development of FarFish to keep a flexible and multidirectional dialogue between the two main agents in the RFMS process i.e. authorities and operators.

The RFMS development process within FarFish is structured according to the spiral development model [6]. The spiral model is a development process combining elements of both design and prototyping-in-stages, in an effort to combine advantages of both top-down and bottom-up approaches, making it ideal to implement and maintain RFMS (Figure 2).



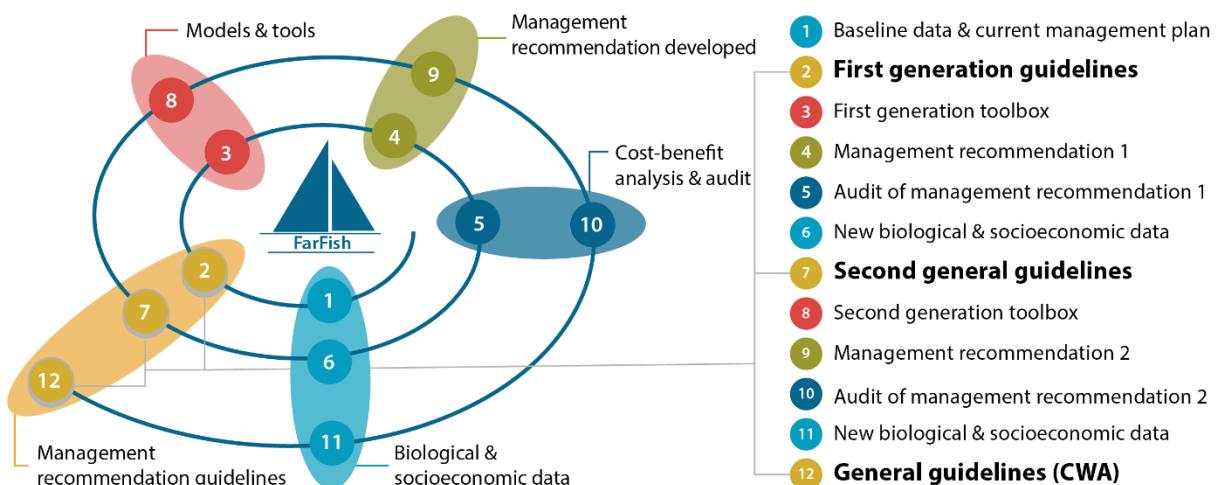


Figure 2. Spiral development model used for implementing RFMS in FarFish

The work in the selected case studies will follow an iterative process, which allows for organised revision of all aspects of the project outputs and implementation of novel ideas. It allows for introduction of new data at different stages in the process, as well as it enables quicker response to external and internal opportunities. Experience shows that many crucial and unanticipated inputs which can severely affect a product are not identified or taken into consideration until after the product has been finalized. The second and third iteration loops will therefore reduce the risk of such critical inputs being ignored during the lifetime of the project. The FarFish spiral development approach will make the overall process adaptable and more likely to successfully deliver relevant outputs that can be successfully applied after the project end.

2 Integrating best practices: stakeholder engagement in SFPAs

2.1 Public awareness and fisheries policy within SFPAs

The European Union is one of the world's leading maritime and fisheries players. It has recently reaffirmed its commitment to leading international ocean governance. We need to remember that more than 70% of our planet is covered by water. Healthy oceans are indispensable for managing our climate, protecting our marine ecosystems, boosting Blue economies, and ensuring our well-being. Common goods like oceans require common actions: no country alone can achieve this. A core component of international ocean governance is the governance of international fisheries, which is one of the reasons why the EU is strengthening its external fisheries policy through full engagement and support to regional fisheries management organisations (RFMOs), the SPPA network, and several actions to tackle illegal, unreported and unregulated fishing (IUU) [7].

The principal aim of fisheries management under the new CFP is to ensure high long-term fishing yields for all stocks by 2015 where possible, and at the latest by 2020 (referred to MSY) [8].



Figure 3. SFPAs as an instrument for ocean governance

The EU has set its own agenda to take the lead of a stronger system of ocean governance around the globe; it seeks to take forward the EU's strong role as the main global actor for sustainable development, ocean governance framework & ocean resource user.
These are ambitious and promising commitments for fisheries governance and for sustainable development, two closely interconnected goals.

Another increasingly important aim is to reduce unwanted catches and wasteful practices to the minimum or avoid them all together, through the gradual introduction of a landing obligation [8]. In terms of the obligations binding the EU specifically in the external dimension of its fisheries policy, Article 28 states that it must actively support and contribute to the development of scientific knowledge and advice, and also promote and support action necessary to eradicate IUU fishing. Lastly, the new CFP has overhauled its rules and management structure, with regionalisation and more extensive stakeholder consultation.



In particular, one of the most important novelties of the EU's reformed CFP, which came into effect on 1st January 2014, are the new SFPAs. These ones state that all EU fishing activities, inside and outside EU waters, are subject to the same environmental and other standards [8]. Thus, the EU must conduct its external fleet in accordance with the objectives and principles set out in *Articles 2 and 3* of the CFP. According to *Article 2*, those objectives include the application and promotion of the precautionary approach so as to ensure that the stocks targeted are higher levels that deliver MSY by 2020 at the latest, the application of the ecosystem principle, the promotion of the collection of scientific data and the gradual elimination of discards.

Additionally, *Article 3* provides principles of good governance, in particular by requiring that conservation and management measures (CMMs) are established in accordance with the best available scientific advice, as well as encouraging transparency and availability of data. Furthermore, the reformed CFP has made consistency with other Union policies one of its principles of good governance. *Article 31* sets out principles and objectives framing such agreements; only surpluses should be targeted and it must be identified in a clear and transparent manner, on the basis of the best available scientific advice and information on the total fishing effort on the affected stocks. For straddling or highly migratory fish stocks, in determining the resources available for access due account should be taken of scientific assessments conducted at the regional level as well as CMMs adopted by relevant RFMOs.

Moreover, the EU has to include a clause in the SFPAs on respect for democratic principles and human rights. To the extent possible, it must also incorporate a non-discrimination clause that requires that measures applied to EU fleets also apply to all other foreign fleets fishing in the coastal States' waters, and an exclusivity clause, which states that, in waters of countries with whom the EU has signed an SFPAs, no EU vessel can operate outside the framework of the agreement, even when the agreement is dormant.

An important requirement was included in *Article 31* in that SFPAs must be of mutual benefit to both the EU and the third country concerned, including its local population and fishing industry [9]. The European Commission's proposal on the 'Sustainable management of external fishing fleets' (SMEFF) was approved as a regulation in December 2017 [10]. The regulation stipulates eligibility criteria related to transparency and sustainability that any EU vessel wanting to operate in external waters, under a SFPAs, a private arrangement with a coastal State or on the high seas, will have to fulfil to obtain a fishing authorisation from the Member State in which it is registered. It will no longer be possible for vessels to re-flag in and out of the EU register. The European Commission will play a supervisory role in verifying the validity of authorisations issued by Member States and will be able to withdraw the said authorisations in some circumstances.

Finally, in undertakings with developing countries, EU's policies must foster the sustainable economic, social and environmental development of developing countries, with the primary aim of eradicating poverty and take account of the objectives of development cooperation [11].



2.2 Main challenges in SFPAs

2.2.1 Sustainability

The aim for the SFPAs is to foster sustainable fisheries and responsible fishing in the waters of the coastal State. SFPAs also stipulate that management measures, including the review of fishing opportunities, must be adopted on the basis of the best available scientific advice and of the CMMs of the relevant RFMOs. However, none of the relevant instruments mentions the goal of reaching MSY by a certain date. It is also absent in all SFPAs, except for some examples such as Cape Verde, where there are clear references to the precautionary principle. One of the issues related to this lack of scientific information is about the surplus. The concept of surplus, which is the basis of these agreements, is very difficult to apply because of absence of reliable data on fish stocks and complete information on the whole fishing effort within the fishing grounds [12].

The ecosystem approach is not explicitly mentioned in any SFPA. Several SFPAs do however refer to the sustainable exploitation of marine ecosystems and the application of an ecosystem approach seems to be part of the Joint Scientific Committee (JSC). In terms of operational ecosystemic measures, just a few SFPAs provide for specific zones closed to fishing, biological rest, and technical measures applicable to different types of fishing vessels [13].

Related to discard rules, the SFPAs do not provide explicit and detailed information about a gradual decrease of discards as an obligation or even a scope to move forward. By-catches are mentioned in a number of SFPAs, but only the Cape Verde CS states that the parties must endeavour to reduce the level of by-catches. Sometimes, the agreement provides for financial incentive on landing catches, while other ones encourage by-catches to be made available locally, like for example in the Seychelles SFPA.

2.2.2 Fisheries governance

Regarding monitoring, control and surveillance (MCS), all SFPAs provide resources along the duration of the SFPAs for MCS. Nevertheless, it seems to be practical issues at many levels with catch data reporting; without information it will be difficult to determine the sustainability of catches and to keep compliance for technical measures. Provision of logbooks or daily reports on catches is indeed an obligation which is not so well complied under several SFPAs.

Another central issue in all SFPAs is the prevention and tackling of IUU fishing. All these agreements can be terminated by either party in the event of failure to comply with undertakings with regard to combating IUU fishing. The Mauritania SFPA states that only vessels that are not listed on an IUU vessel list may get the necessary fishing authorisation. In Senegal SFPA the skippers of EU vessels have to send observation reports when they sight boats that may be engaged in IUU activities.



In terms of the treatment of the EU fleet compared to other foreign fleets, several SFPAs provide for the principle of non-discrimination between the different fleets; it means that a coastal State cannot give more favourable conditions to other foreign vessels, which have the same characteristics and target the same species. Moreover, in few SFPAs, the parties agree that all technical conservation measures applied to the EU fleet must also be applied to all foreign industrial fleets operating in the coastal State's waters under similar technical conditions. Pending ex-post evaluations, however, no information making it possible to verify respect with this obligation is publicly available.

In the interest of transparency, accountability, and accessibility of information under SFPAs, the coastal State undertakes to make any fishing access agreement public. We have some good examples about this, like the Mauritanian Protocol to report yearly on the number of fishing authorisations for each fishing category granted to vessels flying the flag of other third countries, the volumes of catches authorised and the conditions for providing such vessels with access to the Mauritanian waters [13]. The whole SFPAs provide for some kind of evaluation and a number of them explicitly refer to a retrospective evaluation at the end of the protocol's lifetime. That is the case of the Seychelles where the parties agreed to a mid-term review to be held three years following the date of the start of the provisional application of the agreement (*Article 15*) [15].

A post evaluation report is meant as a review of all aspects of the SFPA's implementation. However, those assessments are focussing on economic impacts more than social and sustainable development [16]. Access to information (SFPAs assessment and sectorial reports), by the public in general and the coastal State's civil society in particular remains limited, non-existent, and most of the time confidential. The FiTI, where most of the third countries are active, is not working either as expected.

2.2.3 Social justice and equity

It is important to note that with few exceptions, there is no mentioning of sustainable development in the coastal States concerned as an objective within the SFPAs. Although SFPAs are only one side of the whole frameworks which EU supports sustainable fisheries development in the third countries, SFPA implementation does not seem to prove very beneficial to local communities [17]. Beyond the EU obligations to ensure sufficient resources and to promote sustainable local and national development within the countries signing the agreement, that issue does not appear to be fully taken into account, with local stakeholders neither sufficiently nor efficiently involved in negotiating and decision-making processes. The situation could be worse still, when the coastal State's fishing tradition is either in competition with non-national fleet. It is especially relevant when the resources targeted under the access agreement are key to food security (like happens in Mauritania and Senegal) and hence should be reserved to local small-scale fishers [18].

Although most SFPAs contain several objectives on the promotion of cooperation among economic operators, the level of implementation of those ones differs widely; it is highly dependent from available infrastructures degree in the third country. Also, the whole SFPAs include provisions



regarding sectoral support, the parties have to agree on a multiannual sectoral programme and detailed implementing rules covering annual and multiannual programmes. Nevertheless, in most frameworks, the relevant objectives, the criteria and procedures for evaluating the results obtained each year are extremely vague and need to be complemented by the JSC [19].



3 How FarFish Hub works: communication flow

Interaction with stakeholders should be understood through communication flows within the FarFish Stakeholder Hub. Working with stakeholders at regional, national and European level, knowing their different backgrounds (fisheries industry, policy makers, scientists and NGOs) also involving different levels of participation requires the design of an effective communication strategy as a key tool for successful stakeholders involvement.

Along stakeholder communication process it is usual to find common barriers (e.g. cultural, language, habitats differences) which could block the dialogue creating misunderstanding. Also, fisheries management is a difficult issue, especially when third countries are involved. Here, the main challenge is to deal with different audiences and to be able to establish priorities within groups. The groups are heterogeneous; they act according to values, beliefs and particular views, and do not always seek the collective interests. Therefore, the conflict of interests is a reality that should not be ignored in FarFish.

Although conflicts must be resolved on the basis of greater representativeness, it should be clear that reaching agreements and consensus sometimes involves segmenting the groups. It means to build a solid base of agreements, initially between different short of groups of stakeholders, which will subsequently be transferred to the rest of the users in the following steps. Furthermore, buy-in from stakeholders requires trust and effort and this is built after a long process. In this regard, iterative process helps to reveal deeper layers of information and opinion from stakeholders enhancing trust and facilitating buy-in. Therefore, as multiple stakeholders have multiple needs, in FarFish we have designed multiple communication tools and customized actions to generate a continuous communication flow for matching the gaps and specificities of each CS and each stakeholder group. Stakeholder participation needs to be underpinned by a philosophy that emphasises empowerment, equity, trust and social learning [20].

To understand the process followed for designing and implementing the Hub and its multiple communication tools and actions, it is important to visualize the different stages of the Hub process. CETMAR (Centro Tecnológico del Mar - Fundación CETMAR) have divided the process into four steps that correlate with the main events involving stakeholders and include the activities developed and to be developed. CETMAR has been working in *Stage 1*, so far in the project (Figure 4).

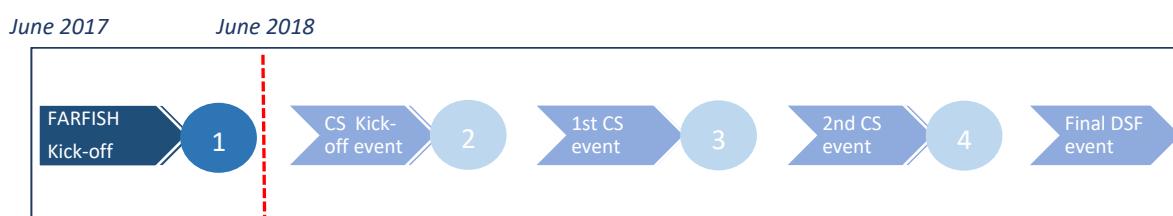


Figure 4. Stakeholder Hub progress and stages



1 Before the FarFish Kick-off event

Stakeholders Template (ST) (see, Annex 1) has been submitted to CS leaders. The ST is a document used to try to build a list with key stakeholders for each CS. It is based on representativeness, relevance and availability criteria. It used the experience of the CS Leader as a *liaison person*, a proper actor who knows the reality of fisheries in the study area. Most of the required information is personal data, contact details, type of institution or organization. It also requires an important component of subjective data (perceptions) focusing on relevant social and management issues.

Once updated the Hub database for planning the CS Kick-off event, CERMAR is upgrading communication tools inventory and dynamic for stakeholder requests during the event.

What we plan to do in the following steps:

2 After the FarFish CS Kick-off event & Before 1st CS event:

Get back to update the Hub database, and prepare the CS events Roadmap which will be submitted to CS leaders for feedback. Also, design a specific communication plan for stakeholders including new tools for stakeholders' participation in the Hub (SWOT analysis per CS to identify core challenges and opportunities for the future MRs).

3 During & after 1st CS event:

Implementation of CS events Roadmap & communication tools, stakeholders' feedback template.

4 Before, during & after 2nd CS event:

Implementation of tools for gathering stakeholders' feedback, update of the stakeholders Hub database, design of the second roadmap for CS events, improvement of the tools & communication flows when it will be necessary.

3.1 Communication protocol

For the definition of information flows and tools that ensure representativeness and structured dialogue, we have distinguished two types of flows according to their scope: content of the project and Hub functioning.

Considering the actions taken to underpin the communication flows to date we have structured them as follows:

- A proposal of communication protocol amongst WPs leaders and CS leaders was presented during the Faro WP/CS leader meeting and approved by participants. According to this protocol, anytime WP leaders would like to contact stakeholders, they will have to do it through CS leaders with copy to CETMAR (WP1 leader) and FarFish email address –in order to



ensure a continuous, follow up. Finally, CS leaders will be the ones who will contact stakeholders (Figure 5).

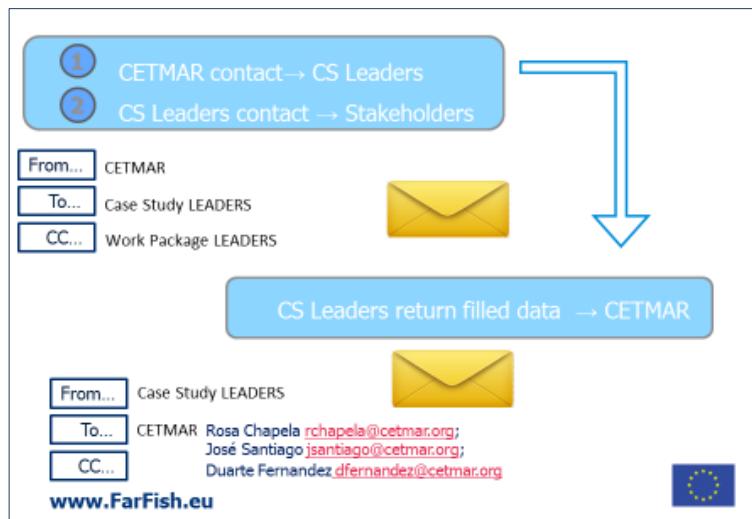


Figure 5. Communication protocol for FarFish

FarFish needs a regular and fluent communication between all WPs in order to build a solid base for improving stakeholder interaction from the initial stages. Thus, it is important to enhance the role of interactions with stakeholders between meetings (e.g. CS leaders for model development) as these are not listed within the communication tools but have a high influence in the process and are absolutely necessary for the project development. We have developed a communication strategy for these half-way interactions between stakeholders and WP leaders to minimize the number of times stakeholders are requested to collaborate (Figure 6).

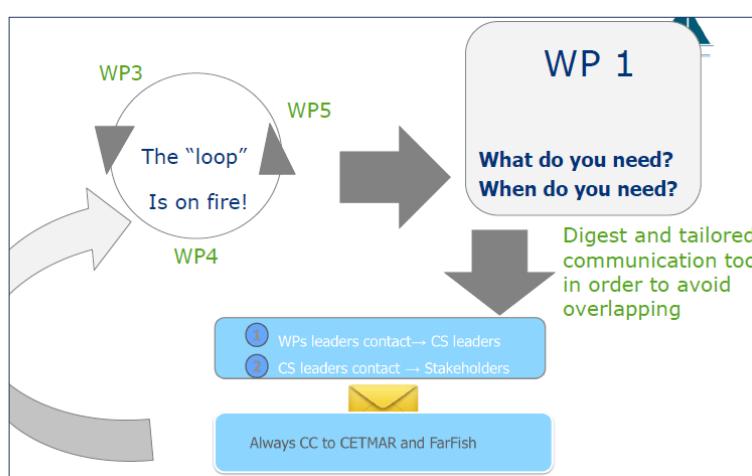


Figure 6. WP3, WP4 & WP5 interaction strategy before CS meetings



3.2 Key partners and individuals

FarFish is involving stakeholders from the first stages by including in the Consortium a set of international and national organizations relevant in terms of fisheries management by each CS.

All partners must take on a significant role and responsibility in the project related to knowledge production, analysis and innovation activities. In addition, they also do facilitate a link to the numerous other stakeholders that we would like to inform, engage and get feedback from.

So far, the SH is including a wide range of stakeholder groups – administrations and policy makers, fishing and commercial operators, fishermen, RFMOs, regulators, scientists, environmental NGOs etc. As an open and live platform, the Hub will be constantly trying to engage stakeholders along the project and, by extension, is in a permanent update. Based on an expert knowledge methodology, the tool to collect the qualitative data for the selection of players is the Stakeholders' template (see, Annex 1).

CETMAR has listed the stakeholders involved in the project to date. From the list, the selection of players for each event is carefully made by optimizing time and budget and avoiding stakeholders' fatigue. The interaction with CS leaders is carried out in order to tailor the list of stakeholders who take part on each event.

The stakeholder list has been made according to the relevant users in each case study (Table 2 and Table 3):



Table 2. Relevant stakeholders for the whole CS regulated by SFPAs

Case Study	Species	Region	Stakeholder	Organisation type
SEYCHELLES	Yellowfin tuna; Bigeye tuna; Skipjack tuna;	Seychelles EEZ	SEYCHELLES FISHING AUTHORITY	Administration
			DGMARE	Policy maker
			OPAGAC	Producer association
			ANABA/OPTUC	Producer association
			THAI UNION	Processing company
			ORTHONGEL	Fishing company
			CFTO	Fishing company
			SAPMER	Fishing company
			ECHEBASTAR	Fishing company
			FBOA	Producer association
			IOTC	RFMO
			FAO	Global organization
			WWF UK	NGO
MAURITANIA	Black hake; Prawn, southern pink shrimp; demersal species; tuna	Mauritania EEZ	DGMARE	Policy maker
			DARE	Administration
			OPROMAR	Producer association
			LDAC	Advisory committee
			INROP	Research institution
			FAO	Global institution
			ANFACO-CECOPESCA	Producer Association
			PECHECOPS	NGO
			MAURITANIA 2000	NGO
CAPE VERDE	Yellowfin tuna; Bigeye tuna; Skipjack tuna	Cape Verde EEZ	DNEM	Administration
			AMP	Administration
			ICCAT	RFMO
			APESC	Producer association
			INDP	Research institution
			UNI-CV	Research institution
			FAO	Global institution
			IGFA	Recreational Fishing Association
			OFC FUNDATION	NGO
SENEGAL	Tropical African hake; Senegalese hake	Senegalese EEZ	DPM	Administration
			DPSP	Administration
			DITP	Administration
			GAIPES	Producer association
			CRODT	Research institution
			APRAPAM	NGO



Table 3. Relevant stakeholders for those CS without SFPAs

Case Study	Species	Region	Stakeholder	Organisation type
SOUTH WEST ATLANTIC	Argentine Hake; Australian hake Argentine shortfin squid; Southern blue whiting	FAO 41 (Mainly subarea 41.3.1 & 41.3.2)	DGMARE	Policy maker
			CGPOP	Administration
			OPROMAR	Producer association
			ARVI	Producer association
			LDAC	Advisory committee
			USP	Research institution
			CAFS	Research institution
			INIDEP	Research institution
			ICCAT	Research institution
			OCEANA	NGO
			FAO	Global organization
SOUTH EAST ATLANTIC	Alfonsino; Boarfish/pelagic armourhead; orange roughy; skates, sharks, deep-sea crab; Patagonian toothfish; Wreckfish; Grenadiers nei; Blue antimora; King crab	FAO 47	DGMARE	Policy maker
			MFMR	Administration
			BCC	Administration
			LDAC	Advisory committee
			SEAFO	Advisory committee
			IMR	Research institution
			OPAGAC	Producer association
			ANFACO-CECOPESCA	Producer association
			ADAPI	Producer association
			FAO	Global institution
			OCEANA	NGO
			EJF	NGO

3.3 Implementing the Hub on the first CS launching

The CS launching, '**Strengthening fisheries sustainability outside EU**' that is to be held by the end of June (Vigo-Spain), is not only the first opportunity for different stakeholders to feel comfortable within the project, but the opportunity for them to be truly involved.

Following the RFMS approach, CETMAR is trying to get a wide representative number of authorities and operators for each CS. At the present time, the priority is to convene both at the same table to start a process of dialogue and legitimization of future proposals. In this regard, representatives of the national governments of those countries that currently have fisheries agreements with the EU are being invited, as in the case of Mauritania, Seychelles, Cape Verde and Senegal. On the other hand, the whole relevant fishing industry, basically concentrated on EU operators (most of them Spanish ones), will be an essential part of this fishing puzzle.

Moreover, a fundamentally practical and interactive workshop is established where two essential issues are prioritized:



1. First, the different WPs will show to the audience how their activities can be useful for the stakeholders. The concept of utility is key for determining the involvement of these users in the following phases of FarFish.
2. To establish a deep and detailed debate on management issues, in three main points: i) analysing MPO and Guidelines reports (D4.1 & D3.1); ii) setting out the outcome targets (OT); iii) discussing proposals for the implementation of MR.

The design of the workshop is established from an integrative and inclusive perspective that combines working groups by each CS with open debates to the whole audience. This flexibility is important, especially in the first stages, because it allows a change of role from the most particular to the most global and the other way around. In this manner, the stakeholder will be placed in different scenarios, participating and paying attention to the CS where she/he feels more comfortable; at the same time stakeholders are able to make contributions to the rest of the CS audience as 'external' evaluators.

Here, an important issue has to do with the way in which the construction of information is approached. A workshop offers an interactive scenarios where people share knowledge and experiences to find 'responses' together. So, the emphasis should be on the "work". In addition, a successful workshop has a final product built by the whole stakeholders along the time they all share collectively. It is therefore essential to achieve the conditions for a fluid exchange, through the integration of different levels of knowledge (Experience Based Knowledge-EBK) [21].

To get a better understanding of the different roles that could be appropriate to establish within the working group, it is important to recognize the similarities and differences between facilitation roles. The following table (Table 4) indicates the main differences between facilitator, consultant, coach and leader roles.

Table 4. Main roles regarding the task of facilitation

FACILITATOR	CONSULTANT	COACH	LEADER
Process expert	Process expert	Process expert	Good competences on process
Neutral in content	Content expert	Involve in issues	Involve in content
No take decisions	Could be involve on decision-making	Involve on decision-making	Always involve on decision-making
No mediator; maintain the balance between process & content	Technical and expert mediator	Has authority upon the discussion	Has authority and leadership upon the discussion



In a working group a variety of those roles could be tested. All of them are relevant, but within interactive approaches the role of facilitator does acquire certain significance. The facilitator uses their knowledge on ‘design thinking methodology’ to tackle the different issues in a strategic way, promoting productive and effective interactions among the stakeholders, including how decisions are made and the *fair use of the word* by the whole members.

The facilitator is to focus on effective process allowing the participants to emphasize on the issues under analysis and the real substance of their goal. Moreover, the facilitator’s concern is to maintain the balance between process and content, carefully choosing the tools, dynamics and techniques.

By *neutral in content*, it is understood that it facilitates a discussion without sharing its opinions, in a way that stakeholders do not know what the facilitator thinks about the questions being analysed. Consequently, it does not influence on group decisions. Staying neutral requires listening to the different points of view and to apprehend from the divergence of opinions [22].

Therefore, the roll of the facilitator is to closely articulate other complementary roles, such as those related to preparation, organization and administration of the workshop.

The design of the workshop is established in a sequence way, where it is initially tackled from the MPOs to the final MR considerations. Thus, the methodology’s process should be to describe the work to be done and the ‘order’ in which it is to be done [23].

The ‘waterfall’ methodology (Figure 7) consists of a set of activities where the outputs of each step are the inputs to the next. Its goal is to get everything right before progressing to next step to minimize rework, which assumes complete and clear requirements that can be validated at each step. Although it has been known for certain areas of engineering design, waterfall methodology could be useful if we focus the OT requirements on three of their main steps. In this case, the **Design** would address the joint discussion and construction of OTs. The following stages of **Implementation** and **Verification** would be very near, especially if we understand that OTs are *specific and measurable* (set by the authority and presented to the operators) in order to reflect overall policy objectives in terms of biological, environmental and socioeconomics terms. In this sense, along the Implementation stage it should have to establish the possibilities so that OTs could be developed in an effective way. This is closely related to the Verification stage, where in an initial phase it should allow us to point out the indicators to measure how the implementation would be carried on.

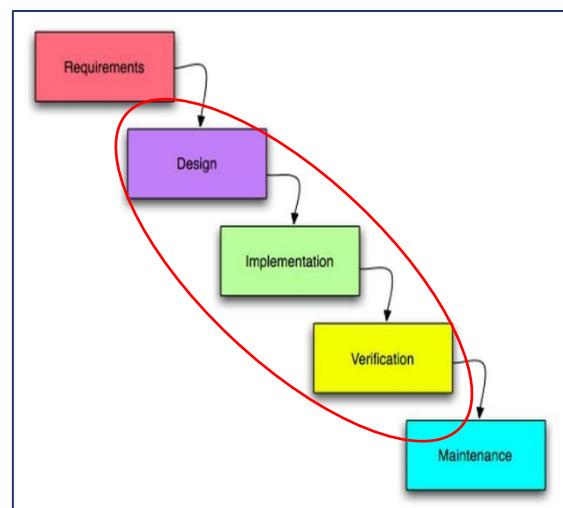


Figure 7. Theoretical framework of the waterfall methodology proposal for WP/CS Leaders Workshop Meeting



Beyond the next event, it will be necessary to further combine innovative and customized methods for each context of stakeholder interaction in order to provide the decision-makers with the best available information. Each CS has their own social and cultural patterns, therefore there are not a 'one-size-fits-all' model within the participatory process. The Hub must therefore be tailored to the specificities of each CS. At the present time, we have not developed yet a prior steps strategy for each case. Nevertheless, we have already foreseen as well a strategy for WP dependencies. Internal interactions within WPs are continuously taking place, therefore we must ensure that particularly WP3, WP4 and WP5 (Figure 6) are aware of the stakeholders' needs.



4 Conclusions and discussions

The FarFish Stakeholder Hub requires an adaptive and flexible approach to cover the different gaps and needs that broad up from the whole stakeholders interaction in the project. Each case study contains multiple stakeholders that have different roles within the FarFish project; to build an effective communication strategy is essential for good development of the project.

To design and implement a collection of tools for feeding stakeholders specific needs according to the CSs definition, we should be clear on the main issues that WPs would like to focus on. In this sense, *what do you want?* and *when do you need?* are the basic questions that should be addressed though detailed actions in a short-term. That implies that there is a need to make specific contributions in advance. By taking this approach, we will improve coordination and reduce the risk of natural barriers becoming a major issue, as earlier described.

From this very initial stage of the Hub design and implementation we are listing the key takeaways and developing a roadmap to keep accomplishing the stakeholders' gaps & needs throughout the project lifetime. These include:

- To grant a structured dialogue among stakeholders (policy-makers, authorities, fishing operators, scientists, RFMOs, NGOs, other interest groups and the society).
- To boost continuous communication between stakeholders, CS leaders and WPs leaders.
- Our 'leitmotiv' has to do with transparency and accountability.
- To understand the differences on multi-level stakeholders improving the ability of adaptation; an iterative approach is crucial to co-create adaptation solutions with stakeholders.
- Alternative communication tools to those who cannot attend CS events need to be performed and tailored in order to cover all range of stakeholders' interests.
- To facilitate the decision making is a must throughout the project lifetime.
- To analyse the context and provide the necessary tools that facilitate stakeholders' participation and feedback.
- Defining and assuming the specific and optimal role, responsibilities and tasks is fundamental.
- Timing is a critical issue as stakeholder interaction is built on other WPs work (WP3-WP4-WP5).
- Contingency planning is necessary to face the different needs and barriers identified.



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Annex 1. Stakeholder Template to be filled by CS Leaders



WP1. STAKEHOLDER INTERACTION

Table 1. All case studies (CS). Please include the main and relevant stakeholders on the CS

Case Study	Name of the CS Liaison ¹	Institution (name and type)		
Social impacts	Is there any special issue into the fishery management? Yes/No. If yes, please detail the main conflict/s and main actors (key words)			
List of stakeholders relevant for your CS				
Organization name	Contact person	Contact details (phone, e-mail)	Relevant standardized data could be provided about the fishery	Comments (already involved in Management Plans, skills, leadership, etc.)

¹ The person who will be your major link in the implementation of the CS, the one that you would call on the phone and may support you in activating the other stakeholders



WP1. STAKEHOLDER INTERACTION

List of stakeholders relevant for your CS				
Organization name	Contact person	Contact details (phone, e-mail)	Relevant standardized data could be provided about the fishery	Comments (already involved in Management Plans, skills, leadership, etc.)

From the above list, circle two or three organizations that could have higher involvement in FarFish

Do you consider the above list is complete or do you think it could be completed with some other organizations you may know?

Do you need support in the identification of other relevant stakeholders? YES NO

Additional comments (expectation/interest/criticism related to FarFish)