

# MARE/2012/12-Lot 1: Information and communication activities

Contracting Authority:  
European Commission, Directorate-General for  
Maritime Affairs and Fisheries



Request for Services No. 17

Communication Campaign on  
Aquaculture in the European Union:  
Analysis of International  
Campaigns on Aquaculture

July 2014



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## 1. Summary

A review of the existing messages to promote aquaculture shows that there is still a lack of general awareness, and many campaigns strive to improve it. Thus, communication efforts still present aquaculture as a unified sector, which causes messages present in campaigns to be sometimes contradictory and generally not clear enough considering the diversity of production methods and products. This may not help consumers nor producers, as generic messages can inform the sector but may not be unique enough to promote concrete products against the competition. More established farming sectors have clearly segmented commercial and promotional strategies.

The analysis also shows that there are two areas in aquaculture promotion: as an effort *per se* or to increase its visibility in overarching campaigns about seafood and fishing sustainability, and healthy diets and responsible consumption.

There are three main strategic lines for aquaculture promotion that the EC should consider independently, which can be combined flexibly: to raise awareness and normalise the sector, to encourage consumer support, and to boost growth.

We recommend an extensive list of messages, adapted for the EC from those present in current initiatives. While communicating the overarching message 'European aquaculture is fresh, local and healthy', therefore highlighting the generic yet reassuring geographic indication, we also recommend communication efforts are adapted depending on the type of aquaculture to be promoted, in order to highlight the most valuable and objective benefits of each method as regards sustainability. When communicated as a whole, the range of legitimate and clear messages is compromised, as is the uniqueness of promotional messages. This can cause highly sustainable practices to be overshadowed by legitimate doubts projected from less sustainable practices, and can ultimately help cheaper imports to be the ones to profit the most from the reassuring messages focusing on the safety and security of seafood sold in the EU.

## 2. Introduction

There is wide consensus on the importance of aquaculture as both a traditional food production sector, and as a necessary strategy to meet the world's growing demand for seafood while sustainably managing aquatic resources. On the other hand, even in leading producing areas, there is a distinct lack of general awareness around the sector.

This lack of awareness combines with underlying public concerns about intensive food production, which relate with recent scandals that have reached the media<sup>1</sup>. The fact that aquaculture is often perceived as a recent development with important technologic inputs has associated the above concerns with the large scale production of cheaper and uniform formerly high-value fish or exotic species, so visible today in European supermarkets. Furthermore, there have been large scale campaigns about the consequences and unsustainability of some types of aquaculture, generating much consumer unrest and confusion<sup>2</sup>.

There are and have been numerous campaigns to promote aquaculture and aquaculture products, though the quantity and frequency of them are not representative of the importance and potential of the sector. Aquaculture is also an increasingly visible part of campaigns promoting the consumption of sustainable food and the benefits of eating more seafood.

In line with this 'novelty' factor and lack of popular knowledge, aquaculture is generally promoted as a single coherent sector. This is in line with the will to enhance development and growth by business stakeholders, but doesn't match well with market and consumer dynamics. On the consumer side, the trend is towards further requiring clearer information on the different expressions and scales within aquaculture, reflecting the normalisation and widespread presence of aquaculture in landscapes, counters and tables.

This study analyses the types and wording of messages used to promote aquaculture across Europe in recent years.

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1 e.g. horsemeat, dioxins in poultry and pork, mad cow disease, farming and agricultural runoffs, biodiversity loss in ecosystems and crops, land and marine displacement, GMOs, chemical pollution, etc., covering all aspects as regards feeding, medication, traceability, productivity enhancement, animal welfare and industrial farming in general.

2 e.g. environmental impact and human conditions in tropical prawn and *Pangassius* farming; nomenclature, origin and ecological consequences of introduced tilapia; the health and environmental impact of high density salmon farming; or the environmental consequences of tuna ranching.

### 3. Materials and Methods

We have mapped online resources in nine native languages (English being used for Ireland, the UK and those at European and international level). Although some of the results date back several years, we have only considered results from 2010 onwards.

We have also spoken with representatives from FEAP (Federation of European Aquaculture Producers, Belgium), CIPA (Comité Interprofessionnel des Produits de l'Aquaculture, France) and the department for food promotion at the Spanish Ministry of Agriculture, Food and the Environment.

Finally, we have considered previous mapping and insights from the study that led to the design for the EC of the campaign 'Inseparable: eat, buy and sell sustainable seafood'.

Campaigns on aquaculture fall mainly within three categories: public campaigns to promote national sectors and healthy habits, private promotion of products and schemes, and environmental NGO campaigns for or against aquaculture and/or certain seafood products.

Although they fall beyond the scope of this study, some mainstream and well-known trends will be taken into account, without further research; for example those overviewed in the second paragraph of this introduction or those related to basic seafood consumption patterns and their geographic variations. These will be explained where appropriate.

We have considered a final selection of 85 campaigns (including similar initiatives such as guidelines or exhibitions), mapped across the 10 target European Member States, as well as on a larger European and international levels, to complement and better put in context the results. We have analysed the type (campaign or similar), scale (from local to international), target (e.g. consumers), sponsor (public, private, etc.), position (whether for or against aquaculture, but including nuances and often no explicit positioning), objective (the overall objective of the initiatives) and messages (explicit wording of directions for the target).

Sponsors are pooled under four main categories, although the limits for each may sometimes be diffuse. 'Public' refers to governmental initiatives (from local to European scale), while 'private' includes all those carried out by firms or professional associations, for example. For clarity, we have termed 'NGOs' those large environmental organisations with international funding, and similar organisations on a smaller scale mobilised around specific issues and directly controlled by groups of citizens as 'not for profit'. Finally, 'Public/private' refers to those private initiatives with public financial and/or visibility support.

All campaigns are listed in Annex 1: Campaigns.

## 4. Results

Results are tabulated in Annex 2: Results.

Figure 1 shows how the 85 reviewed campaigns and related initiatives are distributed.

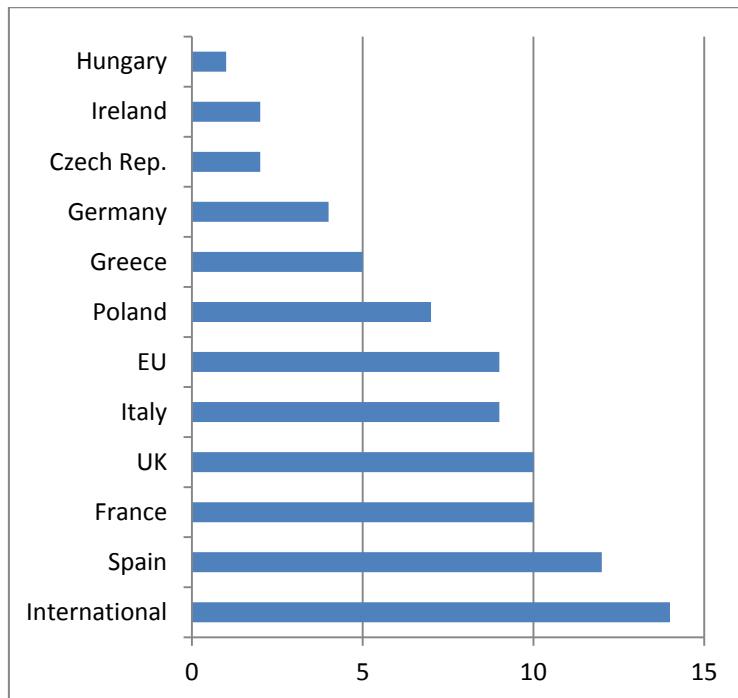


Figure 1. Distribution of reviewed campaigns across countries.

Most of the 85 examples (see Figure 2) are online campaigns (65, or 76%), which often are complemented by events, publications or other kinds of promotional activities. The following class by frequency have been classified as 'movements', because these are associations targeting ownership and change over a broad base of philosophical and behavioural aspects, and as such are ongoing campaigns with no set end date. Three of these four are national expressions of the same organisation (Slowfood in Italy, France and Germany) and the fourth is Sustainable Fish City in the UK.

All the rest are elements that usually form part of larger campaigns, but here are found as single products. These are contests (2), literature reviews (2), videos (2), opinion websites (2), and a set of interesting yet isolated alternatives, including a large exhibition, a radio programme, a virtual tour of European fish farms, an investment forum and a promotional special day.

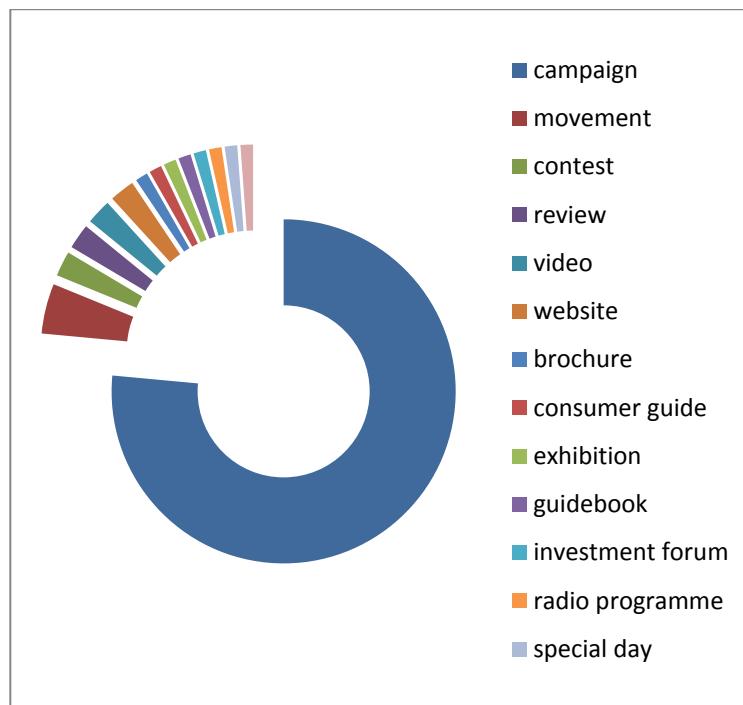


Figure 2. Types of aquaculture promotional initiatives.

Most of the campaigns targeted a national audience (see Figure 3). The following group by frequency are campaigns which represent the interests of a larger, international matrix, but adapting all messages to the cultural and linguistic context in which it is launched. This is the case of campaigns by WWF, for example. International campaigns are all in English and fine-tuned to profit from social media dissemination. Finally, there are three initiatives at European level (one by the EC and two by FEAP) and several local to regional promotional campaigns, focusing on local production.

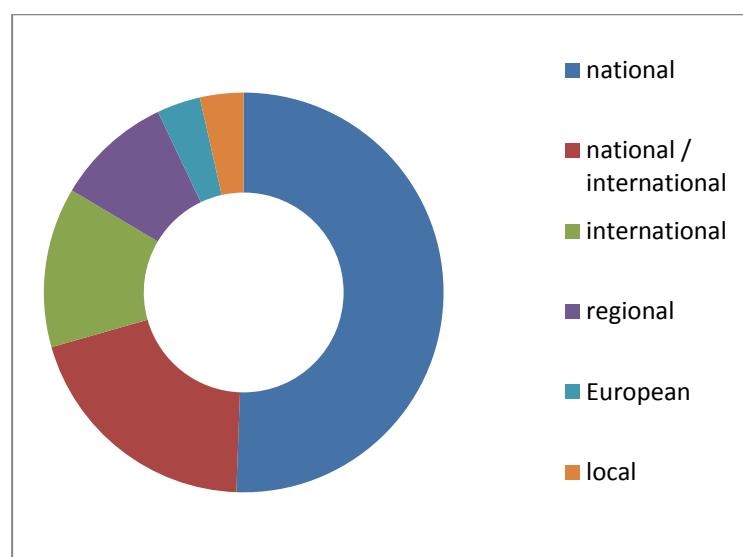


Figure 3. Scale of campaigns.

Figure 4 shows the main target of all of these campaigns to be consumers, represented as a single target (43, or 51%) or combined with secondary audiences (professionals, policymakers or children, adding up to 49 cases, or 58%). We distinguish between 'general public' (citizens) and 'consumers' when the focus was on information and learning without direct messages about consumer choices (general public), or when all the messages were directed towards changing buying behaviour (consumers). The general public stands as the main target in 23 cases (27%). Professionals are the main and/or associated target in 14 cases (16%). There are specific campaigns for children (3), policymakers (2) entrepreneurs (1), and apprentice chefs (1).

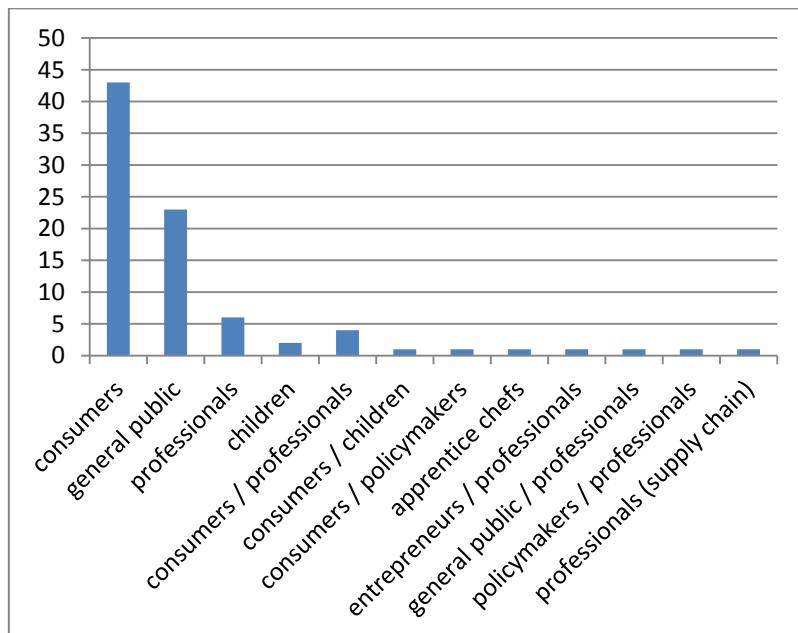


Figure 4. Distribution of targets across the 85 campaigns.

Funding (Figure 5) falls mainly in three categories: public (29 or 34%), private (27 or 32%) and large ENGOs (20 or 24%). There are seven campaigns sponsored by smaller independent organisations, including two initiatives in Greece to fight against local aquaculture development, and two in the UK to protect natural resources (Loch Swilly and wild salmonids).

The list of objectives is quite varied across the 85 examples, as can be seen in Figure 6. The main objective behind most campaigns (32, or 38%) is to raise awareness. Another 25 (29%) seek to increase consumption (whether of seafood (17), aquaculture (2) or specific farmed products (7)). Wherever possible we have placed negative campaigns under the category of wanting to raise awareness and/or promote sustainable practices, but there are four openly negative campaigns against aquaculture with no otherwise constructive arguments whatsoever.

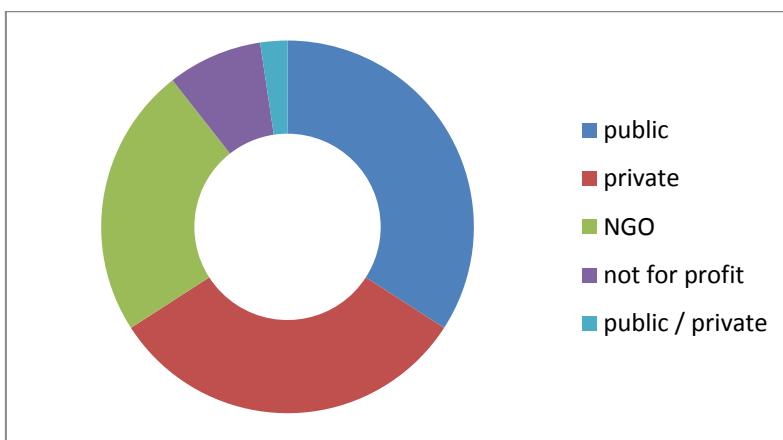


Figure 5. Distribution of the campaigns' sponsors.

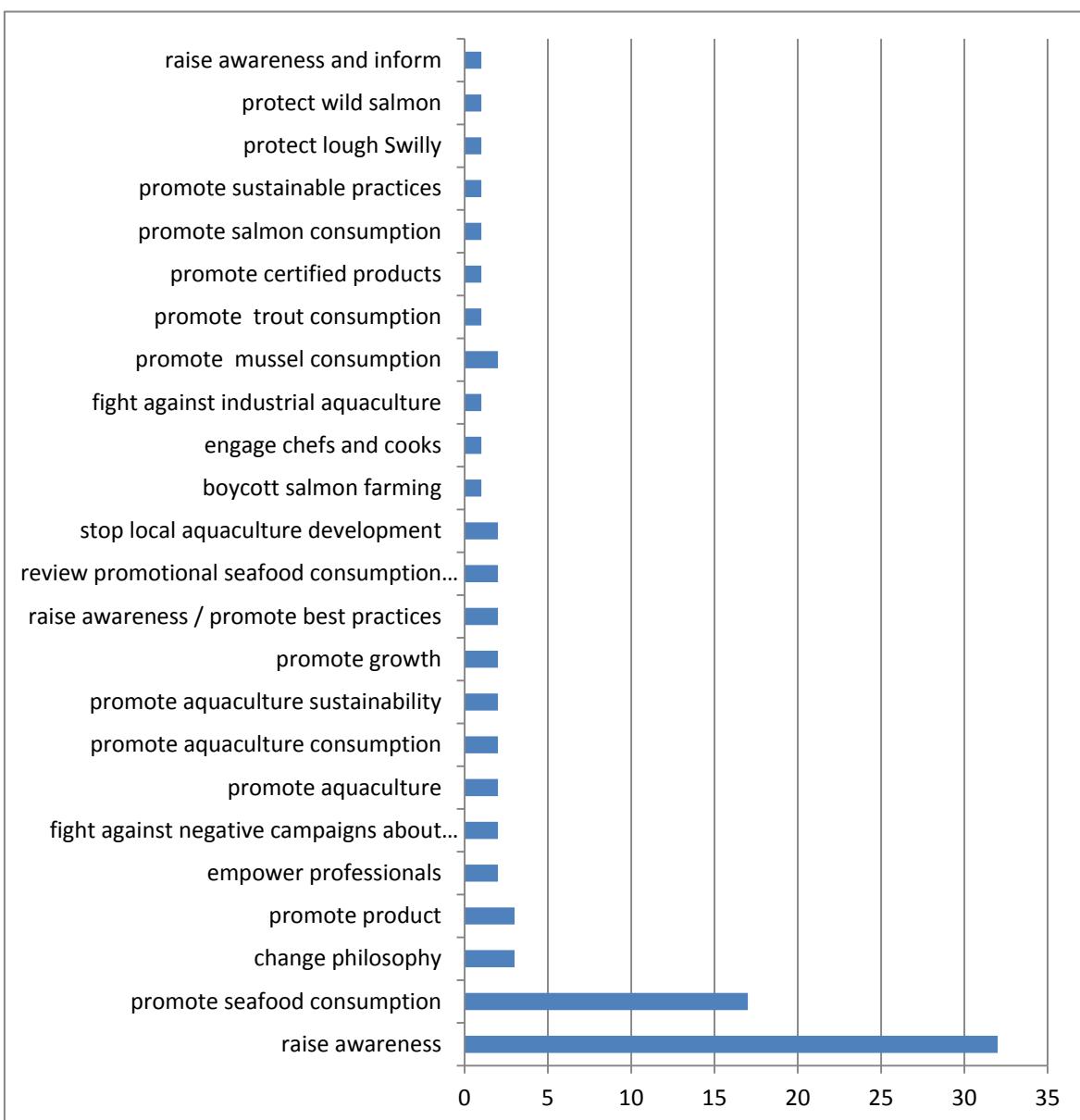


Figure 6.List of the campaigns' objectives (n=85).

Figure 7 illustrates positioning. Most campaigns on aquaculture are positive about it (50, or 59%). However as many campaigns refer to aquaculture only as an optional and sustainable choice, this positioning is conditioned to its sustainability in a case-specific manner (20, or 24%) while 8% (7 campaigns) are still not at all explicit about their potential support of aquaculture. Another 7% (6) are against aquaculture, while one is against unsustainable salmon farming only. Lastly, there is one focused on promoting certified aquaculture.

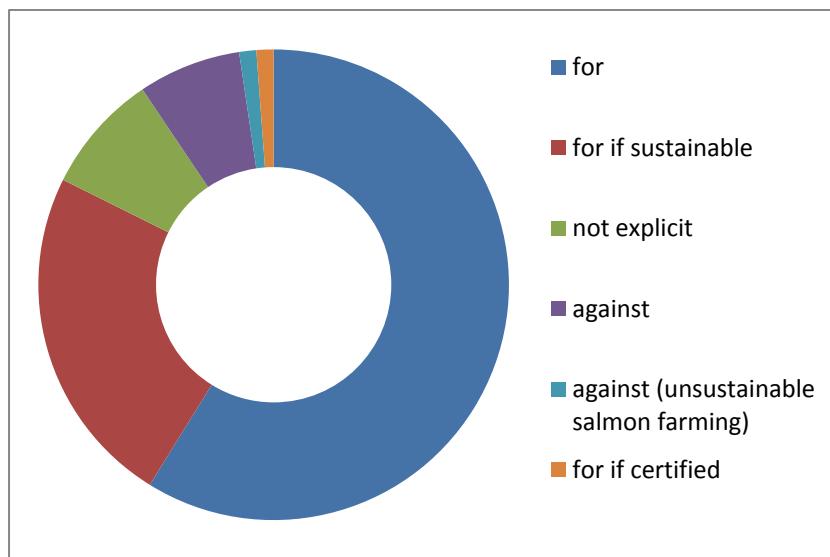


Figure 7. Position and overall objective behind the 85 campaigns.

We have extracted the main message behind each of the campaigns, listed below in Figure 8. When these messages were not unique and explicit, we have extrapolated them. These messages are very much related to the campaigns' objectives, materialising them into words designed to linger on in the audience's minds. The two main single messages are 'choose sustainable seafood' (17, or 20%), which is generic for consumers, and 'invest in sustainable aquaculture' (11, or 13%), which is the generic counterpart for professionals. Overall, the most frequent message is a family of similar recommendations beginning with "Eat more...", which is stated in 32 of the campaigns (38%), many of them about specific products such as trout or oysters.

There are also messages related to sustainable choices, such as "Ask your fishmonger" or "Read the labels", which seek to empower consumers while engaging vendors.

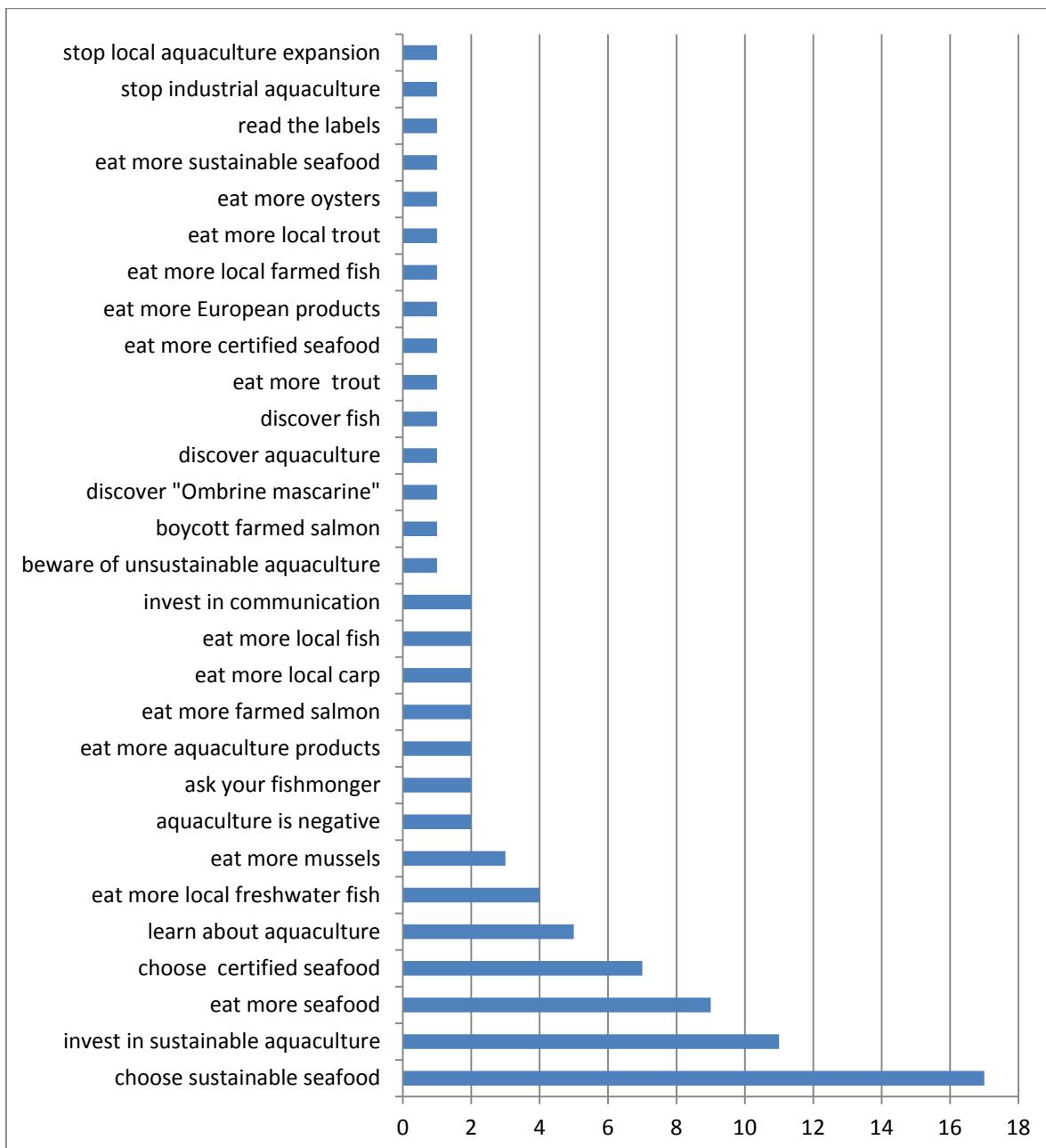


Figure 8. List of the campaigns' main messages (n=85).

Several secondary messages coexist within each campaign, often with no clear hierarchy or argumentation. We have included the full list of all these messages as Annex 3: Messages. In order to present this large variety of messaging, we have pooled them by assigning them a nesting equivalent from the shorter list of main messages above. This reduced list (Figure 9) allowed us to analyse a much larger number of real messages, and to discuss the overall impact of some campaigns, which, especially when they explain different concepts to reinforce main messages, showcase which are the underlining issues for communication towards consumers and other stakeholders.

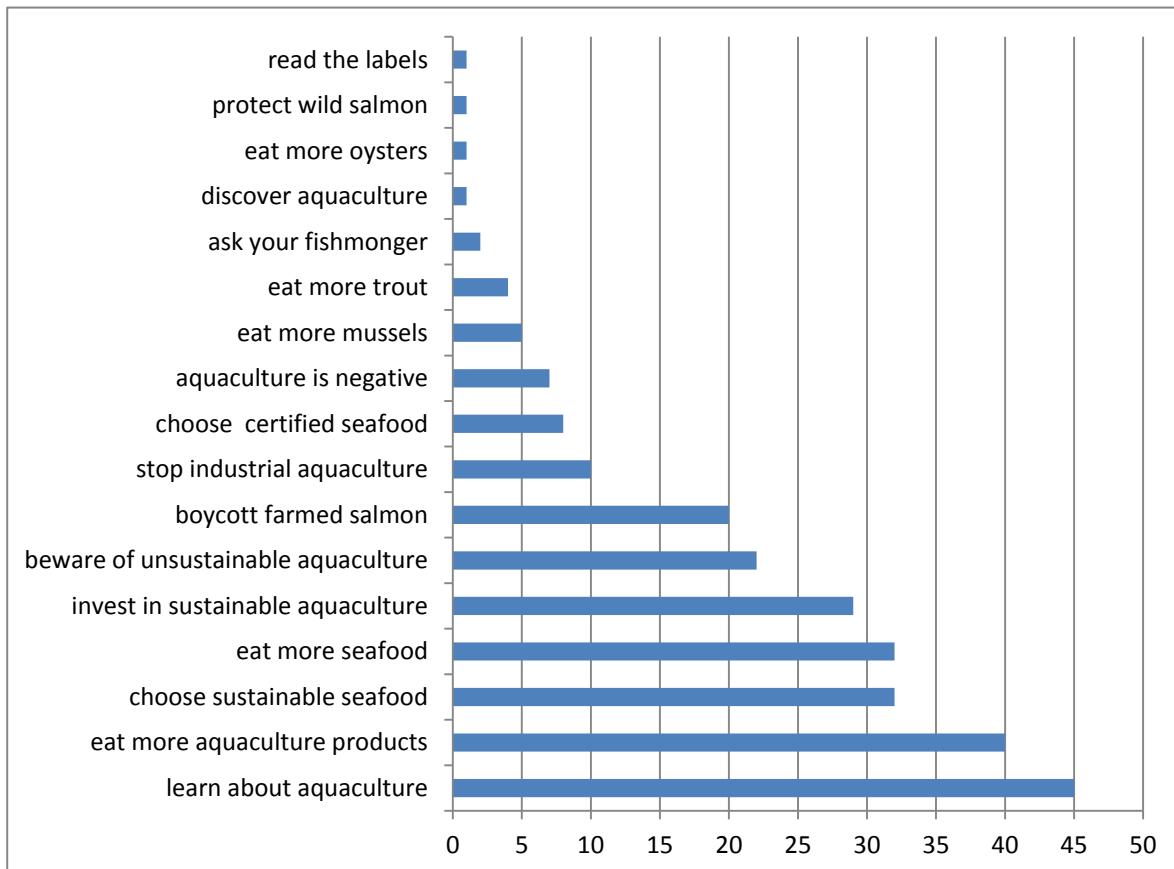


Figure 9. List of the pooled specific messages (n=260, see text for explanation).

The most frequent message here is 'learn about aquaculture' (45 out of 260), showcasing the need to raise awareness and better inform on the issue. Secondly, the concrete and promotional call to 'eat more aquaculture products', and thirdly the generic 'choose sustainable seafood', which currently includes frequent references to aquaculture as a good choice in some circumstances. As regards most ENGO guidelines, this is not quite a universal recommendation yet, as, linked with the 'learn about aquaculture' message, it is complemented with information on the risks and variable sustainability of global aquaculture methods.

Aquaculture is mentioned in many campaigns in the context of recommendations for a healthy diet (n=32), as many of them are focused on promoting more fish and seafood consumption.

Interestingly, and showcasing the political and strategic support for business developments in aquaculture, the next most frequent message falls in the category 'invest in sustainable aquaculture'. This serves both as an invitation towards new growth and as a call for existing industries to commit to more sustainability as part of rising consumer demand, but also as a business plan for durable economic performance and competitiveness. When directed towards large, capital-intensive, multinational companies, this message could bring about a larger potential impact for consumer choices and overall sustainability. Elsewhere its main objectives are to attract secure investments, more efforts in innovation and research, and a political support towards sustainable and job-generating aquaculture MSMEs.

The next three most frequent messages are negative and add up to 52. To these we should add ‘aquaculture is negative’ which with seven mentions takes the sum to 59. In varying degrees of activism, all represent current concerns among citizens and conservationists about an industry whose rapid technological development and high global demand often cause severe environmental impact. ‘Beware of unsustainable aquaculture’ is generic advice at a global scale, which raises the alarm on irresponsible development, and which includes all the major issues of concern: from mangrove deforestation and human rights in tropical prawn and pangassius farming, to ecological disasters driven by the introduction of invasive species like tilapia, to concerns about the use of chemicals, pesticides, hormones, colour additives, antibiotics and other pharmaceuticals, genetic modification, animal welfare, the ecological impact of fishfeeds, waste management, pests and restocking, predator management, landscape modification and the effect on local fisheries and socioeconomic models. ‘Boycott farmed salmon’ is centred on the environmental impact of large salmon farms in higher latitude fjords, from Canada and Chile to Scotland and Norway. Farmed Atlantic salmon embody the most controversial aspects of large scale aquaculture in developed countries, and includes a call to “Protect wild salmon” (UK) from genetic and pest contamination of wild sympatric populations. “Stop industrial aquaculture” refers to public rejection of aquaculture expansion in Greece, which is also linked to the economic problems the industry has faced there.

With eight appearances, ‘choose certified seafood’ is another generic call for consumers to make sustainable choices, this time as endorsed by independent certification schemes including MSC and ASC (supported by WWF), Friend of the Sea and Global GAP. However, this independence is not in conflict with particular private interests. There is a parallel call from consumers, scientists, private industries and some public entities to create and promote public standards for certification, beyond basic legislation, to competitively distinguish those methods and products of larger objective sustainability as a more transparent, accessible and reliable playing field for producers and consumers alike.

Among the list of environmental benefits, none explicitly mention the low carbon footprint aquaculture has when compared to most other animal production industries.

The rest are promotional messages about specific products: mussels (5), trout (4), local freshwater fish (4), carp (2) and oysters (1), which do not suffer from negative public perception (except trout sometimes) but profit from periodical private and public efforts to increase consumption.

Finally, ‘ask your fishmonger’ and ‘read the labels’ are two further generic recommendations that promote critical and responsible consumption, for which aquaculture might stand as affordable and available good choices.

Figure 10 shows a pooling of related messages into a final and very reduced list of distinct overall messages, which further identify the overarching communication lines used to promote aquaculture, and nest all of the 260 different messages found in this survey.

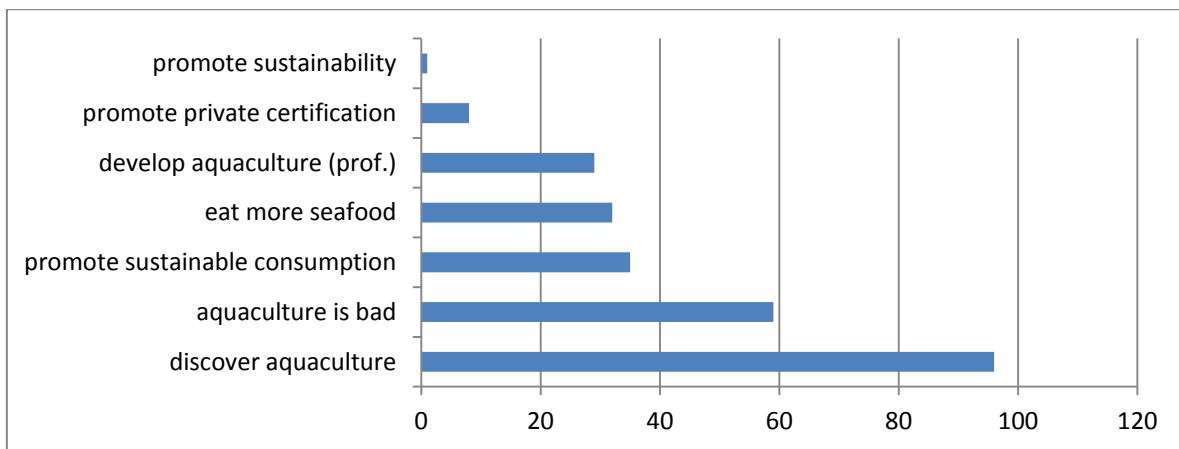


Figure 10. List of the pooled, overall messages (n=260, see text for explanation).

'Discover aquaculture', which includes all messages aiming to increase awareness and promote learning (therefore fighting back negative arguments) is the most utilised (n=96, or 37%). This is followed by 23% of the results, the generic (and simplified) 'aquaculture is bad', highlighting that there is a serious issue with public concern and irresponsible practices.

'Promote sustainable consumption' deals with aquaculture as a good alternative in the modern context of global markets and seafood consumption. This pinpoints the fact that aquaculture is nowadays present in most initiatives around sustainable seafood and healthy habits ('eat more seafood' n=32).

A conspicuous fact that differentiates aquaculture from the rest of better established food production industries are the explicit support and communication campaigns targeting professionals, whether they inform on sustainable best practices and legislation, or enhance development and entrepreneurship. 'Develop aquaculture' (a message for professionals) summarises 11% of the total messages.

Finally, there are several independent certification schemes promoting their labels for aquaculture farms, methods and products, which fill a niche and aim to ease consumer dilemmas on which products are trustworthy as regards sustainability.

## 5. Discussion

In its effort to renew its explicit support to aquaculture, the EC can play a leading role in giving trustworthy, neutral and inspiring advice to promote farmed products and engage consumers and professionals alike into normalising the sector as an excellent source for careers and quality food. While Figure 10 pinpoints the main lines for communication that mention aquaculture, there are some that should naturally become nested in any specific campaign to promote aquaculture. Therefore for example, ‘promote sustainability’ and ‘promote sustainable consumption’ is general and positive advice but not a reason to choose farmed products in spite of other sustainable options. Rather, these messages should become a secondary attribute in ‘discover aquaculture’, because most of it is highly sustainable. ‘Promote private certification’ falls beyond the legitimate responsibilities of the EC, who can recommend ‘read the labels’, but not give priority to any independent initiatives that may alter free and transparent competition. ‘Eat more seafood’ is equally a generic recommendation, and efforts should be made to position aquaculture in any campaigns promoting this, but this shouldn’t stand as a unique message that specifically promotes aquaculture. Finally, the EC should always consider mainstream concerns and negative messages, provide clear and science-based argumentations against them, and also within the main strategic line of raising awareness about the sector. This could lead to the maintenance of generic geographic indications (e.g. ‘Farmed in the EU’) which are overarching and reassuring, but wherever possible complement initiatives to support concrete branches in aquaculture using the most powerful proposals available for those specific products, in order to better communicate their sustainability or other attributes to consumers.

Considering the insights from the collection of previous examples and results, and in order to tailor-make a coherent approach to put the spotlight on aquaculture, we will discuss the conclusions under the following three categories. These will serve to revisit and better organise all the original messages found during the analysis, expand some, and discard others:

1. raise awareness of aquaculture, particularly towards improving general knowledge and normalising the sector
2. commercial promotion to increase consumer support, including clear differentiation between methods, as well as imports
3. inspiration, guidelines and support for professionals

This coincides with the list and order of the campaigns’ main messages as illustrated in Figure 8, as can be seen in the table below (n=261). Messages in grey are generic messages that are related but not specific to aquaculture, those in red are negative.

|                                     |    |                         |   |
|-------------------------------------|----|-------------------------|---|
| learn about aquaculture             | 45 | aquaculture is negative | 7 |
| eat more aquaculture products       | 40 | eat more mussels        | 5 |
| choose sustainable seafood          | 32 | eat more trout          | 4 |
| eat more seafood                    | 32 | ask your fishmonger     | 2 |
| invest in sustainable aquaculture   | 29 | discover aquaculture    | 1 |
| beware of unsustainable aquaculture | 22 | eat more oysters        | 1 |
| boycott farmed salmon               | 20 | protect wild salmon     | 1 |
| stop industrial aquaculture         | 10 | read the labels         | 1 |
| choose certified seafood            | 8  |                         |   |

Following is a reflection on appropriate messages to promote European aquaculture. A classified listing of messages used in previous campaigns can be found in Annex 4: Recommended Messages.

### **a. About raising awareness on European aquaculture and promoting the sector as a necessary and environmentally friendly food production industry.**

There is still little popular knowledge about aquaculture, and existing consumer information is often generic, vague, controversial, or severely affected by opposed interests, which reflect the global and complex nature of seafood markets and the food industry in general.

Out of the reviewed materials, some interesting and inspiring examples to raise awareness and explain what aquaculture is about with enough space and scope are the websites by FEAP (including 'Aquatour') and CIPA, and the travelling exhibition about aquaculture.

Others approach it by highlighting its **long history, tradition and low impact**, which holds true for many practices and regions, but is not the case for many modern developments, including their scale and tremendous and rapid technological advance in the fields of genetics, fish husbandry and reproduction, feeds or water treatment, *inter alia*. This is the case for the most successful forms of modern mass-production of finfish, mainly Atlantic salmon and Mediterranean sea bass and sea bream (in Europe).

We believe that while this needs to be further communicated, more information is needed on the real and interesting developments which allow modern aquaculture to reach mass production rates and yet stand as a highly sustainable opportunity, especially as regards

advance and experience of other farming practices, making clear mention of the risks and how European debate deals with them. Just as children are taught how modern farming and agriculture work, and citizens are aware of the different types, scales and intensities in land farming, there is a gap in information about how fish farms function. There is a valuable example towards this idea in FEAP's 'Aquatour' and the opening of some fish farms for visiting public and schoolchildren.

Another approach is to raise awareness about how aquaculture is needed **to complement and help protect wild aquatic resources**, based on global trends of seafood production and consumption, highlighting its **necessary role, low environmental impact** and **high sustainability**, which further industry developments help to increase continuously. This is also

a fundamental part of promoting aquaculture and increasing knowledge, but should not omit (or avoid) transparently communicating the real risks of some practices, making a clear distinction between some methods and others, and better listing the objective benefits from European aquaculture in an understandable way: its **low carbon impact**, innovation in plant-based feeds, closed circuits, integrated systems and domestication of non-carnivorous species.

Most sponsors coincide highlighting the **real and potential benefits** of aquaculture, which on a popular basis is still not well known and associated either with **traditional** and relatively **natural** products (most shellfish and freshwater species), or with **technology-rich, intensive farming** techniques more related to industrial pork, cattle and poultry. This in turn is affected both by mainstream knowledge of the risks and consequences of intensive farming and by strong consumer demand for **cheaper and convenient, yet controlled and guaranteed**, products.

This should give way to a **differentiation** on what kind of aquaculture is promoted, more so when existing legislation, modern advance, varying standards across producing regions, and marketing strategies allow most products to be sold as 'sustainable choices'. One of the consequences of not differentiating is that to appear trustworthy some messages are diluted with nuances: from "*Aquaculture is sustainable*" to "*Most aquaculture is sustainable*" or "*Aquaculture can be sustainable*", or even "*Aquaculture has the potential to be very sustainable*". In the context of critical consumer confidence, without a clear definition or metrics of what sustainability is, and amidst contrary messaging from different stakeholders, these additions may act as counterproductive disclaimers which reduce positive impact of those products or practices with wider primary benefits, such as price.

The overall confusion and fuzziness over global farming and seafood sustainability should drive public efforts into shedding more **clarity** on the issue, and maybe apply the same communication strategies as used for other food production sectors, for which the use of the words 'sustainable' and 'environmentally friendly' can be better judged by consumers and therefore applied case-specifically. For example, to differentiate organic eggs, or meat from cattle farmed in open fields, but never to promote high-density pig farming as a good, sustainable choice, even if it holds true, is not it's most powerful and trustworthy 'unique

selling proposition'. Moreover, sustainability remains as an additional extra consideration for many consumers, who base their choices on previous buying habits and price. This clear lack of differentiation therefore adds confusion and works against aquaculture when considered as a whole. When consumers are told that all European aquaculture is sustainable, but receive contradictory information from other trusted sources, there is a loss of engagement and confidence. Aquaculture may be too diverse and mature already to apply the same approach to all products and practices.

Considering two examples, heavily industrialised methods and extensive shellfish farming, we can see that they do not share nor need the same approach for communication, and this is evident both in public and private campaigns. In this case the differences are large enough

that neither of them is affected by promotional efforts designed for the other part, although their potential impact can decrease because of dispersion. This may be a problem when, for example, all concerns raised by certain types of farming or imports are involuntarily projected onto other sustainable products. This may have negative consequences both for some products (highly sustainable products overshadowed by contradictory information) and the promoter (whose trustworthiness and legitimacy are compromised by controversy, and the fact that some practices are denounced by scientist, conservationists and citizens alike with objective data). This is amplified by the fact that those same products have more presence, visibility and market demand than those which need more support from public communication. From a resource allocation point of view, most large companies or associations have enough economic capacity to be in charge of their own promotional strategies, as the driver for lesser sustainability is often a direct product of high and profitable market demand, as in the case for salmon or tuna fattening. An interesting example to illustrate this can be found in Spain, where 75% consumers prefer Norwegian salmon<sup>3</sup>, following strategic promotion by large private associations.

An evident difficulty arises when trying to segment promotion from an institutional point of view, as different stakeholders may raise concerns about discriminatory choices. This, for example, currently impedes promoting aquaculture as '**more sustainable than**' other options, like capture fisheries or battery poultry, as both sectors could argue that such statements imply negative consequences for them. This includes intensive offshore aquaculture, which is strategically the most promising field for business growth, but also the main target for critics.

In order to effectively and efficiently promote the most sustainable practices and promising new developments, it may prove successful to be more clear on what are the priority targets for promotion, and make clear differences on aquaculture practices. In this line, sustainability and tradition may be appropriate for some, while EU regulations and guarantees may work better for others.

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<sup>3</sup> "El 75% de los consumidores españoles sienten preferencia por el salmón noruego". IPAC acuicultura online magazine. 23 July 2014. [bit.ly/1oLAja7](http://bit.ly/1oLAja7)

This can be validated by experiences in other food sectors, where different practices and products are specifically promoted without the need to refer to the sector as a whole. Both approaches work better and appear stronger without the potential doubts provoked by their counterpart. This approach is also effective to justify differences in price, as environmental friendliness often has associated extra production costs, while consumers tacitly accept that lower prices for equivalent products most often imply more intensive production methods. Following private (e.g. Norge) and public examples (e.g. Spanish government), a good strategy may be to plan timely successive and well-differentiated campaigns: an overarching and durable campaign steadily promoting geographic origin (e.g. ‘farmed in the EU’) with associated and reassuring ‘EU guaranteed’ messages (e.g. ‘safe and secure’) and mass consumption benefits (e.g. ‘fresh, local, healthy’). This strategy could also include a programme of concrete initiatives to raise the visibility of specific product types, thus making use of the most unique and robust messages available for each (shellfish, extensive, multifunctional or integrated, or intensive aquaculture). If the goal is to improve consumer perception and entrepreneurship in intensive offshore aquaculture (for example), then efforts could be concentrated to highlight that it is **normal** (from hunting to farming, regulation), **desirable** (lessons learnt, more sustainable than, quality products, advance, jobs, availability, affordability, stability) and **necessary** (growing demand, natural limits).

Although not generally present in public campaigns, the global trend towards increased exploitation and integrated management of aquatic resources, linked to Blue Growth, is also a good way to promote aquaculture as part of a larger context, associated with food security and safety, but more related to our growing occupation and use of the marine space. A good example of this approach has been the EU’s support of strategic aquaculture development in Europe.

Finally, a lot of effort must still be dedicated to **providing answers** to the most common **preconceptions** and negative **doubts** about aquaculture, but paying great attention as to the **neutrality** and **trustworthiness** of explanations. Again, it is important not to expand doubts into otherwise trusted sectors, as generalising messages over a wide spectrum of practices does not meet the specific requirements of consumers, producers or supply chain stakeholders. At the end of the following list of recommended messages is a list of legitimate consumer concerns, to which the EC could answer (or redirect to relevant external sources) in a **case-specific** manner.

Following is a list of recommended messages for the EC, with special focus on objectiveness, legitimacy and clarity:

- **Aquaculture is a traditional food production industry that thanks to technological advance has reached mass production and is now present in most counters and tables**

- **Aquaculture already provides around half of the world's seafood, and this will progressively increase**
- **Aquaculture is necessary, positive, and a great opportunity to reduce our environmental footprint**
- **Aquaculture contributes with healthy and accessible seafood to a growing world population, playing a fundamental role against poverty and malnutrition**
- **Aquaculture is a necessary and natural step in our historic exploitation of aquatic biological resources, fundamental to maintain a safe and sustainable supply of seafood to a growing population**
- **Aquaculture is part of a new, necessary and sustainable alliance with the sea.**
- **Fish farming is a much-regulated activity that implies the selective and controlled reproduction of fish, their husbandry and raising along different life stages, and the commercialisation of final products**
- **Aquaculture can raise legitimate concerns typical of any large food production sector. You can find a list of answers to the most common doubts *here*:**

(include answers in a case-specific manner to)

|                         |                            |                       |   |   |                          |
|-------------------------|----------------------------|-----------------------|---|---|--------------------------|
| fishfeeds               | animal welfare             | waste products        | contamination with chemicals            | environmental impact                        | restocking               |
| escapees                | GMOs                       | genetic contamination | contamination with pharmaceuticals      | parasites                                   | runoffs                  |
| landscape deterioration | local socioeconomic impact | invasive species      | unsustainable international aquaculture | farming and ranching of carnivorous species | impact on wild fisheries |

To expand and complement such list, there is a variety of secondary messages available:

- Aquaculture can contribute to protect biodiversity and ecosystem services
- Aquaculture has a very long history, and was well established in Europe by Roman times
- Aquaculture is a sustainable source for many more things than seafood: non-food products, biotechnology, medical treatments, coastal management and environmental services are an example.
- Aquaculture does have an impact, as any other food production sector or industrial activity. European aquaculture is one of the most sustainable food production methods.
- Aquaculture in Europe is extremely rich and diverse: from the natural management of marine and freshwater areas, to the production of prime commercial fish and algae, from

closed production of single species, to integrated multispecies systems, or from state of the art research to the reintroduction of vulnerable species

- The most important European products are shellfish (mussels, oysters and clams) and fish (salmon, trout, carp, sea bass and gilthead sea bream)
- There are many more farmed species in Europe, and ongoing domestication of new ones. Turbot, eels, cod, sole, sturgeon, scallops, abalone, meagre, tuna, pike, crayfish, other carp species, algae, plankton... and many non-food products.
- European aquaculture ranges from tropical installations in outermost regions to inland farms all across Europe, and from the Mediterranean to cold water aquaculture in the North Atlantic.
- The most important global market species are salmon, trout, pangassius, tilapia, barramundi, seriola, algae and tropical prawns.
- All aquaculture in Europe complies with strict regulations that guarantee the sustainability of the farm and the quality of its products
- There are many types and scales in modern aquaculture. Their main benefits and degree of sustainability vary. The EU is dedicating a lot of effort to improve the social, economic and environmental standards of all types of aquaculture at a global scale.
- There is probably an aquaculture farm close to you, as there are more than 14,000 European aquaculture companies
- Most of the arguments claimed against aquaculture refer to irresponsible practices that do not happen in Europe: sustainability is at the very core of the industry.

## b. About initiatives to commercially promote European aquaculture products

Aquaculture and more sustainable choices need positive promotion along the whole supply chain, and this is well represented in campaigns. Messages converge on using 'fresh' (also implying 'local'), 'healthy' and 'available', but also 'affordable', 'convenient' and 'sustainable'.

These messages are overarching and positive, fit for the whole sector, but not exclusive or commercially powerful for marketing purposes. The review on campaigns shows that commercial promotion efforts need to be more adapted to the product, thereby allowing for the use of more clear, unique, differentiating and attractive messages that can take full advantage of the reality of aquaculture, especially as regards sustainability.

According to the classification of commercial methods and techniques published by the EC, it seems recommendable to align efforts according to the characteristics and advantages of each product type.

While the overarching EU regulations focus on sustainability, quality and safety, these are not efficient messages to engage consumers, as the underlying message is that the EU controls and ensures that producers do not exceed certain limits.

Any messages presuming to reassure consumers may sow new doubts, and concentrate commercial benefits on the lower value part of the offer, often imports, therefore not meeting European producers' needs. If we consider other food production sectors, we can see that messages on safety and security are limited to a specific range of low-price products, often following media scandals.

By adapting communication efforts to specific types, citizens not only learn more about the nature of aquaculture and the different choices available to them, but can better apply critical thinking when seeking more sustainable choices when available and affordable. For producers and European aquaculture, there is enough presence of different aquaculture in the markets to concentrate communication efforts on more sustainable production methods, and take full advantage of their characteristic and exclusive 'unique selling propositions'.

We therefore recommend the design of precise strategies for the following fields, which would all include efforts to increase overall awareness of European standards, but concentrate on communicating the sustainability benefits specific to each of them.

1. Shellfish farming
2. Extensive freshwater and brackish aquaculture
3. Intensive freshwater and coastal installations
4. Offshore aquaculture

For example, the first two can profit from highlighting their local tradition, ecological management, diversity and positive impact, while for the last two messages can allude more towards the global context: overexploited natural resources, natural evolution towards farming, food security, growth potential and EU regulations.

There are two main fields for aquaculture product promotion: as a targeted effort *per se* (to promote the sector and/or its products), or to increase its visibility within other initiatives (e.g. healthy diets, sustainable fisheries and seafood, coastal and economic development...) Adapting existing messages from previous efforts, our recommended list for the EC is:

- **European aquaculture is everywhere, diverse and surprising**
- **European aquaculture products are an excellent and recommended part of any healthy diet**
- **Aquaculture in the EU is a world leader as regards sustainability and quality standards**
- **European aquaculture is an important food production sector that provides with prime products and durable jobs**

- European aquaculture ranges from traditional techniques, such as shellfish and extensive freshwater farming, to modern intensive methods, like closed or offshore systems,
- European aquaculture is fundamental to contribute with new sources for sustainable food and integrated environmental management

To expand and complement this list:

- European aquaculture products are fresh
- European aquaculture products are healthy
- European aquaculture products are local
- European aquaculture products are widely available all year round
- European aquaculture products are affordable
- European aquaculture products are easy to cook and fun for children
- European aquaculture products are sustainable
- European aquaculture products are traceable
- European aquaculture products are environmentally friendly
- European aquaculture has a low carbon footprint
- Eat, buy and sell European aquaculture products
- Farmed European white fish is an excellent source of fat-free healthy proteins and essential nutrients
- Farmed European fatty fish is an excellent source of Omega 3 and essential nutrients
- Farmed European shellfish are an excellent source of essential minerals and nutrients
- European aquaculture products are natural, and over 90% of the more than 14,000 European aquaculture companies are family-run and employ less than 10 people.

### c. About promoting entrepreneurship and investment in sustainable European aquaculture

European aquaculture needs support because its development has stagnated against its clear potential for growth. While the reasons and technical studies on this fall beyond the scope of this analysis, promoting growth stands as a parallel necessity alongside efforts targeting consumers.

Professionals in the business, new entrepreneurs, investors and national and local administrations need reassurance, support and inspiration to boost growth and entrain research and education to supply sustained knowledge and skills.

Beyond recent guidelines from the EC to normalise and support the sector, the existing evidence points towards four main lines of action:

1. Standards and good practices: mainly for existing companies and professionals, to renew efforts and confidence towards committing to sustainability as a competitive edge and trusted European standard.
2. Promoting innovation and sustainability: to expand the benefits of aquaculture and move towards more added-value products, techniques and applications.
3. Promoting jobs and careers: as a sustainable and quality source for employment in all regions, and better integrating aquaculture within all associated activities along the production and supply chain.
4. Promoting entrepreneurship and investment: reassuring interested parties about the secure framework to invest in all kinds of European aquaculture.

Based on the messages used in other campaigns, our list of recommended messages is:

- **Buy sustainable European aquaculture**
- **Sell sustainable European aquaculture**
- **Invest in sustainable European aquaculture**
- **The EU is committed to support growth in sustainable European aquaculture**
- **European aquaculture is a great business opportunity in line with Blue Growth**
- **Improve the sustainability of your aquaculture business, it pays off**

To expand and complement this list:

- The European aquaculture industry is a leading sector with great scope for international projection
- Innovate in sustainable European aquaculture
- Innovate with sustainable European aquaculture
- Research in sustainable European aquaculture
- Share good practices
- Diversify your production and activities
- Learn about available EU funding to boost growth in sustainable aquaculture
- Network to boost sustainable local aquaculture in Europe
- Work in sustainable European aquaculture
- There is strong and growing demand for sustainable European aquaculture products
- The EU is working hard to remove existing obstacles for successful new developments in European aquaculture, engaging all stakeholders and regions into giving adequate support to the sector

Depending on objectives, all of the above messages can be combined to design specific initiatives.

At this moment, raising awareness still stands as an overarching necessity, and a lot of effort should be dedicated to enriching any campaigns with clear and positive information on European aquaculture, yet making clear differences and adapting contents and messages depending on which sub-sectors are being promotion.

As the main producer of salmon and member of the EEC, Norway is an important stakeholder directly profiting from efforts to promote aquaculture consumption in Europe. This also applies to imports when engaging supply chain stakeholders in offering aquaculture products to consumers, as their lower prices are attractive but affect the clarity and effectiveness of any efforts to promote sustainable aquaculture. We must also mention that the role of private funds and resources behind local and international NGOs is large.