Perceptions of coastal stakeholders and public on the implementation of marine natural capital markets in Scotland: results from a questionnaire survey

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Abstract

The FIRNS project *"Enabling Markets for Marine Natural Capital"* has contacted coastal and marine stakeholders and the public to explore their feelings on the commodification of marine ecosystem services and know their opinions on oyster reef restoration. This report summarises first findings from 30 stakeholders, and then from 248 people living in Scotland, 32% of whom (80 responses) directly linked to the sea.

From the survey emerged the opinion that marine natural capital, if traded in private markets, may generate positive benefits for the marine environment (e.g., enhancement of landscape, restoration of habitats, biodiversity, and removal of water pollution) and communities because of finances reinvested in nature conservation, enhancement of recreational aspects or subsidies for supporting local entrepreneurs. It emerged that the public seem more in favour of private markets, but many of them, including the coastal stakeholders, provided some concerns: commodifying nature is not considered the right thing to do to protect marine environments that should be managed by public funds. Additional concerns expressed by the stakeholders arose from the risk of greenwashing, while some people were restrained in expressing positive opinions of environmental markets due to lack of understanding of how these markets operate, or of whether they may be characterised by fair and just transactions. Discussions with communities over community-led marine management which do not impose prescriptions on how or whether to trade marine natural capital were suggested as a way of empowering community decision making around the implementation of marine natural capital markets.

Introduction

The FIRNS project "Enabling Markets for Marine Natural Capital" received funds from Nature Scot and the National Heritage Lottery Fund to explore technical, financial, legal, and socio-economic issues and facilitate the institutionalisation of environmental markets for marine habitats.

Although important advancements have been made in terrestrial ecosystems to sell carbon credits to corporates and generate income for land owners for the promotion of alterative and sustainable ways of managing forests (Woodland Carbon Code) and peatlands (Peatland Code), there is not an equivalent instrument for the marine environment. Attempts to replicate these experiences to manage carbon credits are now interesting those managing saltmarshes (Saltmarsh Code is in a development phase) and more complex ideas are proposed in the current implementation phase of the of FIRNS (Facility for investment ready nature in Scotland) scheme (2023-2024), while other options include the sale of

nature and biodiversity credits underpinned by a metric framework that quantifies ecosystem integrity in a cost effective, scalable, and rigorous way.

Recent research has proposed a framework for facilitating the sale of services by the aggregation of supply and demands of ecosystem services through intermediaries (Reed et al., 2022). However, the role of communities in shaping these markets is still poorly investigated. Some key ideas have emerged from the Scottish Government (SG) who have proposed principles for fair and just investments. The SG is committed to developing a values-led, high-integrity market for responsible investment in natural capital, that helps deliver policy goals for economic transformation, climate change and biodiversity, provide community benefits and support a Just Transition (Scottish Government, 2022). Similar considerations are made by the Land Reform Act 2016 that requests the Scottish Ministers publish a statement on land rights and responsibilities (LRRS). The principles in the LRRS focus on sustainable economic development, a just transition to net zero, and aim to help achieve social justice and a fairer society for the common good (Scottish Government, 2022b).

Financial institutions in collaboration with NGOs and the Crown Estate have elaborated and discussed the priorities to tackle the main legal, institutional, and scientific issues with the aim of developing high-integrity marine natural capital markets in the UK (Blue Marine Foundation et al., 2023). In addition, the British Standard Institute (BSI, 2023) launched a consultation to deliver on the first version of overarching principles for UK nature markets with support from the Department for Environment, Food & Rural Affairs (Defra). The recently elaborated standard on environmental markets integrity (BSI, 2024) builds on an overarching set of principles and a common definition of nature investments, designed to support the UK's environmental goals including reversing biodiversity loss and achieving net zero (BSI, 2023).

To propose a further perspective on the benefits and risks that coastal communities may face in the initialisation of a marine environmental markets, within the remit of the "Enabling Markets for Marine Natural Capital" project, The James Hutton Institute, supported by the Scottish Association for Marine Science (SAMS) and Kaly, has formulated a questionnaire survey. Results of this survey will be used to inform a marine natural capital code, a document proposing a strategy to accelerate the generation of private investments in the marine environment and consider how to deal with the concerns of communities, facilitate their participation in the governance of the newcoming markets to enable their genuine participation in decision making, and minimise community risks.

Method

The questionnaire was drafted by Hutton in Word file to be refined according to the specific perspectives proposed by the research team (SAMS and Kaly), and then transferred into

Qualtrics to facilitate its distribution. We opted for an initial distribution through already existing networks of coastal communities (through the Coastal Community Network) and via several other stakeholders (Scottish Wildlife Trust; Lorn Natural History Group; HWDT; Marine Conservation Society; Buglife; RSPB; Mid Argyll Wildlife Trust; South West Mull and Iona Development; Highland Rewilding; Coastal Communities Network; Seawilding; Scottish Seaweed Industry Association; Association of Scottish Shellfish Growers; Native Oyster Restoration Alliance). We asked these partners to distribute the questionnaire within their networks. On 29th Feb 2024, 30 questionnaires were returned. To increase the rate of responses we contacted a market research company to distribute the questionnaire in Scotland to hundreds of citizens, possibly living in coastal areas. The questionnaire was open until the 26th of March and through this route, an additional 248 responses were returned, 32% of them indicating a connection with the marine environment (e.g., work, leisure, etc.). The increased number of responses from this second round of investigation allowed the comprehension of expected benefits and drawbacks of marine environmental markets with focus on the restoration of oyster reefs through private finance.

The questionnaire is composed of three sections: the socio-demographic characteristics of the respondent, general questions on environmental markets, and specific questions on oyster reef restoration. Benefits and risks of implementing this project by environmental markets are also investigated alongside questions around what might constitute necessary support for coastal communities. Questions are mainly formulated as sentences to which participants are asked to indicate level of agreement according to a 5-point Likert scale, or as multiple choices to select up to a maximum of five options. Some open-ended questions are made available to give the opportunity for respondents to provide qualitative opinions around the use of environmental markets. The Appendix at the end of this document reports the questionnaire.

Results

This section proposes the main findings from the questionnaire survey, selecting some of the questions whose responses are considered most relevant from the ones proposed in the Appendix. This section is divided in two parts. The first proposes the answers of those stakeholders who describe themselves as connected in some way to the marine environment or from coastal communities, while the second presents the findings from the general public.

Findings from the marine stakeholders

Thirty answers were received. This small sample is made of a balanced set of male and female respondents in full employment, mainly of Scottish residence. The level of education is very high with more than 30% of the sample having a postgraduate degree.

The sample selected a variety of values arising from the marine environment, but focussed mainly on intrinsic values, those that that are not related to any specific use.

The marine environment is also considered a place with the potential to generate important recreational opportunities, and its enjoyment may be beneficial for health and wellbeing.

There is consensus that the protection of the marine environment needs to be funded by the state, but there is disagreement on the usefulness of private finance as proposed in Figure 1.

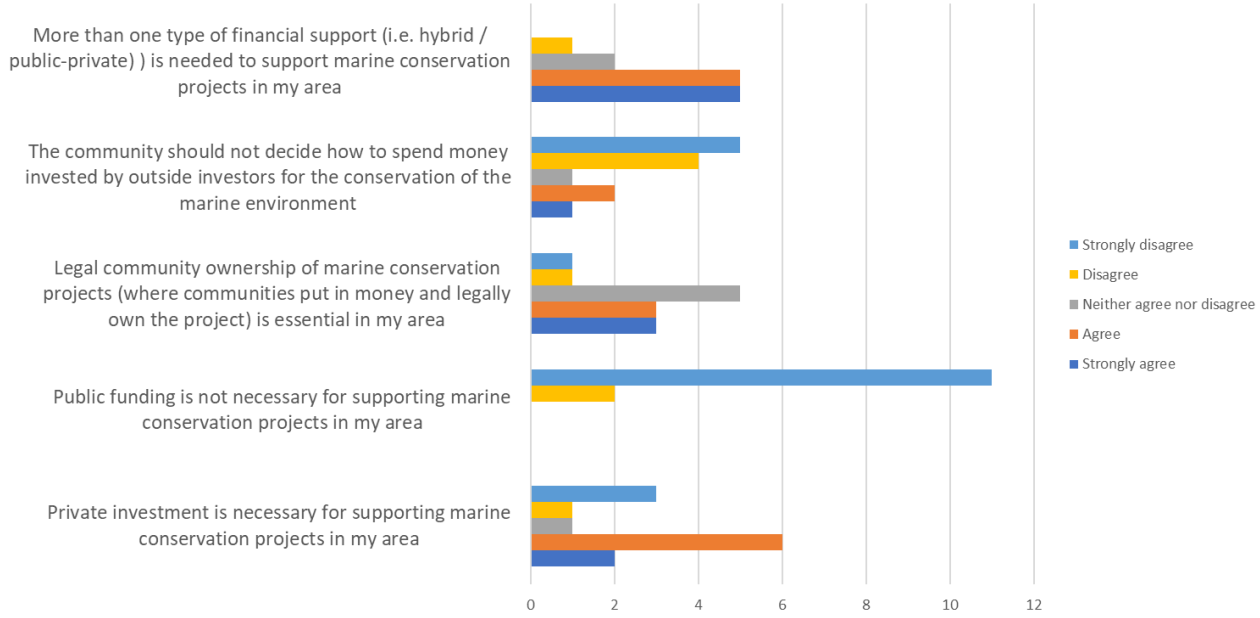

Figure 1: Ways of supporting the marine environment.

Figure 2 confirms that the sample has not reached consensus on the role of private environmental markets. In all the statements proposed in the Figure 2 it is evident that the sample is equally split between agreement and disagreement on the possibility to generate a living income from selling marine ecosystem services by environmental markets. Many disagree on the need to trade marine ecosystem services in private markets.

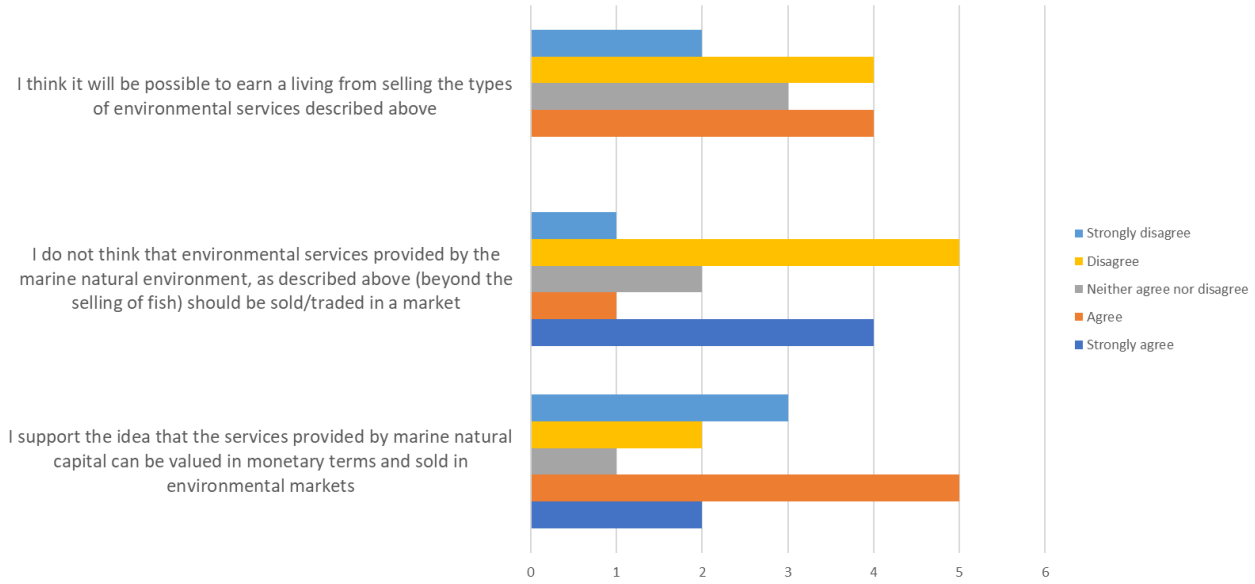

Figure 2: Further ideas on private environmental markets.

Among those who are in favour of private markets, it emerged that respondents preferred the option of environmental services being sold as a bundle which should include carbon, nitrogen, and biodiversity (Figure 3), followed by the option of selling biodiversity credits on their own. However, those who suggested other options mainly expressed negative thoughts on the idea of commodifying marine environmental services, pointing to the idea that environmental credits:

"…can be used by privates for carbon off-settings with the risk that the total value of carbon in the atmosphere does decrease (greenwashing)".

In addition, they stated that:

"Commodifying nature can generate unfair and unjust market condition that advantages who is already rich".

From this narrative, it emerged firmly that:

"The monetisation of the environment should be valued intrinsically for its own sake",

and that:

"A community-based, well-being economy approach is unlikely to arrive at private investment as the solution".

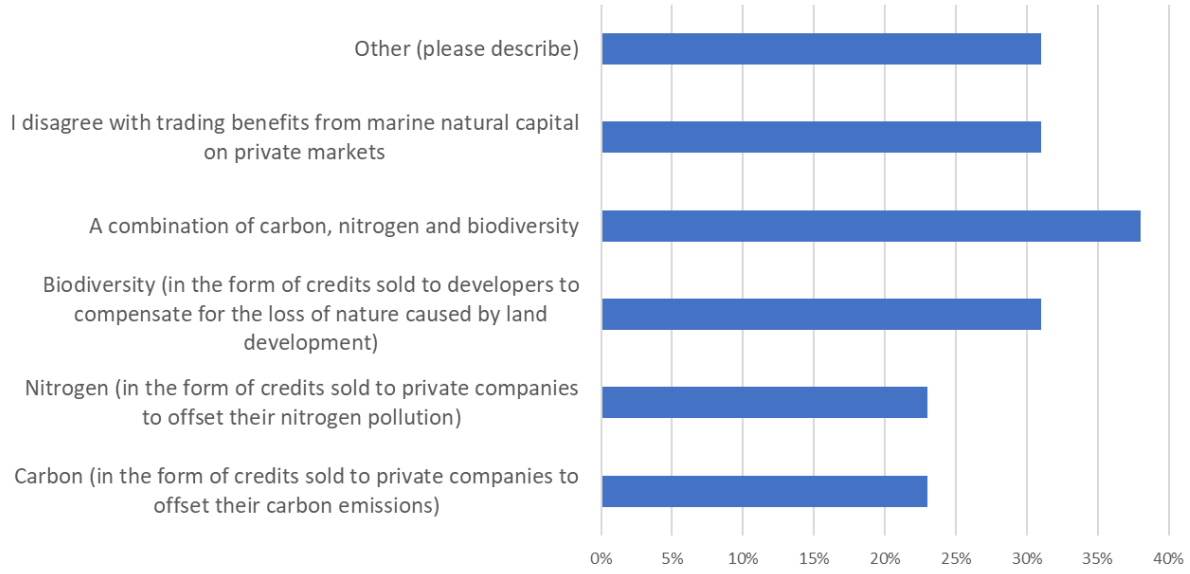

Figure 3: Types of environmental services that could be traded.

Looking at the specific responses on the benefits of implementing oyster restoration projects, the sample agreed that these projects may generate positive effects for the environment, especially for conservation and restoration of biodiversity and for the removal of pollution, and for communities, with the possibility of increasing new jobs in conservation and volunteering activities (Figure 4).

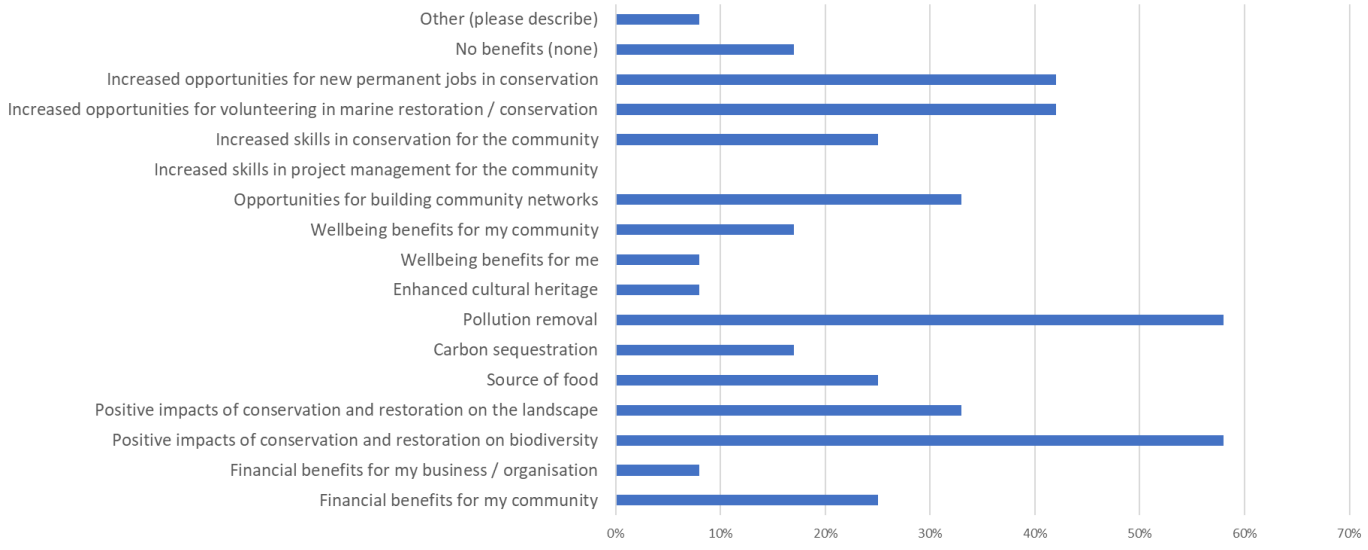

Figure 4: Benefits of oyster restoration projects.

These benefits, if achieved through environmental markets, must be accompanied by support to the community (Figure 5), with special consideration for income to be reinvested in the conservation and recovery of marine habitats, biodiversity, and the increase of recreational areas.

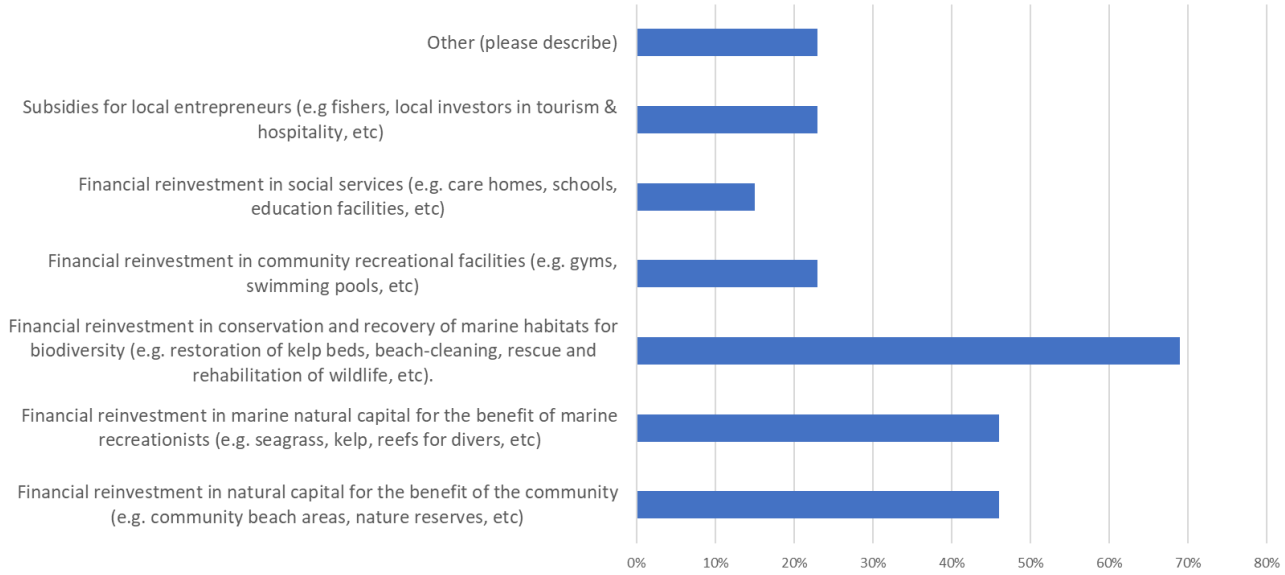

Figure 5: Preferences for supporting coastal communities.

There are also a series of risks that the introduction of marine environmental markets may cause. Amongst the most considered, there is the fear that communities will not be involved in the organization of the markets and that their voices will not be heard (Figure 6).

Figure 6: Risks of environmental markets.

Findings from the general public

A general public sample of 248 people replied to our questionnaire. More than half (56%) stated that they have no connection with the marine environment, while 12% stated that they live in a coastal zone without declaring any other specific link with the coastal and marine environment. The remaining 32% stated that they have a connection (based on work or leisure relationships) with the marine environment. Most of the people (57%) is well rooted in the areas where they reside, stating to have lived there for at least 10 years.

Respondents participating in the survey are mainly from big cities and the surrounding areas of Glasgow, Edinburgh, Aberdeen, Inverness, Dundee, Kilmarnock, and other municipalities located in the Argyll area (e.g., Oban). More than half (56%) of the sample is represented by men and 84% falls within the age group 30 to 65. As regards the level of education, the sample is characterised by people with a university degree (31%), while 15% declared themselves to have a post-graduate title, and 44% stated that they have obtained a high school education degree. More than half of the sample is in full time employment (54%), while those lacking employment make up 13%, and those retired, 7%. This sample is made up of Scottish (79%) and other nationals from the UK (11%). The remaining 10% are European and international citizens. The answers provided below refer to the entire sample from the general public.

Most of the sample agreed and strongly agreed on the need to conserve the marine environment. In addition, nearly two-thirds declared themselves to have interests in the management of the marine environment, although 54% said felt that they do not have the ability to influence it.

The marine environment is seen to offer several opportunities. Relational values, feeling a connection with nature, opportunities for health, wellbeing and happiness were the options most frequently selected (Figure 7). A relevant number of answers considered the intrinsic value of conserving the marine environment for its own sake.

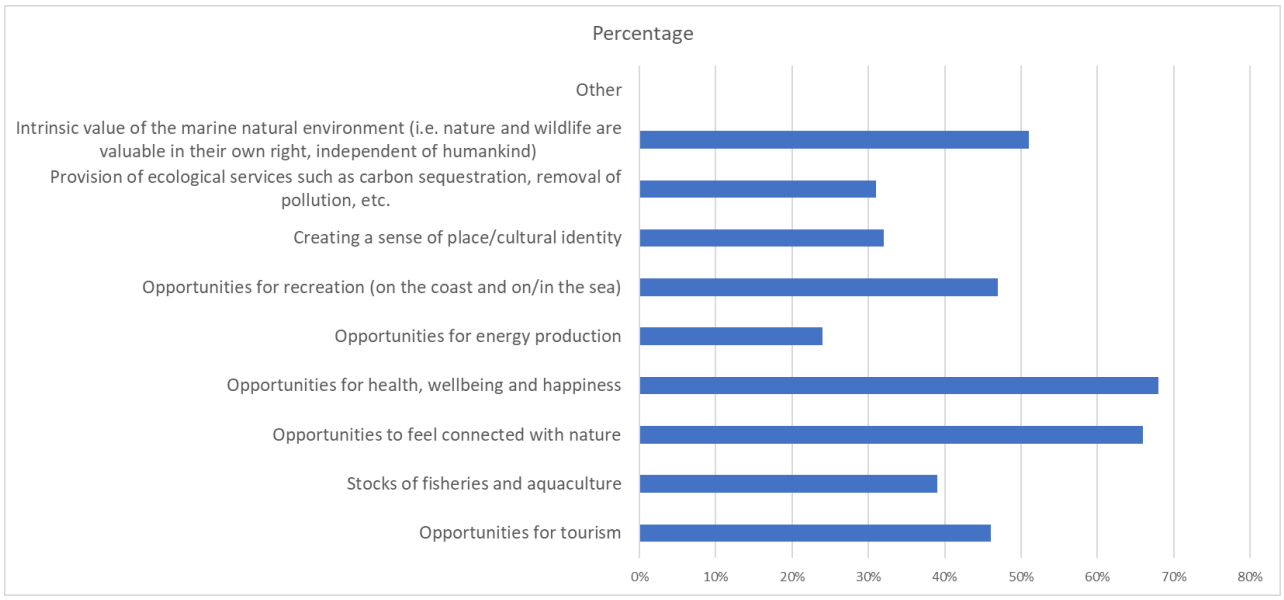

Figure 7: Opportunities and values generated around marine/coastal areas.

The sample considered important different types of financial support to protect the marine environment. Compared with the answers provided by the marine stakeholders, it showed positive ideas on the possibility of utilising private funding (Figure 8).

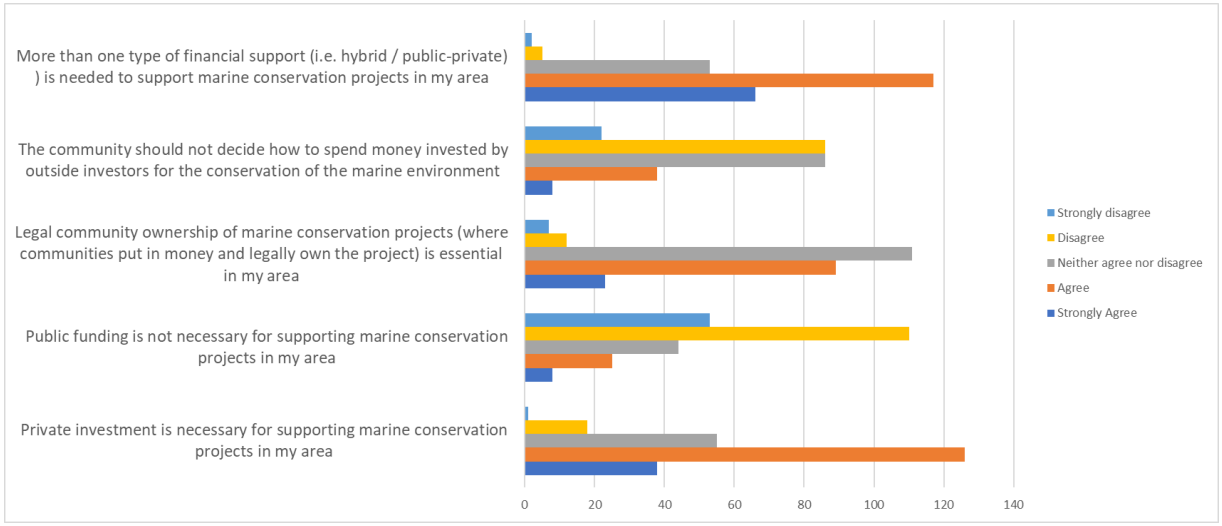

Figure 8: Modalities to support marine conservation.

To support the findings of the previous figure, Figure 9 shows that people considered that it was important to obtain income from selling environmental services. Therefore, ideas around valuing these services in monetary terms are not refuted.

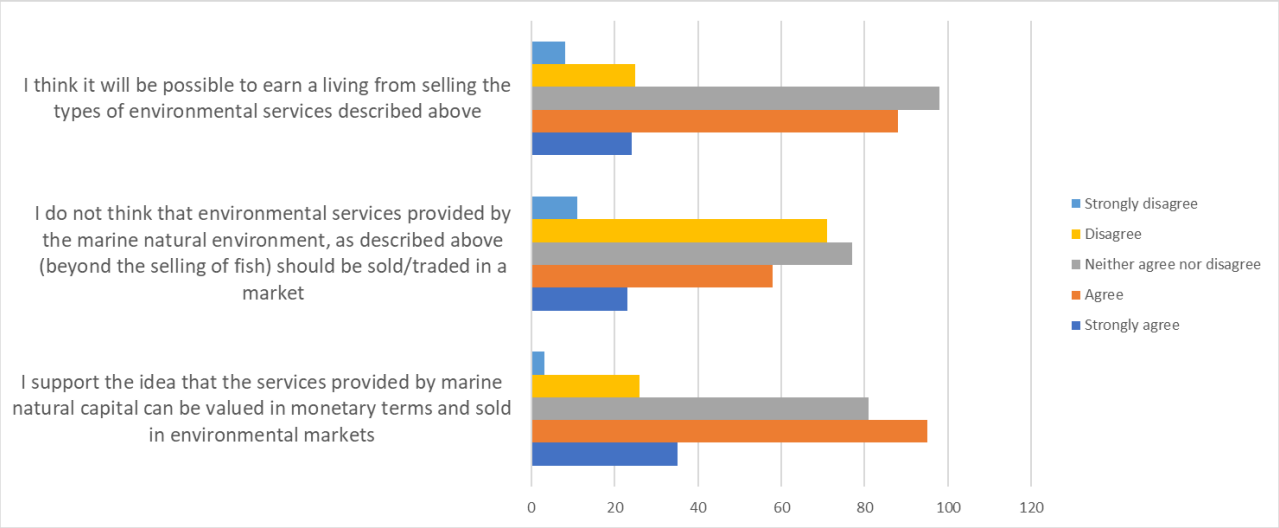

Figure 9: Further ideas on environmental markets.

However, those who disagree with the idea that marine ecosystem services should be traded stated their concerns about the commodification of nature, emphasizing that profits should not be made at the expense of nature conservation. For some people, this motivation is mainly related to ethical motivations that guide their thinking to believe that commodification cannot be the right thing to do. One respondent stated that the Scottish Government should provide the funding for the common good to protect the environment. Many others declared that they do not have the right knowledge about environmental markets to answer comprehensibly and do not have the necessary level of understanding to know what consequences may arise from their implementation.

Finally, as per answers provided by the coastal and marine stakeholders, the public stated that ecosystem services should be traded as a bundle to remove pollution and increase biodiversity, followed by a preference for credits for biodiversity protection to compensate for the loss of nature caused by development (Figure 10).

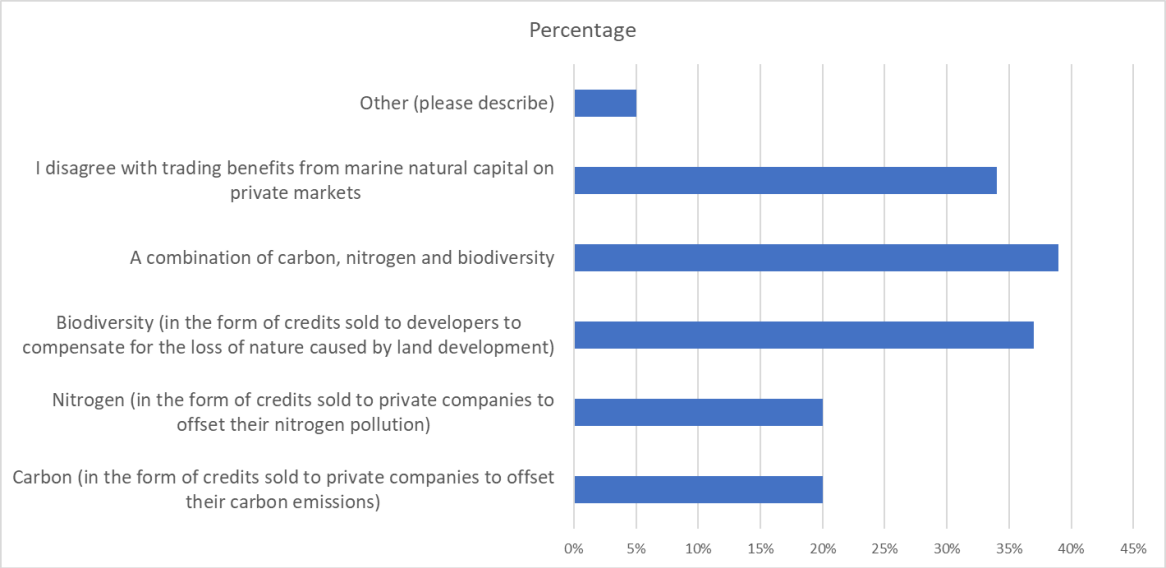

Figure 10: Preferences for tradable ecosystem services.

Notwithstanding that most of the answers in Figure 10 make the claim to sell a bundle of ecosystem services, many disagreed with the idea of trading benefits from marine natural capital. The reasons for this choice may be related to lack of awareness of how this can be achieved and the consequences of this choice, since some people stated that they have difficulty understanding how carbon and nitrogen credits work.

As regards to the specific questions on investments in oyster reefs (Figure 11), only 10% of the sample (nearly 25 answers) stated that they lived near a native oyster restoration project. Among them, nearly 35% stated that they had no direct involvement, but supported the project, while 25% (6 responses) declared that they contribute to the management of the oyster restoration.

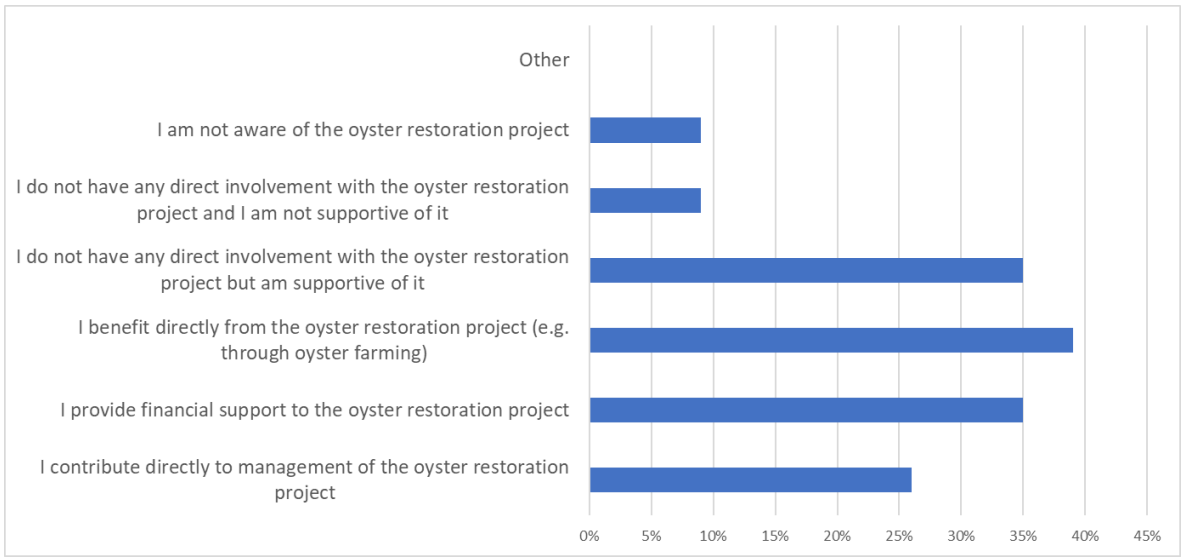

Figure 11: General involvement in oyster restoration project.

As per statements proposed by the coastal and marine stakeholders, the public agreed that oyster restoration may generate several benefits to the environment and communities. From the options proposed, the most expected benefits were the removal of pollution, the restoration of landscape and habitats, and increases in biodiversity, alongside the possibility that the number of permanent jobs will increase and financial benefits for the communities will be provided (Figure 12).

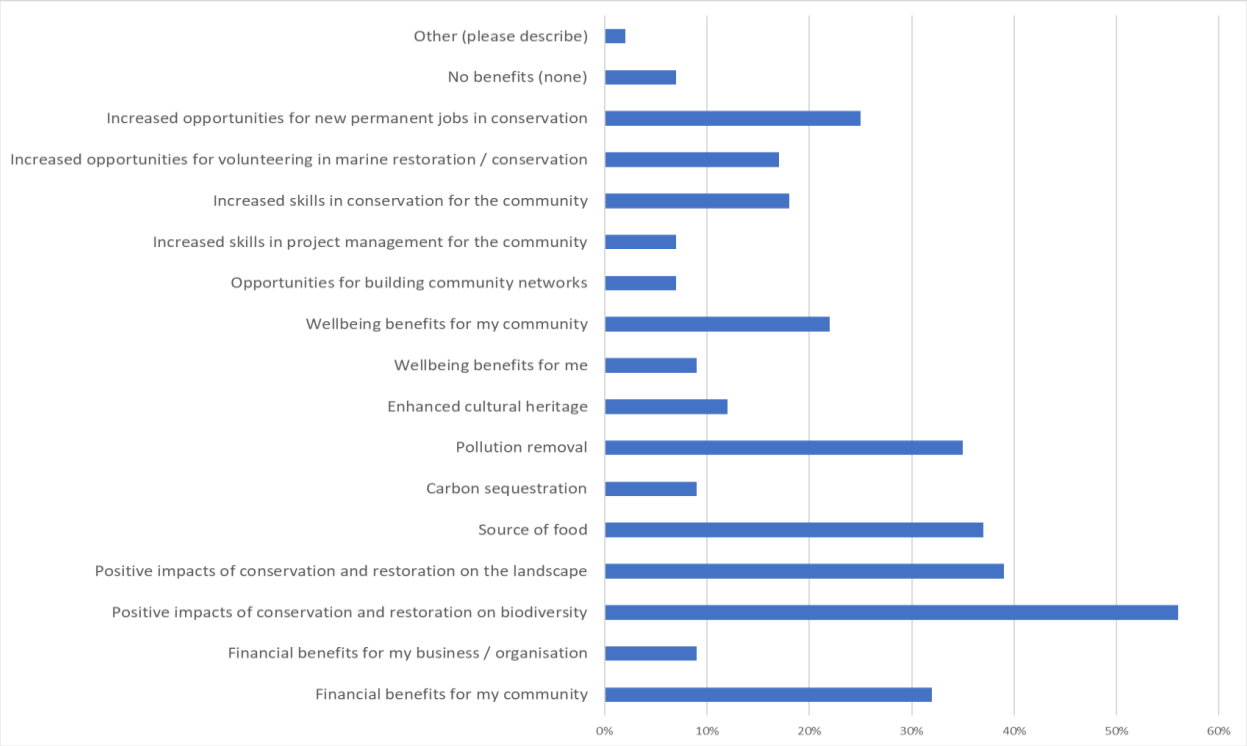

Figure 12: Perceived benefits arising from oyster restoration projects.

The main benefits expected from private investments in environmental markets for communities were suggested to come in the form of reinvestments in conservation and recovery for marine habitats, and in the creation of community beach areas or nature reserves, etc. A level of interest is also expressed for reinvesting money in social (e.g. schools) and recreational services and for subsidizing local entrepreneurs.

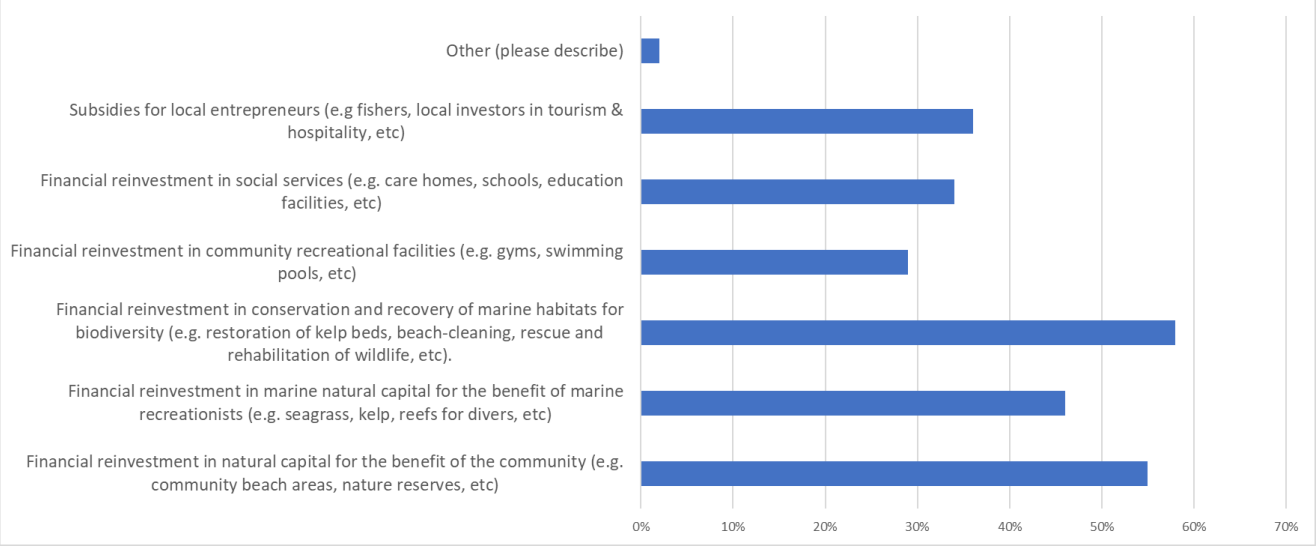

Figure 13: Preferences in support of local communities.

Finally, Figure 14 contains the list of risks that marine private investments may cause to the environment and local communities. Among the highest risks, people mentioned the likelihood that communities will not receive any benefits from the natural capital investment, which would have negative impacts on the quality of landscape, fears of more traffic in the areas affected by projects, and unwanted built infrastructures that may limit accessibility to the marine environment.

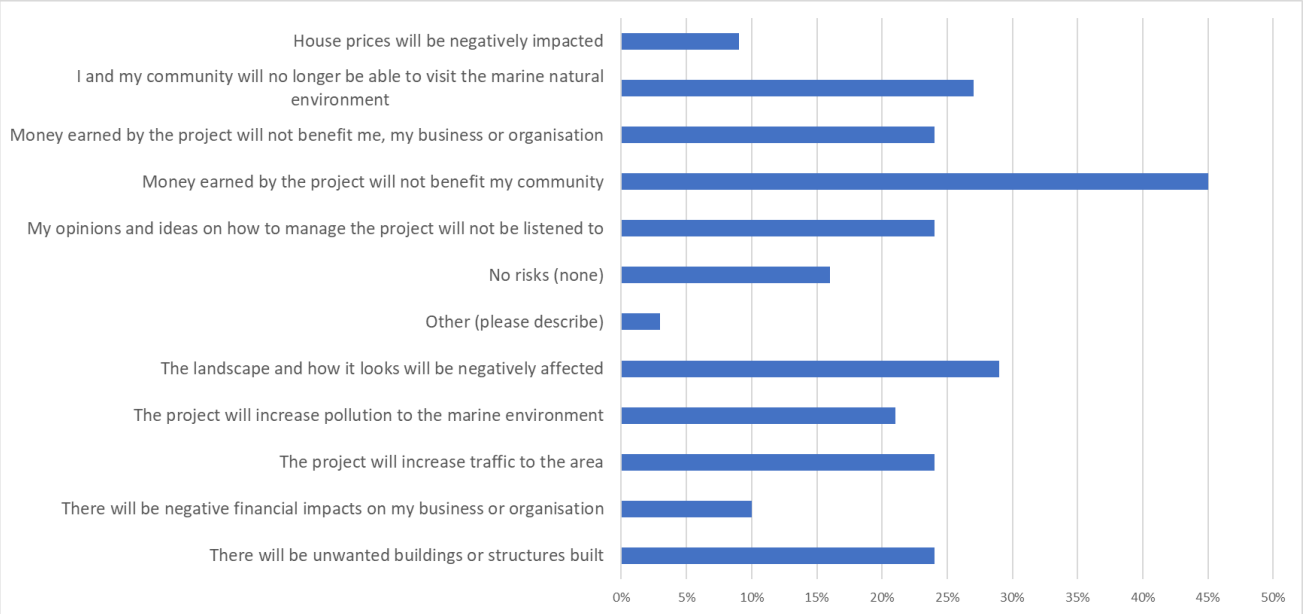

Figure 14: Expected risks for the communities arising from private environmental markets.

Conclusions

Responses from the two samples showed some common ideas about the benefits, opportunities and risks arising from the implementation of environmental markets for the marine environment and communities. The main differences can be seen in the highest rate of appreciation manifested by the public on the adoption of private investments to protect the environment. However, there is not a unanimous voice. Those who replied in a negative way adduced ethical motivations to justify their disapproval for the establishment of marine environmental markets.

In both samples, respondents recognised that marine ecosystems should be valued for their multiple attributes, and conservation should be delivered not only to guarantee use values, but also to strengthen reciprocity between humans and nature. Among the people surveyed there is agreement on the use of private markets to protect the environment and support marine habitats restoration by oyster reef conservation. Private markets should focus on targeting a bundle of ecosystem services, with positive benefits arising mainly from the removal of pollution and the generation of financial support to communities.

However, there is also concern that communities will not benefit from private investments and that their opinions will not be listened to. From a relevant number of responses, it emerged that natural capital is considered by some to be a negative idea as it may lead private companies to control the natural world. Therefore, public conversations on community-led coastal and marine management are needed, without any prescriptions on the implementation of natural capital markets. We found that ideas emerged from the survey are aligned to considerations recently proposed by the Brussel Green Finance Observatory (GFO) on activities carried out by the Community Advisory Panel (CAP) of the UN-backed Biodiversity Credit Alliance. The GFO recommended Indigenous Peoples and local communities to be involved in the debate for biodiversity credits because they still have little voice in the CAP since this is mostly comprised of carbon and biodiversity issuers whose economic interest is to see these markets to be fully operative (Ferraglioni, 2024).

Acknowledgement

This report was funded by the FIRNS project "Enabling Markets for Marine Natural Capital" sponsored by Nature Scot and the National Heritage Lottery Fund.

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Appendix – questionnaire survey

Dear Participant,

This research aims to explore the potential for creating a market in marine natural capital (marine natural resources that people depend upon and benefit from), in a way that genuinely includes and supports local communities in Scotland. In particular, we wish to understand the potential benefits, opportunities, drawbacks, and risks of private sector investment in oyster restoration projects, for local communities. The research is being carried out by two research institutes: the James Hutton Institute and the Scottish Association for Marine Science (SAMS), in partnership with the Kaly Group, an entrepreneurial platform focused on nature-based solutions and natural capital in the marine environment. The research is funded by the Scottish Government and NatureScot, in partnership with the National Lottery Heritage Fund, under the new Facility for Investment Ready Nature in Scotland (FIRNS) grant scheme.

This survey can be answered by individuals or representatives of organisations and will focus on exploring any interest you or your organisation may have in the establishment of a local marine natural capital market in your area. You will also be asked a number of specific demographic questions to help us understand how social and economic factors shape perceptions and experiences of the potential impacts of marine natural capital markets.

Participation is voluntary, you do not have to answer all the questions, and you are free to withdraw at any point while completing the survey without penalty and without giving any reason.

The results will inform the next stages of our research, which will include: interviews with stakeholders, an in-person workshop with a specific community case study, and an online workshop with representatives from the financial and legal sectors that will inform the creation of a steering group for a local marine natural capital restoration project. If you would like to be involved in any of these activities, you can let us know using the contact details provided at the end of the survey. We welcome any interest in taking part in our follow-up research activities, however this is not a requirement for participating in the survey.

This survey may involve the collection of personal or identifying information for which the James Hutton Institute ('we', 'us', 'our') is the data controller. Our full privacy notice is available at www.hutton.ac.uk/terms. Your data may be shared only with researchers at our project partner SAMS, which is also a data controller when they access and use this data. We rely on our research tasks which we perform in the public interest for collecting and using potentially identifying information, such as the first part of your postcode (e.g. AB15), via the survey.

Where we rely on your consent, i.e. for collecting and using your contact details with regard to your further participation in this project, you have the right to withdraw your consent and ask us to delete this information at any time. To do this, you may contact katy.joyce@hutton.ac.uk.

Your postcode is requested to give us your geographical location in relation to local oyster restoration projects carried out in Scotland. Only material where your identifying details have been replaced with codes will be analysed and used in project outputs. Personal data will be destroyed at the end of the project. Only coded data will be retained for further research, archiving, and publications. The data will not make you identifiable.

If you have any questions about this survey, or the 'Enabling Markets for Marine Natural Capital: Facility for Investment Ready Nature in Scotland (FIRNS)' project, please contact Dr Simone Martino at: simone.martino@hutton.ac.uk.

By checking the 'yes' box below you consent to take part in this survey and for your answers to be used by the 'Enabling Markets for Marine Natural Capital: Facility for Investment Ready Nature in Scotland (FIRNS)' project.

I consent to taking part in this survey:

Yes/no

I am over 18 years of age:

Yes/no

Please provide the first part of your postcode (e.g. AB15) or name the town / village you live in:

How long have you lived in this location?

Less than 3 years

Between 3 and 10 years

Between 10 and 20 years

More than 20 years

What is your gender identity?

Man

Woman

Transgender

Non-binary

I prefer not to say

I prefer to self-describe

How old are you?

18-29

30-49

50-65

66+

I prefer not to say

What is your highest level of education?

National 5s / GCSEs (or equivalent)

Highers / advanced highers / A-Levels (or equivalent)

Further education / college

University degree

Postgraduate degree

None of the above

I prefer not to say

Are you:

In full-time employment

In part-time employment

In casual employment

Unemployed

Retired

Other (please describe)

Which of the following best describes your national identity?

Scottish

The rest of the UK

Any other European country

Any other country in the world

The marine environment broadly refers to the nature that exists around coastal, sea, and ocean areas, including people and wildlife, and the resources they depend upon for wellbeing and prosperity.

Do you have any particular links with the marine environment?

Yes, I work in the marine environment

Yes, I spend part of my leisure time in the marine environment

Yes, I both work and spend leisure time in the marine environment

No, I do not have any connection with the marine environment

I live in a coastal area but don't feel a strong connection with the marine environment

Please read the following four statements about the marine environment and indicate to what extent you agree with each of them:

I recognise that there is a need for conservation of the marine environment

I do not have a strong interest in the conservation of the marine environment

I am interested in the management of the marine environment in my area

I do not have the ability to influence the management of the marine environment in my area

What environmental features are you aware of in the marine environment in your area (e.g. sandy beaches, rocky beaches, kelp beds, rocky reefs, sea lochs, etc)?

Please read the following statement and indicate to what extent you agree with it:

The marine natural environment in my area is in good condition

Please explain the reasons for your response:

Which of the following do you value about the marine natural environment (please select a maximum of 5 options)?

Opportunities for tourism

Stocks of fisheries and aquaculture

Opportunities to feel connected with nature

Opportunities for health, wellbeing and happiness

Opportunities for energy production

Opportunities for recreation (on the coast and on/in the sea)

Creating a sense of place/cultural identity

Provision of ecological services such as carbon sequestration, removal of pollution, etc.

Intrinsic value of the marine natural environment (i.e. nature and wildlife are valuable in their own right, independent of humankind)

Other

The environmental features that we find in the marine environment (e.g. water, plankton, seafloor, fish, cetaceans, seabirds) and any environmental **services** that may arise from them (e.g. carbon sequestration, water pollution removal, oxygenation, recreation, human health etc.) can be thought of as **'Marine Natural Capital'**. *The following section explores your opinions about different options for supporting marine natural capital.*

These options include:

- **Private investment**, which means private acquisitions of environmental services. A 'seller' (usually the owner of the environmental feature that provides the service, such as an estate, community trust, or public institution) sells the service to a 'buyer' (such as a private company), who pays for the service. Some or all of the income from these payments is then used to support conservation of the environmental features from which the services are provided. This model is commonly used in Scotland to protect forests and peatlands.
- **Public funding**, which means public money (taxpayer money) is invested in the conservation of environmental features, by the state, to help maintain the provision of the services provided by these features. This is typical of environmental subsidies that are used in agriculture.
- **Legal community ownership**, which is where environmental features are legally owned by local communities. In this case, any money or other benefits from the sale of environmental services associated with these features are received by the community. This is a new idea, but has predominantly been used in land-based environments (such as forests), thus far.

- **Hybrid public-private financial support**, which means that both public money and private money are invested in the conservation of environmental features in the marine environment, to help maintain their provision of environmental services. Any money generated by the sale of these services can be used to repay the investors. A hybrid approach like this is often used to support conservation of peatlands.

Please read each of the following five statements regarding different ways the conservation of marine natural capital could be supported. Please indicate to what extent you agree or disagree with each statement:

Private investment is necessary for supporting marine conservation projects in my area

Public funding is not necessary for supporting marine conservation projects in my area

Legal community ownership of marine conservation projects (where communities put money in and legally own the project) is essential in my area

The community should not decide how to spend money invested by outside investors for the conservation of the marine environment

More than one type of financial support (i.e. hybrid / public-private) is needed to support marine conservation projects in my area

The following section explores your opinions about buying and selling services that marine ecosystems offer such as carbon sequestration (storage), pollution removal, food provision, recreation, habitat creation, biodiversity gain, and protection against coastal erosion. It is possible to create markets that sell and buy these services provided by the marine natural environment. These markets are typically characterised by:

1) a seller of the service who looks after the environment to generate positive public environmental values;
2) private or public buyers who want to buy environmental services to restore habitats, comply with environmental regulations, offset carbon emissions and other types of pollution; and / or
3) investors (public or private) who fund habitat restoration for profit.

Please read each of the following three statements about potential marine natural capital markets. Please indicate to what extent you agree or disagree with each statement:

I support the idea that the services provided by marine natural capital can be valued in monetary terms and sold in environmental markets

I do not think that environmental services provided by the marine natural environment, as described above (beyond the selling of fish) should be sold/traded in a market

I think it will be possible to earn a living from selling the types of environmental services described above

Please use this space to explain your responses to any of the above statements, if you wish.

This section explores your feelings about the specific forms that the sale of benefits generated by marine natural capital could take.

If trading benefits/ecosystem services from marine natural capital was possible, I would like to see exchange for (select any number of the following):

Carbon (in the form of credits sold to private companies to offset their carbon emissions)

Nitrogen (in the form of credits sold to private companies to offset their nitrogen pollution)

Biodiversity (in the form of credits sold to developers to compensate for the loss of nature caused by land development)

A combination of carbon, nitrogen and biodiversity

I disagree with trading benefits from marine natural capital on private markets

Other (please describe)

Is there anything in particular that concerns you about potential private financial investments in the restoration of marine natural capital?

As part of this project, we are exploring what a market in marine natural capital might look like, including the potential benefits and risks associated with this. We would like to understand what processes would need to happen and what measures would need to be in place to ensure such a market involves local communities in planning and decision-making

around it, and how communities may realise any benefits associated with it. The following questions will ask you about your relationship (if any) with oyster restoration projects, and your perspectives on the potential for marine natural capital markets associated with them.

Do you live or work near a native oyster restoration project?

Yes/no

What sort of involvement do you have with the oyster restoration project (please tick all that apply)?

I contribute directly to management of the oyster restoration project

I provide financial support to the oyster restoration project

I benefit directly from the oyster restoration project (e.g. through oyster farming)

I do not have any direct involvement with the oyster restoration project but am supportive of it

I do not have any direct involvement with the oyster restoration project and I am not supportive of it

I am not aware of the oyster restoration project

Other

Please read each of the following two statements about the oyster restoration project in your area. Please indicate to what extent you agree or disagree with each statement.

The oyster restoration project will have a positive impact on the environment

The oyster restoration project will have a positive impact on my community

What do you think would be the most important potential benefits if ecosystem services associated with oyster restoration (such as carbon sequestration) were exchanged between buyers and sellers in your area (please select max 5 options)?

Financial benefits for my community

Financial benefits for my business / organisation

Positive impacts of conservation and restoration on biodiversity

Positive impacts of conservation and restoration on the landscape

Source of food

Carbon sequestration

Pollution removal

Enhanced cultural heritage

Wellbeing benefits for me

Wellbeing benefits for my community

Opportunities for building community networks

Increased skills in project management for the community

Increased skills in conservation for the community

Increased opportunities for volunteering in marine restoration / conservation

Increased opportunities for new permanent jobs in conservation

No benefits (none)

Other (please describe)

What kind of support do you think the local community should receive from private businesses that may benefit from markets in ecosystem services associated with oyster restoration projects?

Financial reinvestment in natural capital for the benefit of the community (e.g. community beach areas, nature reserves, etc)

Financial reinvestment in marine natural capital for the benefit of marine recreationists (e.g. seagrass, kelp, reefs for divers, etc)

Financial reinvestment in conservation and recovery of marine habitats for biodiversity (e.g. restoration of kelp beds, beach-cleaning, rescue and rehabilitation of wildlife, etc).

Financial reinvestment in community recreational facilities (e.g. gyms, swimming pools, etc)

Financial reinvestment in social services (e.g. care homes, schools, education facilities, etc)

Subsidies for local entrepreneurs (e.g fishers, local investors in tourism & hospitality, etc)

Other (please describe)

What do you think are the most important risks of creating a private market for oyster restoration in your area (please select a maximum of 5 options)?

There will be negative financial impacts on my business or organisation

Money earned by the project will not benefit me, my business or organisation

Money earned by the project will not benefit my community

My opinions and ideas on how to manage the project will not be listened to

I and my community will no longer be able to visit the marine natural environment

The landscape and how it looks will be negatively affected

There will be unwanted buildings or structures built

The project will increase pollution to the marine environment

The project will increase traffic to the area

House prices will be negatively impacted

No risks (none)

Other (please describe)

What percentage of any financial benefits, derived from the sale of environmental services associated with oyster restoration projects, do you think the community should receive?

0-10%

11%-25%

26%-50%

51%-75%

76%-99%

100%

If you have any other comments relevant to the topic of the questionnaire, please add them here:

If you would be interested in staying in touch with the research project and / or helping us with future aspects of this research (i.e. stakeholder interviews, workshops) please contact

Simone Martino at: simone.martino@hutton.ac.uk. Please click on the next button to submit your response. You will be redirected to a link which confirms your submission.