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Can payments for ecosystem services encourage shellfish industry growth?

Anton Immink

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Ecosystem services/natural capital

Content

Shellfish provisioning

PES options for Scotland

Challenges and opportunities









TECHNOLOGY INNOVATION



CERTIFICATION IMPROVEMENTS



ENVIRONMENTAL MANAGEMENT



GOVERNANCE DEVELOPMENT



ACTION RESEARCH



PUBLIC-PRIVATE PARTNERSHIPS

Shrimp improvement Indonesia Carp Nepal Scaling tilapia in East Africa PES potential in Scottish shellfish

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Wave attenuation

Cleaner water

Shellfish services

– take it or leave it?

Biodiversity shelter

Plankton filtration

Reef creation

Carbon capture

Coastal stabilisation

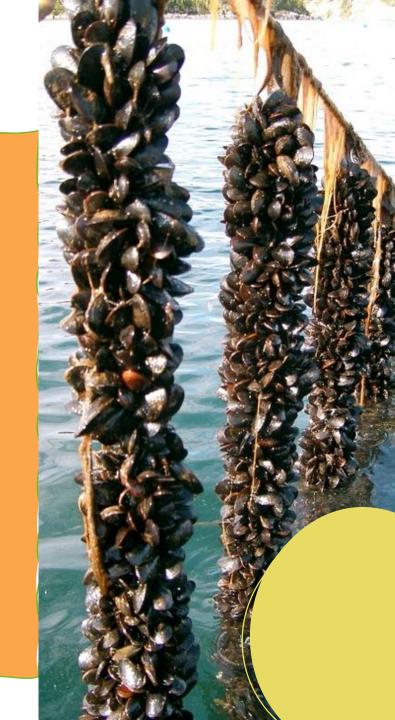


What is PES?

"An economic tool that recognises the value of an activity to provide environmental improvements that have identifiable benefit."

The benefit may be specific or general, but should be measurable / evidenced.

The payment may be made universally (e.g. from taxes) to everyone undertaking the activity or be specific between a beneficiary and provider.



PES potential for Scotland

- Desire to grow the shellfish sector
- Potential to open up new sites/areas
- Political interest (BEAP)
- Shellfish broadly understood to provide a range of ecosystem services
- Could a PES provide incentive to attract new investors/producers?

Funded by Crown Estate Scotland





Scenario development

Single site examples

- Local value
- Good story
- Limited environmental benefit (scale)
- No additionality to volumes
- More for beneficiary

Challenged sites

- Increases volumes
- Addresses direct need
- Data-driven evidence
- Makes the connection between land and sea
- Industry or govt financed?
- Messaging could be about 'cleaning'
- Where to sell this product?
 New markets/tech required

All shellfish system

- Recognises value
- Supports existing sector
- Connects land and sea
- Drive for data
- Only business as usual (current tech) – unless linked to new tech
- Additional volumes?
- Financed from?
- Reputational risk







Challenge 1

Evidence: What data do we need to demonstrate the scale and effectiveness of the ecosystem service?



Challenge 2

Cost: These systems costs money – who pays? How is each service valued? Commercial or political will?



Challenge 3

Reputational risk: existing marketing built on 'clean water' and food safety. 'Inferior' product could undermine that.



Challenge 4

Attracting investors: challenged sites may have lower returns, need PES guarantees, need markets.



info@thinkaqua.org

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