

Sustainable fleet an economic perspective





Menu du jour



Reminders and background concepts

Key economic principles for restructuring the fleet

Economic tools for sustainable fleet

Cost: 20 minutes of your attention

Managing expectations

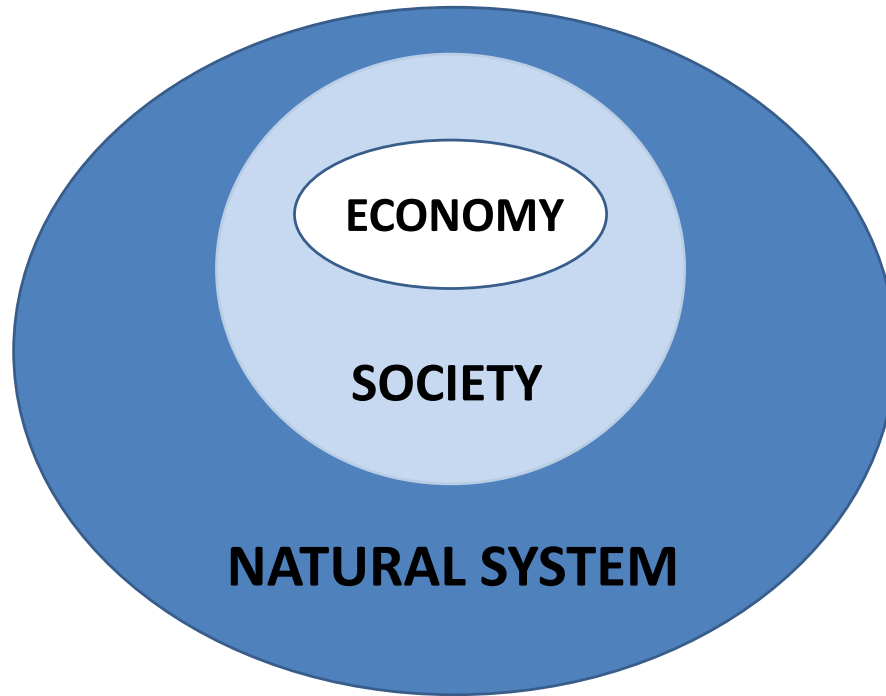
This is complex

We'll not sort it out today !

But hopefully we'll take a big step forward



A natural economy



**“there are no economies without environments,
but there are environments without economies”**

The meaning of “economic”

The term “Economic” has different meanings depending on the context and the user.

In a narrow sense it only refers to market/financial value

In a broader sense it also includes social, environmental value.

How we define it and how we measure it has strong implications for the decisions that we make.



Economic sustainability

From national government perspective:

(narrow)

- achieving economic growth year on year.
- measures success looking at: GVA, GDP, etc.

(wide)

- achieving economic growth while improving our quality of life and the environment.
- measures success “beyond GDP” looking at state of natural and social capital.

Economic sustainability

From business perspective:

(narrow): Long-term profitability.

- Revenue > costs
- Measures success looking at turnover and profit.

(wide): Long-term profitability within environmental limits and in a socially just way.

- Revenue > costs
- Measures success looking at turnover, profit, environmental and social performance.

Economic sustainability in a fisheries context

- *Fishing business* measures success in terms of:
 - net profits and turnover for a particular vessel or group of vessels.
 - return on investment
- *Fisheries manager* measures success in terms of:
 - profitability of the entire fleet
 - positive contribution to regional/national economy (GVA, jobs, etc)
 - independence from public financial support.

A sustainable fleet

Expanding the use of the term economic from its “narrow” financial meaning to a “broader” meaning that (social, environmental and financial aspects) we can define a sustainable fleet as one that:

- 1) is financially viable / profitable
- 2) delivers positive social value
- 3) operates within environmental limits

Key principles for restructuring the fleet



economics

real wealth
means well-being



environment

lifestyles must
become sustainable



society

communities need
power and influence

Reducing / Restructuring the fleet - Principles

Fisheries should be managed to deliver maximum value to society.

Action towards reducing / restructuring the fleet should follow promote “high-value” sectors and reducing “low-value” ones.

Value goes “beyond” financial value and incorporates social and environmental value.

Economic sustainability in a fisheries context

In strict “economic terms” small-scale fishing might be less efficient than large-scale. Higher cost per fish extracted.

But has wider economic, social and environmental benefits.

	Small-scale	Large-scale
Output/cost	low	High
Local social economic impact (jobs, tourism, etc)	High	low

Reducing / Restructuring the fleet - Context

We already know it !

“Government’s role is to manage this asset on behalf of society and to get the most benefits for today’s citizens and future generations. The few in society who catch fish are responsible for doing so efficiently.

This means getting the best possible economic and social benefits from fishing for the least environmental cost – including safeguarding stocks for the future“

(DEFRA, Fisheries 2027 vision)

Reducing / Restructuring the fleet - Context

People realise we need to move to a wider understanding of the term “economic”, beyond pure economic efficiency, beyond financial values and beyond GDP.

But we still operate in a system guided by the “narrow” objectives and tools.

Current use of economics biased towards the “financial” dimension.

Reducing / Restructuring the fleet - Problems

Conventional economic tools don't tell us the whole story

Social / Environmental values are difficult to express in financial terms and these often escape the economic analysis informing decision-making.

Fishing activity that leads to depreciation of natural capital and increases vulnerability of jobs in the fishing sector capital counts as positive contribution to GDP.

We discount future benefits and future costs.

High interest rates make it difficult to invest in long-term ecosystem restoration.

Reducing / Restructuring the fleet - Solutions

If we are to create / restructure a fleet that delivers higher value to society we need tools that tell us the whole story.

Tools that help reveal the impact of decisions and how these affect our natural capital and different stakeholders.

Tools that help answer key questions:

- depreciating the natural capital
- what type of fisheries/fleet deliver the highest value to society?
- how can we incentivise high-value sectors and reduce low-value ones?

Economic tools for a sustainable fleet



economics

real wealth
means well-being



environment

lifestyles must
become sustainable



society

communities need
power and influence

Measure what matters – complement/correct GDP

Several measures have been proposed to correct GDP and account for depreciation of natural capital.

- Genuine savings (World Bank)
- Green GDP
- Index of Sustainable Economic Well-being (ISEW)
- Genuine progressive indicator
- Happy Planet Index
- Fisheries accounts

More effort is needed to apply them to the fisheries context

Measure what matters – and value what matters

Process of understanding, measuring, and reporting on social, environmental and economic value of a particular activity.

Translates social and environmental outcomes into tangible monetary values.

It is an evolved form of Cost-benefit analysis

$$\text{SROI:} \quad \frac{\text{net present value of benefits}}{\text{net present value of investments}}$$

A ratio of 1:3 indicates that an investment of £1 delivers £3 in social value.

Measure what matters – and value what matters

SROI promotes a new way of thinking about value

Helps visualise impact of a decision

Places stakeholders at the heart of the measurement process.

Enables decision-making informed by those things that matter most to people.



Social Return on Investment – data collection

	Small coastal	Large distant
Profitability (€/kg fish)	4.5	3
Employment (man-labour year vessel)	2	10
Local economic impact (income multiplier)	0.4	0.1
C emissions (kg fuel / kg fish)	0.15	0.54

Social Return on Investment – proxies / SROI analysis

	Small coastal	Large distant
Net value of profits	900,000	300,000
Income earned	250,000	700,000
Income that stays in local community	450,000	100,000
Cost of C emissions	15,000	54,000
Total Value	1,615,000	1,154,000
Investment	1,000,000	1,000,000
SROI	1.6	1.15

Social Return on Investment

Issues:

- Defining the boundaries
- Defining the baseline
- Estimating deadweight / attribution / displacement
- Weight of objectives
- Lack of key data collection systems
- Discounting

Discount correctly

Environmental benefits often occur in the mid-long term.

Is it right to discount them at the same level as other factors?

Stern review used a 1% discount rate on the basis that: we can no longer assume that future generations will be richer than us.

Does the same applies to fisheries context? EC looking at this already.

Defining the time-frame - essential !

Final thoughts

The meaning of “Economic” goes beyond “financial”.

Action to reduce & restructure the fleet needs to follow the principle of delivering highest value to society.

There is a mismatch between “sustainability objectives” and the tools available to guide policy-making them.

We need to develop / adapt existing economic tools and appraisal techniques. Some methodologies already available.

There is environment without economies but no economy....

**No one says it's easy
but we need
to try harder !!**



THANK YOU

aniol.esteban@neweconomics.org

www.neweconomics.org