

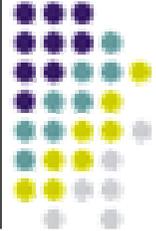


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A comparative review of the fisheries management systems in New Zealand and in the EU



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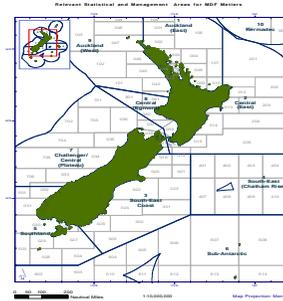
SeaFIC (Wellington, New Zealand) / IFREMER (Boulogne, France)

Marie Curie funded TRANZEF project

EAF symposium, Boulogne s/mer, 6th november 2008

Quick facts

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EEZ (million km ²)	4	25
Employment	2800	200000
No. Vessels 2006	1300	82000
Landings 2006 (million t)	0.5	8
Landings value 2006 (million €)	300 (QMS only)	6680
(million € / person)	0.11	0.03
(million € / vessel)	0.23	0.08
Total imports 2005 (million €)	53	14300
Total exports 2005 (million €)	560	2900
(million € / person)	0.20	0.01
(million € / vessel)	0.43	0.04
Trade balance 2005 (million €)	+511	-11400

Historical background



<p>< 1983</p>	<ul style="list-style-type: none"> •1877: Fisheries Protection Act •1908: First Fisheries Act. •1977: Extension of NZ's EEZ 	<ul style="list-style-type: none"> •1946: NEAFC « recommends » management measures for international stocks (based on ICES) •1970: Earliest common agreement on CFP •1976: Extension of EU's EEZ
<p>1983-1992</p>	<ul style="list-style-type: none"> •1983: Fisheries Act 1983 - MSY •1986: Quota Management System – ITQs •1992: Deed of Settlement: compromise application of Waitangi Treaty 	<ul style="list-style-type: none"> •1983: Common Fisheries Policy implemented <ul style="list-style-type: none"> - equal access to member states' fishery resources - TAC, technical measures, capacity reduction (MAGP) •1986: Spain & Portugal join the EU •1992: Mid-term review & 1st CFP reform
<p>1993-2002</p>	<ul style="list-style-type: none"> •1996: Fisheries Act 1996 <ul style="list-style-type: none"> - tools to strengthen stakeholders participation - includes Deed of Settlement - ecosystem approach 	<ul style="list-style-type: none"> •1998: Strengthening of technical measures •1999: EU-Norway plans for North Sea stocks
<p>2003-</p>	<ul style="list-style-type: none"> •Exchanges between managers, stakeholders and scientists around <ul style="list-style-type: none"> - fisheries plans (some agreed) - full devolution - standards (HCR, targets, processes...) 	<ul style="list-style-type: none"> •2003: 2nd CFP reform <ul style="list-style-type: none"> - multi-annual management/recovery plans, effort limits - tools to strengthen stakeholders participation - ecosystem approach - end of MAGP •2004: Most Baltic Sea countries join the EU

Management processes

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<p>advisory process</p>	<ul style="list-style-type: none"> -well established; -limited quality control / outputs standardising; -broad involvement of stakeholders; 	<ul style="list-style-type: none"> -well established; -substantial quality control / outputs standardising; -limited involvement of stakeholders
<p>operational policy</p>	<ul style="list-style-type: none"> -involvement of stakeholders; -no requirement for annual TAC setting; -costs of fisheries management and research mainly recovered from quota holders ; 	<ul style="list-style-type: none"> -involvement of stakeholders; -requirement for annual TAC setting; -costs of fisheries management and research recovered from tax payers ;
<p>decision-making</p>	<ul style="list-style-type: none"> -precautionary principle; -transparent decisions ; -formalized stakeholders' submissions ; -1 Fisheries Minister ; 	<ul style="list-style-type: none"> -precautionary principle; -untransparent decisions ; -national lobbying from stakeholders -several Fisheries Ministers ;

Management objectives


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FISHERIES ACT 1996:	COMMON FISHERIES POLICY 2002:
<p><i>“ to provide for the utilisation of fisheries resources while ensuring sustainability.</i></p>	<p><i>“shall ensure exploitation of living aquatic resources that provides sustainable economic, environmental and social conditions.</i></p>
<p><i>Ensuring sustainability means (a) maintaining the potential of fisheries resources to meet the reasonably foreseeable needs of future generations;</i></p>	<p><i>For this purpose, the Community shall apply the precautionary approach in taking measures designed to protect and conserve living aquatic resources, to provide for their sustainable exploitation</i></p>
<p><i>and (b) avoiding, remedying, or mitigating any adverse effects of fishing on the aquatic environment.</i></p>	<p><i>and to minimise the impact of fishing activities on marine eco-systems. It shall aim at a progressive implementation of an eco-system-based approach to fisheries management.</i></p>
<p><i>Utilisation means conserving, using, enhancing, and developing fisheries resources to enable people to provide for their social, economic, and cultural well-being ”</i></p>	<p><i>It shall aim to contribute to efficient fishing activities within an economically viable and competitive fisheries and aquaculture industry, providing a fair standard of living for those who depend on fishing activities and taking into account the interests of consumers.”</i></p>

Management principles



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	FISHERIES ACT 1996:	COMMON FISHERIES POLICY 2002:
<i>Stakeholders involvement</i>	<i>“the Minister shall consult with such persons or organisations as the Minister considers are representative of those classes of persons having an interest in the stock or the effects of fishing on the aquatic environment in the area concerned, including Maori, environmental, commercial and recreational interests”</i>	<i>“The Common Fisheries Policy shall be guided by (...) broad involvement of stakeholders at all stages of the policy from conception to implementation”</i>
<i>Good science</i>	<i>“decisions should be based on the best available information”</i>	<i>“the Common Fisheries Policy shall be guided by (...) a decision-making process based on sound scientific advice which delivers timely results”</i>
<i>Precautionary approach</i>	<i>“ the absence of, or any uncertainty in, any information should not be used as a reason for postponing or failing to take any measure to achieve the purpose of this Act”</i>	<i>“the absence of adequate scientific information should not be used as a reason for postponing or failing to take management measures to conserve target species, associated or dependent species and non-target species and their environment”</i>

Management targets



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Explicit in the Fisheries Act 1996:

“The Minister shall set a total allowable catch that maintains the stock at or above a level that can produce the maximum sustainable yield, having regard to the interdependence of stocks”

=> B_{MSY}

Not explicit in the CFP 2002, however multi-annual management/recovery plans established SSB and/or F targets for selected stocks from 1999 onwards

1999-2002: Precautionary (PA) reference points (multi-lateral agreements applicable to, e.g. some North Sea demersal stocks, blue whg)

⇒ Risk-adverse B_{pa} , B_{lim} , F_{pa} , F_{lim} (as defined by ICES)

From 2004: Alternative targets defined in management/recovery plans

⇒ PA reference points but also

⇒ F_{MSY} (e.g. North Sea flatfish)

⇒ F and/or SSB targets specific to multi-annual plans

Management strategies



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Not explicit in the Fisheries Act 1996

However, Harvest Control Rule standards are being developed for all stocks accounting for:

- How productive these stocks are
- What information is available on these stocks

Not explicit in the CFP 2002, however multi-annual management/recovery plans established management strategies, which have developed in complexity since 1999

1999-2002: multi-lateral agreements establish boundaries.

TAC defined so that $B > B_{pa}$ and $F < F_{pa}$

From 2004: multi-annual recovery/management plans:

1. Specify a **true Harvest Control Rule** (North Sea saithe & haddock)
2. Specify an **annual increase/decrease rate** in SSB (cod stocks), fishing mortality (Western Channel sole), or TAC (blue whiting) until the target is achieved
3. **Mixed fisheries plan.** Link the decrease rate in F of by-catch species (Iberian Norway lobster) to the decrease rate in F of a target species (e.g. Southern hake)
4. Still **no strategies** implemented for the vast majority of the stocks managed under the CFP

Fisheries conservation measures



Catch limits	TAC	TAC
Effort limits		Capacity & days at sea restrictions
Technical measures	<ul style="list-style-type: none"> -MLS (11 species) -Discarding banned 	<ul style="list-style-type: none"> -MLS (most quota species) -By-catch limits -Minimum mesh size -Selectivity devices (square-meshed pannels) -Other gear restrictions: e.g. twine thickness -Closed areas/seasons (juveniles/spawners)
Box	Some industry initiatives (hoki)	Management set: Plaice box, cod box, ...

Access regulation measures



Licenses	<ul style="list-style-type: none"> -Administrative -Attached to fishers -Non-transferable 	<ul style="list-style-type: none"> -Administrative -Attached to fishing vessels -Generally transferable officially (Spain, UK) or implicitly through vessel sale (France)
Effort-based taxes and subsidies		Decommissioning schemes
TAC allocation	-ITQ	-A variety of systems

Allocating TACs



TAC – including non-commercial catch

↓ catch

Variable allocation: no clear policy

Quota non-commercial

TACC

Consistent allocation rule:

- ITQ(%)
- ACE = ITQ x TACC
- Some flexibility in catch-balancing provided by deemed value



TAC – assumed to be all commercial

Fixed allocation: relative stability principle

Quota c' try

Quota c' try

Quota ...

↓ 1

↓ 2

↓

No consistent allocation rules across country, e.g.:

1. France, UK:

- Producer Organisations
- IQ, monthly allocation...

2. Denmark

- Administrative weekly quota ration for most stocks
- ITQ recently introduced for herring

3. The Netherlands

- ITQ

4. Spain

- More or less a free competition

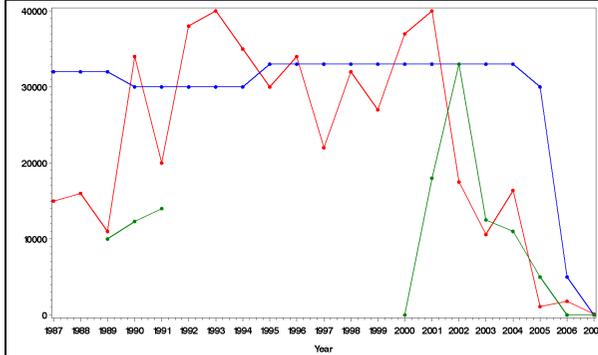
5. ...

TAC, actual catch and catch options

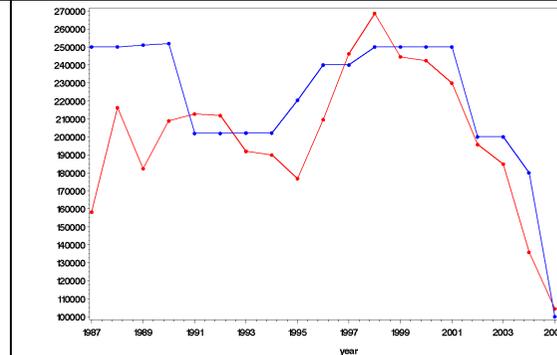
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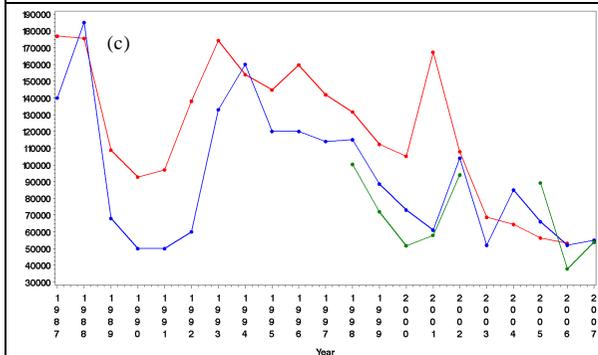
Bay of Biscay anchovy



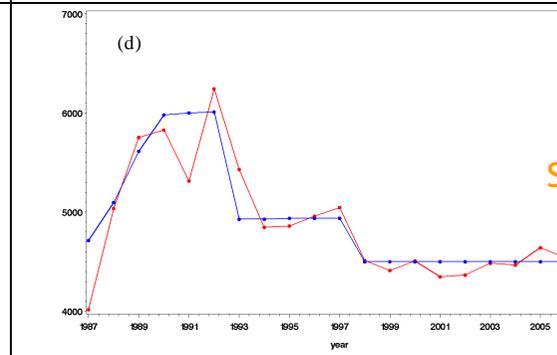
Hoki (HOK1)



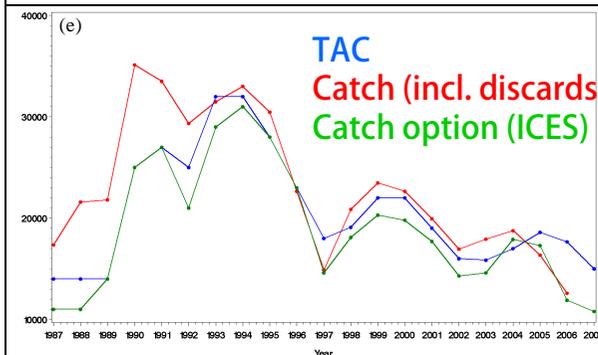
North Sea haddock



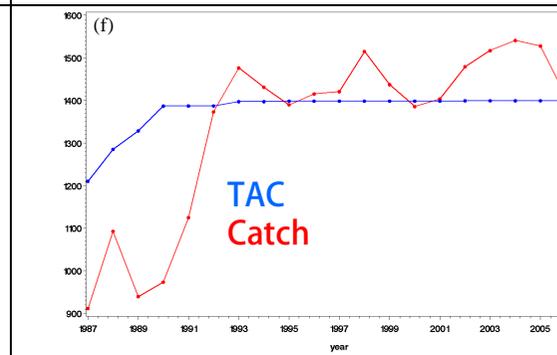
Snapper (SNA1)



North Sea sole

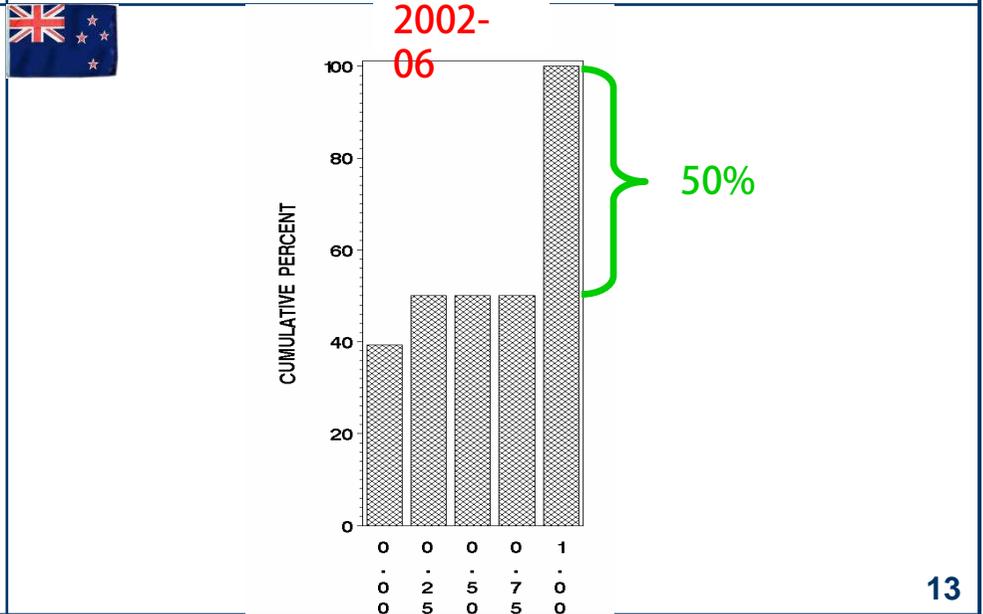
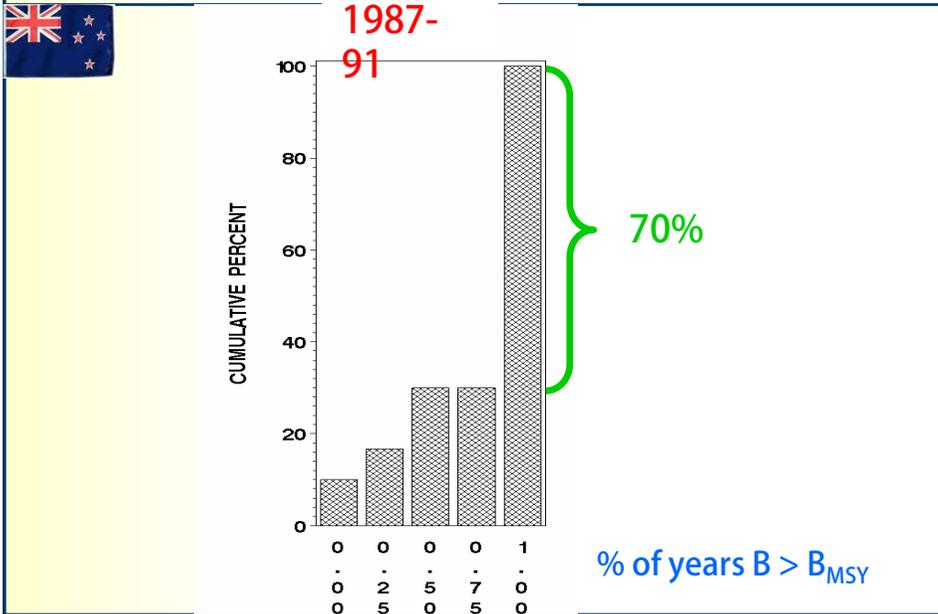
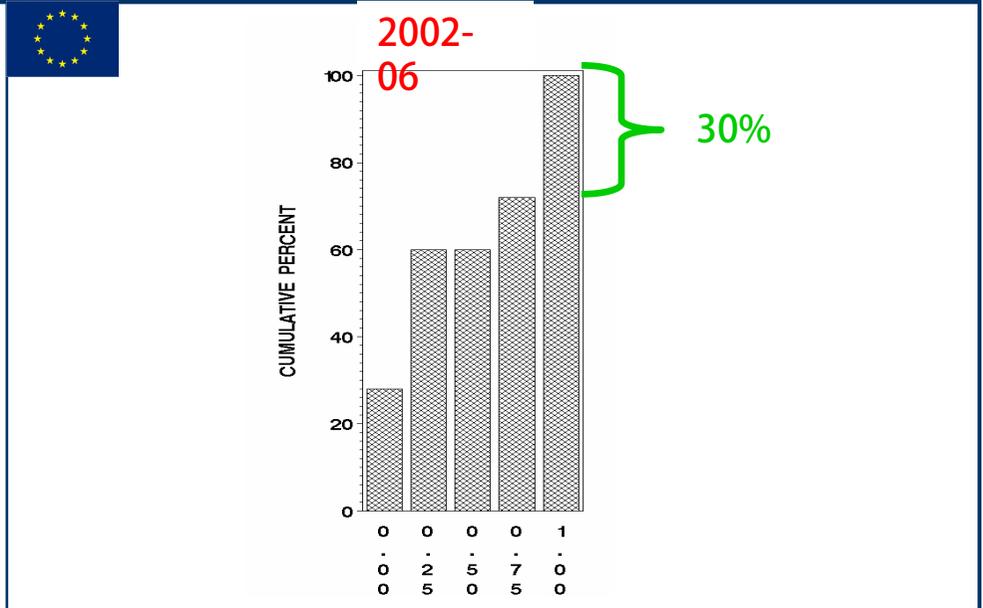
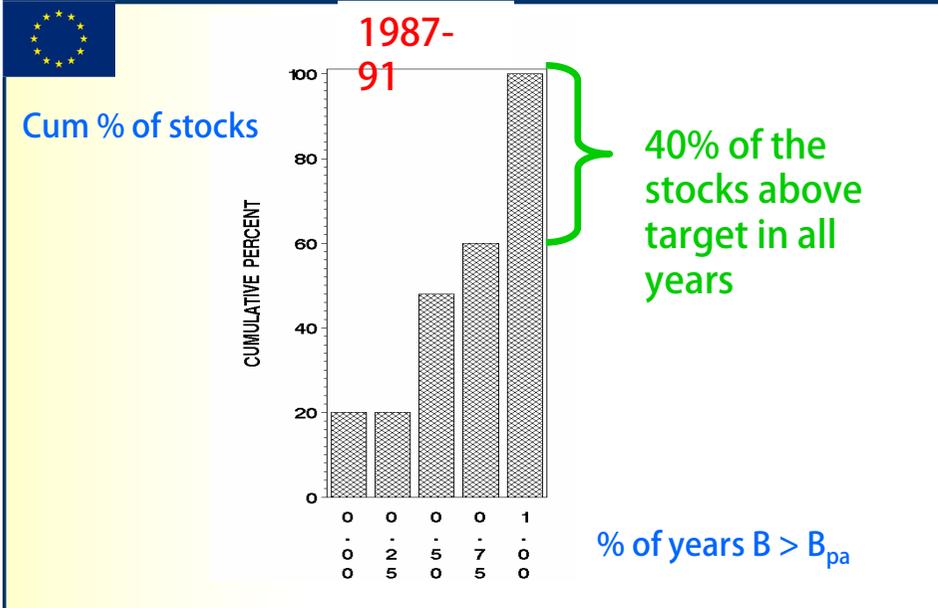


Tarakihi (TAR1)



Sustainability performances

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The future



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- Fisheries plans: towards an **ecosystem-based approach of fisheries.**

- A more holistic Ocean Policy has been considered but is currently in quiescence.

- European maritime strategy: towards an **ecosystem-based approach of the exploitation of the sea**

What could we possibly learn?

- ◆ **Management processes?**
 - Better transparency and broader stakeholder involvement
 - Management decisions more in line with the outcomes of stock assessment
 - Cost recovery (?)

- ◆ **Management targets?**
 - There are merits in quantifying targets in the basic legislation
 - MSY not necessarily the desired target (or even limit)

- ◆ **Management strategies?**
 - Discussions on HCR standards for all stocks (based on production and data availability)

- ◆ **TAC-based management?**
 - Overall simplicity
 - Lack of stock assessments to support TAC-setting
 - May not be valid when stocks heavily depleted

- ◆ **Rights-based management?**
 - Would formalise ad hoc practices and expected gain in economic efficiency
 - Issues: relative stability, social objectives, quota ownership, initial allocation, transferability¹⁵