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Efficiency of CQM Mechanism for Managing EU Fisheries: the Case of the 2011 Danish CQM-Trial

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Project Background

The EU Common Fisheries Policy (**CFP**) is currently facing structural problems. This is mainly due to absence of the stakeholder responsibility. Discards is one of the big challenges, hence the key management measure, i.e. Landing Total Allowable Catches (**TAC**s), seems to have failed. Instead the CFP suggest the use of catch quota management (**CQM**) as a management mechanism for discard reduction. CQM manage fishery by controlling what is caught and not landed, thereby reducing unregistered fishing mortality (Fig. 1).

The suggested solution is the fully documentation of the fishery with active involvement of the resource users in fisheries management, within the perspectives of the result based management (**RBM**). RBM is the management strategy focusing on performance and achievement of results. CQM with remote electronic monitoring (**REM**) system has some RBM – like features, i.e. the documentation system. Hence this makes CQM with REM system (Fig. 2) an interesting mechanism to examine its efficiency in managing the fishery.

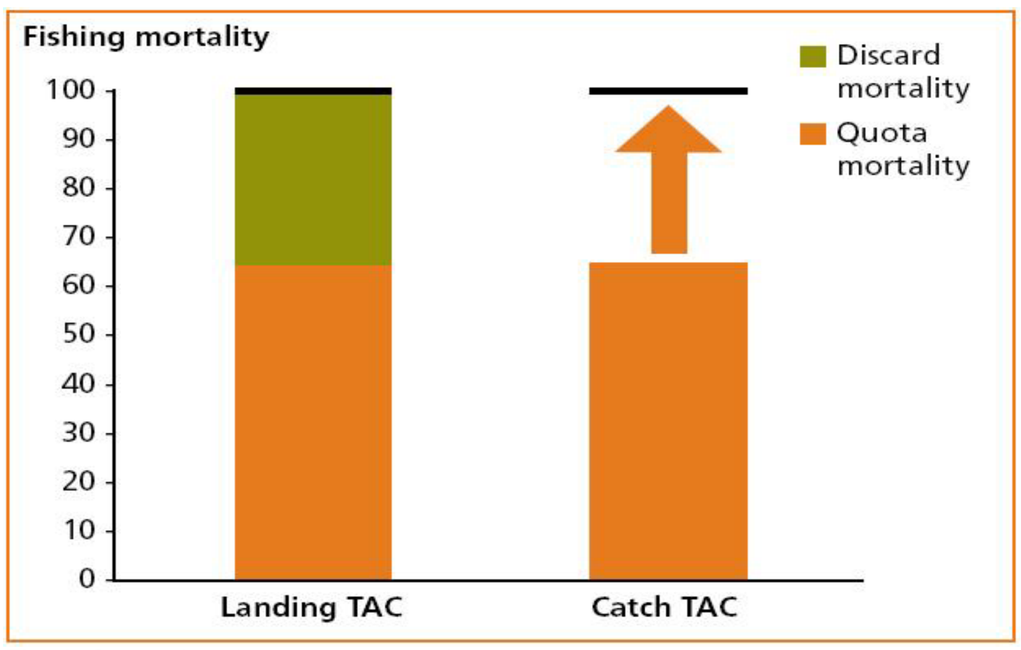


Fig. 1: Comparison between CQM and TAC. Source: Impact Assessment Report of Discard Reducing Policies, 2011.

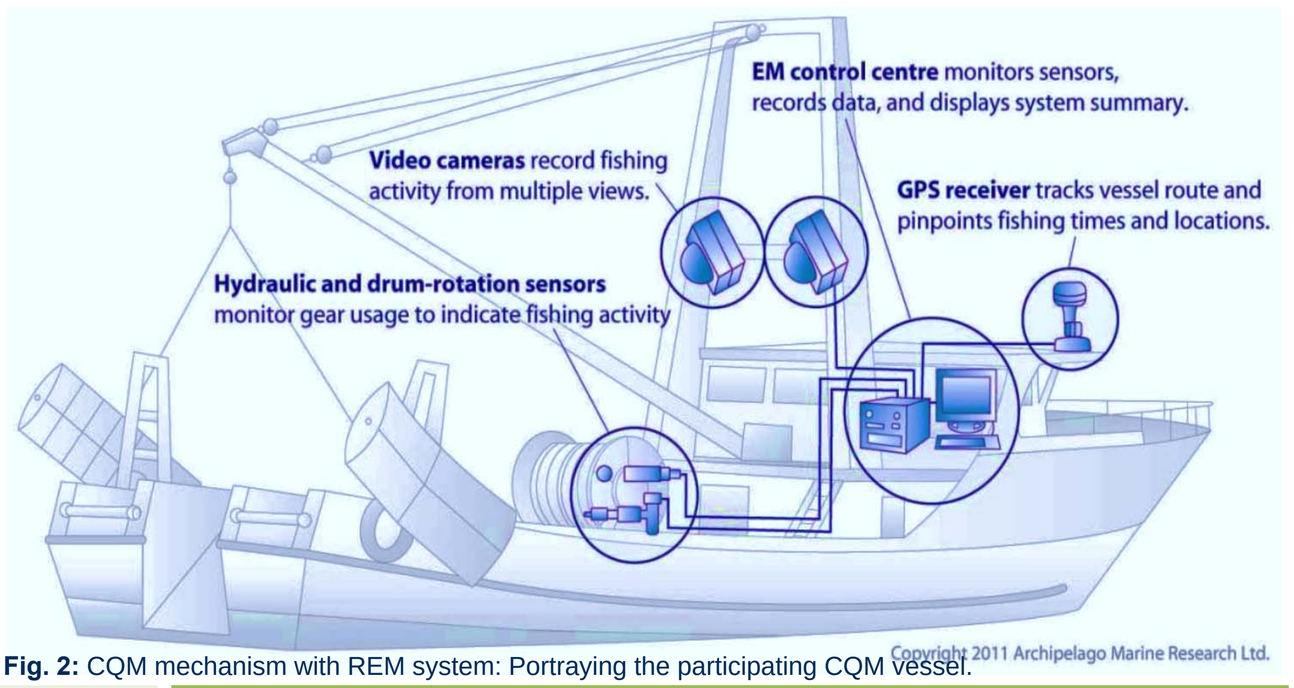


Fig. 2: CQM mechanism with REM system: Portraying the participating CQM vessel.

Objective

To investigate CQM with REM system: Is this an efficient mechanism in EU fisheries management?

Materials and methods

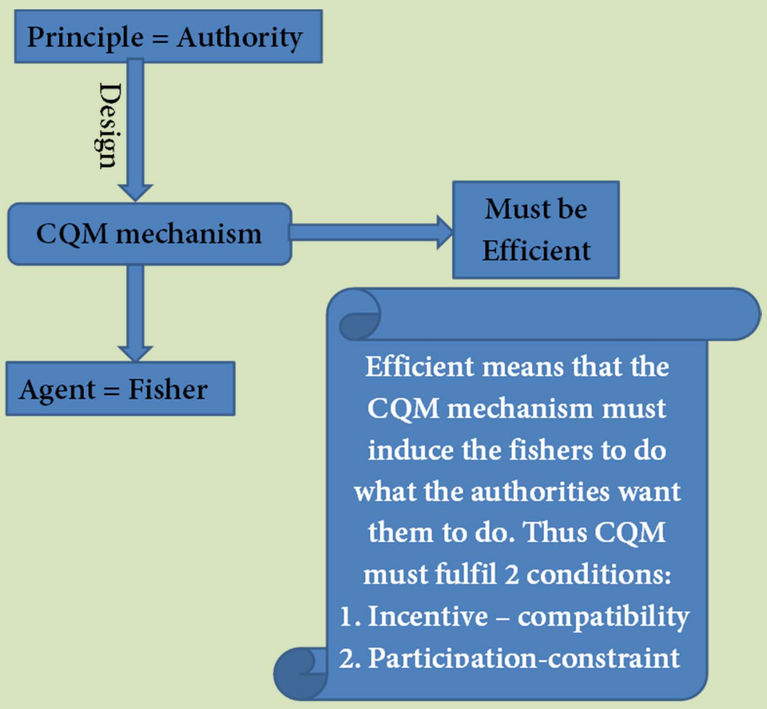
Study Type

A retrospective case study of the 2011 Danish CQM-trial project in the North Sea and Skagerrak.

Main Research question

Does CQM, as a management tool, fulfil the requirements for being an efficient mechanism in fisheries management?

Theory: The principle-agent model



Incentive – compatibility:  CQM-vessel ≥  Non-CQM vessels

Participation - constraints:  CQM-vessel ≥ 0

Preliminary results

- Data from 2011 Danish CQM & non-CQM métiers vessels is used.
- Comparison on harvest income and cost between the two vessel groups are being conducted.
- Preliminary results on price index for cod catch, where the price is weighted by size-grade, indicate that price index for CQM vessels is lower than non-CQM vessels.
- Such results gives an indication that CQM – mechanism may work to avoid high-grading & this is one of the main aims of CQM.
- However for CQM vessels to compensate for lower price index, they must have higher catches.

Further work

The data is still being analysed to test if CQM mechanism is efficient.

We are still working on the landing composition of the other target fish species for CQM and non-CQM vessels

The future work will reveal whether the CQM mechanism is efficient, i.e. that the fishers will behave in accordance to the CQM rules.

We are also preparing and planning for other complimentary paper(s) in connection to how best the stakeholder can be actively involved on the various institutional structural-levels, to ensure a responsive fishery management in Europe