Chapter 9 – Rules for the future: forecasts and hindcasts*

QUESTIONS ASKED

- How do discuss and agree on fishery management plans for the future?
- Can we develop harvest rules in small-scale fisheries, without models?
- How can we express the probable costs of fishing too much or too little?

BACKGROUND INFORMATION

- Wikipedia: <u>Adaptive management</u>
- Wikipedia: Overfishing
- URIRC: <u>Marine Fisheries Co-Management in Senegal</u>
- A fishery: nanoe91 <u>Squid fishing Argentina</u>

COVERAGE

- Harvest rules in a quota managed fishery using a model (parametric)
- Statements and calculations of risk
- Adaptive management in small-scale fisheries (non-parametric)

INFORMATION AND SOFTWARE

The Chapter 9 of FIΣH IT deals with different methods to design harvest rules for the future that can be understood and acceptable by the different agents in a fishery. These agents do not necessarily have deep understanding the dynamics of the stocks, but must be able to express and quantify their goals. The players are asked to formulate strategies, statements of risk and judge the achievements, sometimes in a cooperative way with the other agents in the fishery. The player must understand the socio-economic context of the fishery when developing these strategies. The models used to make forecasts have in-built forms of uncertainty, but are deterministic. This simplifies the calculations of risk by the players.

- Ch9a Forecasts and harvest rules parametric quotas JdS.xlsx
- <u>Ch9b Adaptive harvest rules non-parametric JdS.xlsx</u>



^{*} Santos, J. 2015. FIΣH IT 1.0 – Student Manual: A Training System for Aquatic Resource Managers. Septentrio Educational 2015(3). DOI: <u>http://dx.doi.org/10.7557/se.2015.3</u>. This work is licensed under a <u>Creative Commons Attribution 4.0 International License</u>.

SNAPSHOTS



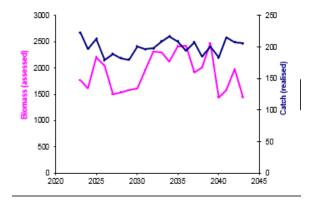


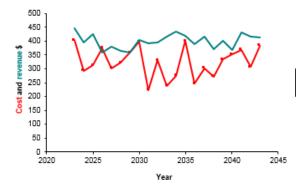






Faizul Latif Chowdhury





Selectivity pattern gillnets

