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ON THE CONTRIBUTIONS OF PROFESSOR RÖGNVALDUR HANNESSON TO FISHERIES ECONOMICS

by
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Scientific production: Survey

- Refereed journals: 85
- Books: 7
- Book chapters, proceedings: 29
- Editor of books
- Editor of special issues of journals
- Consulting, etc.

Classification of the contributions

- Six broad categories, 27 subheadings

- Bioeconomic analysis (28)
- Fisheries management and policy (31)
- Game Theory (10)
- High seas fisheries (11)
- Market studies (11)
- Theoretical contributions (8)

Bioeconomic analysis

- Books and book chapters (6)
- Dynamic bioeconomic modelling (9)
- Optimal capacity and quota allocation (10)
- Bioeconomic production functions (3)

Fisheries management and policy

- Books and book chapters (17)
- Fisheries management: tools and objectives (1)
- Fishermen’s organisations (1)
- Sustainability (2)
- Rights-based management (8)
- Subsidies, buyouts and costs of fisheries management (2)

Fisheries management and policy (continued)

- Rent capture and dissipation (4)
- Fisheries management in individual jurisdictions (10)
- Marine reserves (2)
- Aquaculture (2)
- Climate change (2)

Game theory

- Book chapters (2)

- Game theory and fisheries (8)

High seas fisheries

- Book chapter (1)
- High seas issues (6)
- Extended fisheries jurisdiction (4)

Market studies

- Book chapter (1)
- Empirical studies (6)
- Market strategy (1)
- Fish auctions (3)

Theoretical contributions

- Competition and resource exploitation (4)
- Economic growth (2)
- Market structure (2)

Selected publications

- FISHERIES MANAGEMENT AND POLICY
- *Economics of Fisheries: Some Problems of Efficiency* (Ph.D. dissertation). Lund 1974.

- This is Professor Hannesson's PhD dissertation.
- Efficiency problems in fisheries
- One of the cornerstones in the field.
- Professor Hannesson did his PhD at the University of Lund.
- Spent a year at the University of British Columbia working with Professor Anthony Scott.
- Interacting with other resource economists such as Peter Pearse, Harry Campbell and Paul Bradley.

Selected publications

- BIOECONOMIC ANALYSIS
- *Bioeconomic Analysis of Fisheries.* Published jointly by Fishing News Books and the FAO, Oxford 1993.

- This book is also published in Chinese.
- Illustrates his international character.
- Has served as a consultant to the FAO, OECD, World Bank, governments and other institutions working on fisheries management problems all over the world.
- Points to his role as educator, not only to students of economics and fisheries science, but also to fisheries managers.
- Professor Hannesson must be one of Norway's most international professors, not only in economics, but in any field.

Selected publications

- FISHERY DYNAMICS
- A North Atlantic Cod Fishery. *The Canadian Journal of Economics,* 1975.

- This early contribution from 1975 introduced the idea to that pulse fishing might be optimal.
- The result was derived from numerical optimisation of an empirical model of the North Atlantic cod fishery.
- An absolute novelty at the time.
- Seemed counterintuitive and many researchers strove to find a theoretical explanation.

Selected publications

- OPTIMAL FISHING CAPACITY AND QUOTAS
- How to Set Catch Quotas: Constant Effort or Constant Catch? *Journal of Environmental Economics and Management,* 1991,

- Optimal fishing capacity and quotas is a topic Professor Hannesson has devoted attention to for many years.
- In this article, the consequences of constant fishing effort or constant effort over time on fishermen's incomes and stock sustainability are investigated.
- Context of a dynamic bioeconomic model applied to Arcto-Norwegian cod.

Selected publications

- GAME THEORY
- Fishing as a Supergame. *Journal of Environmental Economics and Management*, 1997.

- A landmark on the economics of International Fisheries Agreements (IFAs).
- Analyses how cooperation on internationally shared fish stocks can be supported by threat strategies.
- The analysis shows that the number of agents compatible with a cooperative self-enforcing solution is not very high for highly mobile fish stocks.
- The analysis on how cost heterogeneity affects the prospects of cooperation is also a notable contribution of this paper.

Selected publications

- GAME THEORY
- Game Theory and Fisheries. *Annual Review of Resource Economics* 2011.

- An excellent survey on the application of game theory to fisheries.
- Covers all major contributions on cooperative and non-cooperative games since the initial papers from the late 1970s.
- The low prospects of cooperation in managing straddling and highly migratory fish stocks, shown in the recent strand of literature on coalition formation games, are overly pessimistic.
- Players are farsighted and therefore, when deviating from an agreement, foresee the subsequent deviations by the other players.

Final comments

- Great inspirator and motivator

- Brought people together and inspired cooperation, also accross various disciplines.

- Seems to know everybody in the field of fisheries economics, but also economics in general and other fields as well.