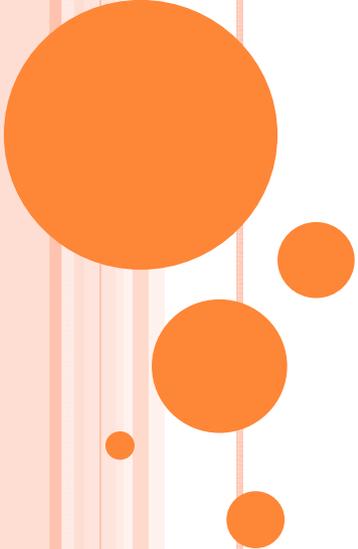


# **SUSTAINABLE GOVERNANCE OF MARINE FISHERIES: A SOCIO-ECOLOGICAL EMBEDDEDNESS PERSPECTIVE**



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# PAPER OBJECTIVES

- Firstly, propose *socio-ecological embeddedness* (SEE) as a normative analytical construct to interrogate sustainable governance of marine fisheries.
- Secondly, to undertake a preliminary assessment of embeddedness of New Zealand's commercial, Maori and recreational fisheries.



# EMBEDDEDNESS THEORY

- Early roots of social embeddedness theory in the works of Polanyi (1944) and Granovetter (1985).
- Whereas the social embeddedness approach emphasises embeddedness of the economy in social and cultural institutions, the ecological embeddedness approach emphasises embeddedness of the economy in the bio-physical environment (Paavola and Ropke, 2008: 15).



# ECOLOGICAL EMBEDDEDNESS

- Recent authors have argued that the “notion of embeddedness can [...] be extended to include natural, as well as social, relations (Murdoch et al., 2000).”
- Our *SEE* approach posits that environmental problems are constructed by irreversible and path-dependent historical processes where social, economic, cultural and ecological aspects are all relevant and that these processes frequently involve conflicts (Paavola and Ropke, 2008: 15).



# SOCIO-ECOLOGICAL EMBEDDEDNESS

- Firstly, there is the *social* context of embeddedness.
- Secondly, there is embeddedness as it relates to relations with *nature*, based on the imperative to recognise sustainability of complex marine ecosystems during fish harvest, including environmentally sound fishing practices and management techniques to avoid ‘tragedy of the commons’ type situations (Penker, 2006).
- Third, there is the *spatial* context, which refers to nested scales of embeddedness of fisheries in local, national and global contextual settings.



# *SEE* OF NEW ZEALAND'S FISHERIES

- Our focus in the following New Zealand case is to ascertain the robustness of New Zealand's QMS framework for fisheries, erected on the pillars of a bio-economic model, to embrace the norms and values of diverse stakeholders and the wider New Zealand society.
- Property rights are a major factor in explaining the differentiated patterns of embeddedness and disembeddedness of commercial, Maori and recreational fisheries. These rights have been radically redefined during the last 25 years through a process of political contestation.



# *SEE* OF COMMERCIAL FISHERIES

- The success of the QMS to set up a commercial export industry is evident to all observers. However, from wider social and ecological perspectives, the embeddedness of New Zealand's commercial fishery is debatable.



# SEE OF COMMERCIAL FISHERIES PT II

- Following the introduction of the QMS within a few short years as many as 1800 small part time fishing enterprises (85 per cent of which were Maori) were forced out of the commercial fisheries (Webster, 2002). Fishing in New Zealand transformed from a casual part-time, artisanal industry to a relatively capital intensive globalised industry with high entry costs.



# SEE OF COMMERCIAL FISHERIES PT III

- The possible disembodied regional social effects of private rights-based commercial fishery are illustrated in Knight's (2007) case study of the commercial Bluff Oyster fishery in the South Island.
- Knight (2007: 87) argues that "The institutions of ownership and property rights that now restrict involvement in the QMS to those with ITQ have resulted in the exclusion from management of a range of viewpoints that had traditionally informed the fishery, and the association between belonging and the resource has broken down... For property rights to work well they must refer to this social basis and they should be embedded in the culture of the commons."



# *SEE* OF MAORI FISHERIES

- The key question is to what extent recent fisheries restitutions have enabled urban and rural Maori to rebuild closer links with their fisheries.



## SEE OF MAORI FISHERIES PT II

- The split between urban/rural Maori, and those affiliated or not affiliated with traditional iwi organisations presents a challenge to effectively granting ‘all Maori’ a part of the settlement riches. Van Meijl (2006: 183) succinctly sums up the situation by observing that “the need to provide social or distributive justice alongside historical or reparative justice has played a prominent role in the debate between the tribal organisations represented by Te Ohu Kai Moana and urban Maori authorities that were also seeking a share of the settlement.”



# SEE OF MAORI FISHERIES PT III

- High Court decisions which have given 'iwi' authority to traditional authorities have disenfranchised some urban Maori. Urban Maori because of this not only have a smaller foothold in the commercial sector but also very limited opportunities to re-establish closer customary links with fisheries. The latter is a significant concern in view of increasing population pressure in Auckland, New Zealand's largest metropolis, on inshore fisheries.
- Stronger embeddedness of Maori customary and commercial fisheries within Maoridom has also been hampered by conflict which emerges when the customary and commercial rights granted under Crown restitution clash with each other.



# *SEE* OF RECREATIONAL FISHERIES

- The creation of the QMS bio-economic regime has created political pressures to disembed recreational fishers from traditional values and norms underpinning the recreational fishing culture.



# SEE OF RECREATIONAL FISHERIES PT II

- Currently, customary rights take priority during the QMS allocation process and commercial fishers have a defined property right to a specific proportion of the TAC. This property right empowers commercial fishers to negotiate with the Minister over TAC reductions, and to demand for compensation when they are reduced. Although there is no *priority* right of commercial fishers over recreational, ITQ property rights give an upper hand to commercial fishers within the quota allocation process than the more limited access rights do for recreational fishers.



# SEE OF RECREATIONAL FISHERIES

## PT III

- Opposition amongst recreational fishers to the Mfish 'Soundings' document has seen the formation of the interest group *option4*. *Option4* demands relative priority in the setting of the TAC over commercial fishing interests.
- Nevertheless, in the short-term, it appears unlikely that QMS allocation processes will be changed to give recreational interests a priority right over commercial fishers.



# CONCLUDING STATEMENTS

- The institutional design of the QMS has helped socio-ecologically embed New Zealand fisheries and its stakeholders in a variety of different spatial contexts.
- But often the successful embedding of one sector (e.g. commercial export industry) has led to others becoming relatively disembedded, powerless and antagonistic.
- These are symptoms of the complexity of New Zealand's fisheries management system, which is much greater than was envisioned by the architects of the QMS.

