

Resource Sharing – Setting and Evaluating the Scene

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Abstract

It is now widely acknowledged that an explicit and well-defined fishery property rights regime can enable the sustainable utilisation, and the long term protection of the marine environment. Within the commercial sector, formal and legally binding trade, exchange, and/or access sharing mechanisms have existed for many years. Trade and exchange is transacted at commercial rates in measurable units of access –for example catch quotas and/or gear entitlements.

Where the community’s aspirations for development of fisheries for all stakeholders and long term protection of the marine environment are to be met, resource sharing regimes that encompass all user groups across a range of fishery scenarios need to be established. Such regimes necessarily will involve consistent and agreed definitions of respective use and access rights, and should include secure and effective mechanisms for exchange within a framework based on property law.

The absence of formal and legally binding resource sharing mechanisms based on explicit rights across user groups – such as recreational, commercial charter, seafood industry, and customary/indigenous extractive users – ensures that allocation decisions by Governments will continue to be subject to political lobby and contest rather than be consistent with the most effective and efficient sustainable use of fisheries and shellfish resources negotiated and agreed by stakeholders.

Under most current access sharing arrangements Governments are faced with continually having to revisit allocations, as the political lobby and populist conservation and social philosophies pressure them for exclusive and/or priority allocations to be made for reasons other than sustainable utilisation. In any event regardless of initial allocation, a system that does not adapt to changing demands will generate pressures for re-allocations.

Enduring resource sharing mechanisms have the potential to bring certainty to all current and future stakeholders whilst creating strong incentives to ensure sustainability of fish stocks and the ecosystems that sustain them.

Background

The craft and the disciplines of fisheries economics have given valuable perspectives into the tragedy of the commons. The application of market led responses to fisheries management problems has halted, or at very least slowed, the degradation of fish stocks. In those situations where rights-based regimes have been thoughtfully implemented and carefully managed, the benefits are evident.

But questions remain - has enough been done? Have we truly halted the tragedy of the commons? Or, have we been let down by the failure of fisheries management agencies and politicians to give proper attention to rights based strategies. By that we mean strategies that seek to improve management by strengthening the property like rights held by fishers.

Fisheries managers have sought ‘*rescue remedies*’, but unfortunately many of those managers have failed to implement effective rights based fisheries management arrangements and have “cherry picked”, tinkered and altered the ingredients.

In this workshop we highlight the value of property rights and the potential of market mechanisms to responsibly address fisheries management issues. However we bring a caution that a “*new tragedy of the commons*” could be played out if the integrity of property rights regimes continues to be eroded.

The nature of the problem

Many inshore fish and shellfish stocks are effectively fully exploited. We refer to them as being “shared fisheries”. Unconstrained catches by one sector are unduly affecting those of others. The absence of properly constituted and mandated non-commercial stakeholder groups constrains and

impedes the opportunity for commercial rights holders to negotiate and agree cost effective fishery plans. Fisheries agencies lack the information and resources, and in many instances, the delegated authority to effectively manage non-commercial catch components.

Only one catch component, commercial – usually the largest – is generally controlled.

Some managers and some stakeholders make erroneous presumptions. For example, “*stocks can be rebuilt if commercial landings are reduced*”. As you are aware this is not true. Stocks can only be rebuilt if catch taken from commercial operators remains in the sea to accrue to the standing stock. In the absence of reliable non-commercial catch data and effective controls on non-commercial removals that may not be the case.

Likewise where restrictions on commercial fishing intended to provide increased catch rates or dollars per unit of effort, or to reduce non-fish interactions, can be subverted by the inability to effectively monitor and control non-commercial fishing, including fish thieving. And, in those situations where competing use (or “non-use” in the case of no-take marine reserves) necessitates the removal of fishing, if no compensatory catch reductions are made to ensure the sustainable utilisation of the remainder of the fishing grounds, the quality of the fishing experience and the status of the stocks are both compromised as a consequence.

Allocating Fixed Proportional Shares Of The Available Yield

It is emphasised that sustainability arises from placing effective controls on removals. There must therefore be some certainty as to the safe levels of removals from fish stocks - the available yields. If yields are not exceeded, harvests are sustainable over time. However if yields are exceeded there is greater uncertainty and increased risk in relation to stock abundance.

There is also uncertainty and risk if the stock assessment process is poorly informed or inappropriate to the stocks under review. Although there is a certain level of confidence in the models being applied in fisheries management, the quality and quantity of data inputs are highly uncertain. If one of the goals of fisheries managers is to make informed decisions, then acquiring “information” must be an essential component of any plan of management for a fishery. For example what is the level of leakage due to fish thieving? It is suggested that this is poorly known.

The first contention is that robust property rights regimes based *on explicit proportional shares of the available yield* for a fish stock provide greater certainty and security to extractive and non-extractive users of the marine environment, and provide greater safety to the status of fishstocks and to the quality of fishing.

That certainty, security, and safety arise from the knowledge that all catch components are defined and therefore able to be managed. Each of the catch components has its own measures of catch and effort, which can be fed back into the regular stock assessment processes.

This feedback loop is an integral part of the fisheries management process. The quality of stock assessments, yield estimates, and thus management arrangements are only as good as the quality of data that informs the decision maker.

The second contention is that robust property rights regimes based on explicit proportional shares of available yield provide incentives for co-operation between extractive user groups. When the catching success of the individual is dependent on overall stock abundance and on the behaviour of all users, there is a much greater individual and collective incentive to take an interest in the status of stocks and fisheries management processes.

Explicit proportional shares of available yield bind extractive and non-extractive users to a common purpose – ensuring the health and abundance of fishstocks and the marine environment.

The third contention is that the allocation of explicit proportional shares of available yield will do much to de-politicise the fisheries management and allocation procedures. The notion that implied shares of catch - such as those which currently exist in the New Zealand fisheries management regime - can be re-distributed or re-allocated according to political whim and fashion, is a fundamental flaw in any property rights regime.

Any and every redistribution or re-allocation should be done by willing and commercially based trade and exchange within and between groups of rights holders.

In the current system of “implied shares”, government agencies attempt to be objective and impartial when mediating disputes between competing users. Invariably the weight of numbers and intervention by politicians compromises that objectivity and impartiality. Decisions to exclude commercial fishing from areas to enhance the quality of recreational fishing are expedient and they may be popular, but they are wrong in terms of the wider vision for sustainable utilisation of marine resources.

Fisheries agencies can be more efficient and more effective when freed from the obligation to balance competing needs. The completed rights-based framework coupled to explicit proportional shares of yield provides the foundation for negotiated agreements between competing users (fishing and non-fishing).

In those circumstances a fisheries agency can legitimately adopt an impartial role responsible for ensuring aggregate catches do not exceed the defined limits. This of course requires properly constituted and mandated non-commercial stakeholder organisations and under this scenario fisheries agencies would retain the responsibility for managing those shares and ensuring that the specified limits are not exceeded.

The fourth contention is that explicit proportional shares of available yield represent the most efficient and effective mechanism to ensure the protection of legitimate non-commercial fishing rights and opportunities. This is particularly so in the case of the amateur fishing sector who generally lack funding, organisation and mandate.

Fixed proportional shares could enable the efficient trade and exchange of fishing opportunity in response to changing community priorities.

Effective controls on catch components underpin the quality of the fishing experience as measured by catch and catch rates.

The primary objective of this workshop is for your consideration and feedback on a framework *that establishes explicit proportional shares of sustainable yields and enables market-led transfer mechanisms that ensure the quality of fishing co-operatively determined by extractive and non-extractive users.*

Intention Collides With Reality

It is fashionable to manage fisheries within a “rights-based framework” but it is almost universal that rights-based frameworks are incomplete.

The commercial property rights to sea fisheries are defined – in quantum, in time, in method, and spatially – whereas non-commercial fishing rights are unspecified (other than an “allowance” being made), unfettered or less well defined than they could (and should) be.

In those situations the outcomes preferred by the community and responsible politicians cannot be fully achieved. Those outcomes include maintenance and/or enhancement of the following benefits and values –

- Conservation
- Economic
- Social
- Cultural
- Amenity
- Existence and intrinsic

There is compelling evidence in Australia, New Zealand and elsewhere, that the full range of benefits is only achieved in a cost effective manner within rights-based regimes, where effective controls are placed on removals from the fisheries (and we emphasise that the central issue is property rights – of which Individual transferable quotas (ITQ’s) are just one subset). Alternatives to ITQ’s are working well in several Australian prawn and lobster fisheries, just as ITQ’s are working well in others, and in New Zealand lobster fisheries.

Working Well?

In what way do these commercial property rights regimes “work well”?

Over time they impart a responsible and custodial attitude towards the resource in which shares are owned. The underlying “*effort and reward*” principles act as an incentive for commercial operators to:

- enhance productivity within sustainable limits,
- maximise economic values,
- individually and collectively contribute to the state of knowledge of the fisheries and
- act cooperatively to implement cost effective and efficient harvest plans.

And most importantly, by their very nature these commercial rights regimes constrain the largest (in most cases) catch component from a fishery to “safe” levels.

It is sometimes said that commercial rights holders are “seafood consumer representatives” and as such carry the additional responsibility for delivering sustainably harvested, hygienic, humane, and nourishing food products.

Commercial property rights to sea fisheries can provide a ‘currency’ with which outstanding historical grievances can be settled.

Commercial property rights provide a basis on which the cost of fisheries management services, including research, or at very least a significant share of that cost, can be recovered from a seafood industry.

And given that commercial fishing generally holds the greatest slice of the pie, and that commercial property rights can trade at high dollar values, it is important that the commercial property rights be secure. The shareholder must have confidence in the safety of his/her investment in order to enact the duty of care towards the resource in which shares are held.

Conclusion

Rights-based management regimes and market-led responses to changing priorities are the tools in trade of fisheries economists. They are conceptually sound and demonstrably effective even in their partial application. However those concepts have yet to achieve their full potential in shared, fully subscribed fisheries.

Commercial property rights holders cannot progress to truly cost efficient and effective fisheries management in the absence of a fully implemented rights based framework. Commercial rights holders grow increasingly frustrated, impatient, and disenchanted as they find their rights being expropriated, compromised, or demeaned by politically expedient decisions and/or conflicting government policies and society is the loser.

We believe that fisheries agencies should complete the rights framework as a matter of urgency – allocate explicit fixed proportional shares – expedite negotiated agreements in relation to competing priorities and use – and maximise the social and economic benefits that can be derived from the sustainable utilisation of productive renewable resources.

The objective - *a framework that establishes explicit proportional shares of sustainable yields and enables market-led transfer mechanisms that ensure the quality of fishing co-operatively determined by extractive and non-extractive users.*