Fish for Food for the Future: The Great Crossover

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Introduction

Since the 1970s the Australian fishing industry[2] has been characterised by the development of key exports for high value, low volume products such as crustacean (such as prawns and lobsters), molluscs and high value fish such as mariculture southern blue fin tuna. Although Australia imported larger volumes of fish in than that which we exported, nonetheless Australia maintained a favourable balance in relation to the value of exports over imports.

In 2007-8 a key 'cross -over' event occurred, both the volume AND value of imports exceeded that of Australian production[3]. This cross-over represents a 'game change' milestone. For the domestic fishing industry it cements a long term shift towards domestic markets and consumers. Current trends point towards domestic markets and domestic consumers becoming the primary focus for the industry, with ongoing cost and productivity improvements the key strategic issue. These shifts require changes in industry and government if the fishing industry is to thrive.

Competitiveness and Key Drivers of Change

The key drivers of this change are the increasing global competiveness of the marine based aquaculture on the one hand, and the expansion of Australian domestic markets on the other. Aquaculture represents an opportunity for Australia, but it is an activity that over time will gravitate to those countries which have a competitive advantage in production. The growth of aquaculture in Asia in particular has been astonishing[4]. Australia is a key market target for the seafood exports of

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[2] Wild fisheries and marine based aquaculture for convenience referred to as 'the fishing industry'. Typically both sectors are targeting the same consumers, are involved with the same agencies and may have a crossover of ownership/interests. Wholly land based aquaculture that is not reliant on natural eco-systems is excluded from this definition, such operations are closer in nature to industrial farming such as intensive pig farms.

[3] ABARE (2009) Australian Fisheries Statistics. Canberra, Australian Bureau of Agricultural and Resource Economics. At page 18.

[4] See, FAO (2009) The State of World Fisheries and Aquaculture. Rome Food and Agricultural Organisation of the United Nations. At page 6.

developing countries in Asia[5]. Australia is developing a trade profile more typical of other developed countries as a net importer of 'high value' species[6] .

The result has been that the prices of our high valued export species have declined 53% in real terms since 1998-9, with exports values down by 49%[7]. A similar decline does not appear to have occurred in the prices of fresh scale fin fish oriented to the domestic market[8]. This is despite the very substantial rise of fresh salmon supplies from Tasmania[9]. That a similar price decline has not occurred to the same extent in relation to domestic wild fin fish prices suggests that observed price falls of high valued species is not due to general Australian market conditions (i.e. local demand factors) , but global competition in relation to certain species.

The winds of change are most clearly seen in Australia's prawn fisheries. The first wave of competition from aquaculture came from being the development of the P. monodon (black tiger) aquaculture industry in Thailand and other Asian countries in the 1980s. There is now a second wave of low cost imports of P. vannamei prawns, including from China. The result has seen prawns as a category declining from being an emblematic Australian icon (recall Paul Hogan's "put a shrimp on the barbie") to prawns being cost loss leaders for major supermarkets with full page advertisements in daily newspapers [10].

Domestic Opportunities and Trends

On the positive side, the increasing population and wealth of Australians means that domestic markets can be expected to expand over time. It has been estimated that the "shortfall" in national seafood supply will grow from 280,000 tonnes in 2000 to 610,000 tonnes by 2020[11]. I place "shortfall" in quotes to reflect that in an open market economy, there will not in fact be a "shortfall". It is unlikely new wild resources will be discovered so the "shortfall" will be resolved by an increase in imports (or redirection of exports), an increase in aquaculture, and rising prices reducing consumption. The later seems unlikely at this time.

The interplay of these three forces is hard to predict, but some likely propositions can be made on the basis of current trends:

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[5] See for example, FISH SITE NEWS DESK (2010) Vietnam: Frozen Shrimp Exports Strive Amid Crisis.
[6] SMITH, M. D. & OTHERS (2010) Sustainability and Global Seafood. *Science* 327**,** 784 - 786. At page 785
[7] ABARE (2009) Australian Fisheries Statistics. Canberra, Australian Bureau of Agricultural and Resource Economics., 18.
[8] W.A. FISHING INDUSTRY COUNCIL (2009) The Challenges: Report to the WAFIC AGM October 2009, (Economic Analysis by Mr John Nicholls). W.A. Fishing Industry Council,.
[9] Indeed the domestic success of the Australian Atlantic Salmon industry shows the possibilities for development of the fresh fish sector in general.
[10] ABARE (2009) Australian Fisheries Statistics. Canberra, Australian Bureau of Agricultural and Resource Economics. At p 18.
[11] KEARNEY, B. (2009) 2050 and Food Security. *Seafood Industry Summit*. Canberra. This paper drew on research originally carried out by Professor Kearney in conjunction with the CSIRO in 2000.

1. Overall seafood supply and the seafood trade in Australia will come to be dominated by imports.
2. Ongoing technological change in aquaculture will continue to place pressure on those Australian producing sectors exposed to international competition, whether from imports or competition for global markets. The competition most closely felt in prawn prices will extend to other sectors as aquaculture activities expand (for example lobster).
3. Sectors such as fresh fish, due to global air transport costs and local preferences, will be less exposed and represent valuable niches.
4. Fluctuations in markets, prices, aquaculture disease events and the Australian dollar will lead to short term fluctuations around long term trends, but only wholly new factors will change overall pressures on prices for most sectors.

Response 1: Efficiency: Gained and Sustained

Wild catch and aquaculture sectors must as a minimum meet the sort of profit/productivity improvements seen in global aquaculture on a year in year out basis – an ongoing 2-3% per annum improvement would be a reasonable target. There will need to be ongoing and relentless pressure to increase the efficiency of commercial and aquaculture, including reducing **all** costs of fishing operations, including governance costs. The Commonwealth's 2008 Harvest Strategy and its $149 million buyback in the late 2000's of effort represent significant steps towards the level of efficiency increases required. Factors such as increasing environmental regulation will make this a difficult task.

In contrast to these positive steps, there are counter-examples of resistance to change. An example is the decision of the W.A. Rock Lobster catching sector in early 2007 to reject moves to a more efficient quota based scheme. Economic research published in 2006 by the W.A. Fisheries Department showed that such a move alone had the potential to improve net economic benefits from the then management structure by $90 million per annum[12]. The State of Western Australia's lack of resolute action in in the face of such advice seems bizarrely passive.

In addition to the efforts of the industry itself, the efforts of organisations the Fisheries Research and Development Corporation, Seafood Experience Australia and the Seafood CRC also contribute to economic success. Their actions must however be strategic and leveraged as to their impact for economic gains to be spread widely across industry.

Response 2. Attention to the <u>Quality</u> of Fisheries Management is Needed

A 2009 report, *Evaluating Australia's Marine Capture Fisheries*, identified that Australia could be $ 350 million per annum better off from improved management of fisheries (including recreational and

[12] ECONOMIC RESEARCH ASSOCIATES (2006) Fisheries Management Paper 210: A Bio-Economic Evaluation of Management Options of the West Coast Rock Lobster Fishery IN DEPARTMENT OF FISHERIES MANAGEMENT PAPERS (Ed.). See summary at page iv.

indigenous fisheries)[13]. The report was based extensive surveys of expert opinion as to quality of Australian fisheries management. The consensus was that management was improving, but nonetheless a fairly low score of 5.8 out of 10 when assessed as against combined social, economic and ecological objectives.

In improving management in Australia the highest priority for action was adopting a more 'strategic approach' to management. This 'strategic approach' involved fairly standard techniques such as more flexible management and the setting of clear objectives for performance. It is disappointing that in Australian even identifying gaps, and consequently opportunities for improvement, seems to be a sensitive topic. A risk averse mind set as to fisheries management seems to be reflected in the previous FRDC's Board's decision in late 2009 not to issue a press release to calling broad public attention to this report[14] and the community gains that can be made from better fisheries management.

Response 3: Social Licence to Operate Must be Defended

In September 2009 a 'Seafood Summit' was held in Canberra for the fishing industry to address risks relating to commercial fisheries and aquaculture, including the growth of marine parks and other environmental restrictions. Participants were concerned as to political aspects of the environmental agenda, and in particular as to marine parks. At the core of these concerns is what can be termed 'environmental theatre'. Environmental theatre addresses community opinion rather than real environmental risks. It tends to dramatic gestures, rather than hard slog and attention to details.

Ecological management of commercial and recreational fisheries is improving, if progress is uneven and slow it is still being made. Major environmental risks are growing to rivers, estuaries and reefs, however, these risks emanate from less visible and more diffuse sources such as agricultural run-off and urban and industrial development. Environmental action is, however, more easily directed against the commercial wild caught fishing sector because it is an obvious, and generally politically weak, target. Although the industry's capacity to respond publicly is limited by its fragmented nature, it needs to respond positively, connecting to both seafood consumers and broad the community with accurate but positive messages. Key allies for the wild–catch sector may be developed in both the recreational sector and indigenous sectors, both of which have interests that are also affected by such environmental theatre.

What is disappointing is the lack of a strong defence by fisheries agencies (and their Ministers) as to their environmental stewardship. Fisheries legislation requires environmental stewardship as a pre-condition, and yet fisheries agencies can find themselves the target of environmental agencies in misleading campaigns as to environmental protection. Fisheries agencies must not only address

[13] RIDGE PARTNERS (2009) Evaluating Australia's Marine Capture Fisheries: Final Report to the FRDC's Resource Working Group.

[14] The author chaired the Working Group of the FRDC supervising this research. See FRDC Website for a copy www.frdc.com.au .

ecological issues but ALSO robustly defend their performance. Failure to do so will lead to demands for multiple layers of regulation by a variety of agencies. To the degree that these multiple layers dilute responsibility and accountability they will prove in-effective in achieving environmental objectives, not to mention the burden they place in terms of cost and complexity.

Response 4: Market and Industry Structure Change, Can Governance?

As Australian production shrinks as a proportion of the Australian market (but not necessarily in absolute terms) the structure and culture of the Australian industry will change. In research undertaken in the early 2000s more than 1000 consumers where asked about what might cause them to buy more fish. The number one factor was price, but the next three factors related to questions as to the safety, sustainability and freshness of the fish they were buying[15]. This research confirms conventional marketing wisdom that those sectors of industry that can remain cost competitive and position themselves appropriately in the mind of the Australian consumer will thrive. There seem to be particularly good prospects for fresh fish, a sector that seems more resilient to import competition. Taking the up these opportunities in the domestic market, in the face of constant pressures from global production, will be a prodigious challenge for the industry.

Particularly at a State government level[16], it is unclear as to the degree to which the structural changes that are influencing the industry are fully appreciated. Governments may fail to adapt governance models built on (once) high value - high margin fisheries. A particular concern would be attempts to charge industry the costs of managing fisheries based on high governmental cost structures, unrealistic risk assessments and outdated enforcement approaches. In Australian fisheries that are restructuring to face falling real prices, government costs that are stable in real terms may nonetheless represent an increasing proportion of costs. Benefits from restructuring in industry can be easily lost to government charges. A recent economic analysis by ACIL of W.A.'s fishing industry[17] showed that for the rock lobster fishery government charges (harbour and licence fees) are already the third biggest expense for fishers, only behind fuel and wages.

Conclusions

A shift from an export orientation to providing value to the Australian consumer needs to be carefully finessed. To meet global competitive constantly productivity must be constantly improved, controlling all costs, including the costs of government and management. Governance needs to be streamlined as well as the cost of that governance reduced.

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[15] ASLIN, H. J. & BYRON, I. G. (2003) Community Perceptions of Fishing: Implications for Industry Image, Marketing and Sustainability Canberra, Fisheries Research and Development Corporation, Bureau of Rural Sciences.

[16] See, RIDGE PARTNERS (2009) Evaluating Australia's Marine Capture Fisheries: Final Report to the FRDC's Resource Working Group. At p 6 some experts mooted the possibility of moving away from state based management to a single national agency as a path to improved fisheries management

[17] ACIL TASMAN (2010) Economic Snapshot of the W.A. Fishing Industry. W.A. Fishing Industry Council. At p 24.

Although there is a strong expert consensus as to the action required, a commitment to change is also needed. Australian fishery management, and Australian fisheries, are at risk of falling into a dysfunctional cycle of crisis/response/inaction/decline/crisis. Despite improvements such as that represented by the Commonwealth's Harvest Strategy, it is not clear that improvements are sufficiently widespread, or that they can be sustained. As the Deputy Director of ABARE recently commented in relation to the Commonwealth's $149 million dollar buy back "There is a danger that the emergence of profits will attract effort back into these fisheries. It is important that fishery managers continue to restrict effort and catch to sustainable levels that maximise profits"[18].

Unlike many wild fisheries elsewhere in, the world the most pressing issue is not sustainability of Australian fisheries in an ecological/biological sense. What is required is the development of a sustainable model for fisheries management in the face of relentless pressures from structural change. If change is achieved through sustained effort the payoff will be better quality management and significant and achievable gains for both the industry and Australian community.

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[18] ABARE (2010) Press Release 19 February 2010: Profitability Improves in Key Commonwealth Fisheries Canberra, Australian Bureau of Agricultural and Resource Economics.