

Taking Stock and Setting Directions

Wild-Catch Prawn Industry of Australia

Situation Assessment

Challenges and Opportunities

A Strategic Path Forward

Executive Summary

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Introduction

This project is a situation analysis of the Australian wild-catch prawn industry to determine the magnitude of production, fisheries management, market, business and other challenges in the near to medium future and prepare response strategies for priority areas. The Australian Government Department of Agriculture Fisheries and Forestry Industry partnership Programme and the Fisheries Research and Development Corporation funded the project. The project identified the industry's:

- Current situation;
- Future environment;
- Capacity to respond to challenges and opportunities;
- Areas that it can build on to increase its success; and
- Strategies for priority areas.

The analysis framework employed was prepared specifically for the Industry Partnerships Programme (CIE 2005) and cascades through industry attributes, enabling environment, external environment and success criteria. Summaries of Australian wild-catch prawn industry performance in these areas are provided at the end of each report chapter.

Current Situation and SWOT

The Australian wild-catch prawn industry is currently characterised as follows:

1. Profitability – many fisheries are of marginal profitability and are under increasing pressure in recent times. Pressure on profitability is linked to both prices received and the cost of production. Overseas aquaculture with large-scale production and low cost labour is more price competitive than the Australian wild-catch.
2. Industry comparative advantage – a reliable volume of premium product, caught in clean oceans and delivered through a safe 'first world' supply chain.
3. Production –between 20,000 and 25,000 tonnes with little capacity to respond to additional demand. Additional Australian demand will have to be met by domestic or imported aquaculture or diversion of product from export markets. On a world-scale Australia is a small boutique industry that supplies high priced, quality products. Industry profit will need to be generated by lowering cost or better marketing this supply limited product.
4. Production cost – is well understood by larger fishers but less well understood by small and part-time operators. Australian cost of production is higher than competing suppliers – standout cost items include labour, fuel, repairs/maintenance and the cost of restrictions

- associated with fisheries management. Australian wild-catch cost of production (\$US8/kg to \$US12/kg) is higher than aquaculture imports (\$US6/kg to \$US8/kg) and the most efficient of Australian aquaculture production (\$US11/kg).
5. Production efficiency – constrained by fisheries management policies which favour substitution of non-controlled inputs for controlled inputs. This substitution results in ‘effort creep’ and further rounds of structural adjustment to remove the increase in efficiency. A vicious circle of adjustment to remove efficiency gains has been created. Structural adjustment is favouring large integrated operators over small single boat enterprises.
 6. Labour supply and skills – industry wide labour supply and skill shortage. A shorter fishing season has made it more difficult to retain labour and labour has been attracted to higher paying industries with superior working conditions. The skills required of skippers, crew and the supply chain have increased overtime.
 7. Skills and knowledge in the industry – the business of fishing has become more complex and some small/part-time fishers have failed to keep up. Fishing industry culture is not conducive to training. Training in fishery skills takes priority over business management and marketing. Investment by fishers in all types of training contracts in low profit years. Skills are also missing in the supply chain. There is a significant gap in product handling skills in the retail sector.
 8. Structural adjustment – the structure of Australian wild-catch prawn fisheries is constantly changing as operators respond to changing economic conditions, environmental conditions and the institutional environment. The primary impetus for structural adjustment has been stock changes and declines in fisher returns. Despite ongoing adjustment many wild-caught prawn fisheries continue to exhibit excess capacity (i.e. too many fishers).
 9. Environmental impact and public image – industry is quick to implement technology that will enhance environmental management. However, bycatch remains a major issue in some, especially northern, fisheries. The public is concerned about bycatch levels and seafloor degradation associated with prawn trawl. A negative public image is perpetuated by a lack of capacity to communicate environmental achievements.
 10. Community impact on the fishing environment – fishing grounds managed for multiple community objectives risk environmental degradation. Estuaries and ocean environments in more populous areas suffer nitrification, biodiversity loss and a reduction in sustainable catch.

11. Resource management - all prawn fisheries are currently managed via input controls¹. Input controls increase the cost of fishing and disadvantage Australian production relative to imports. Typically, input controls result in too many vessels expending too much effort to catch too few prawns. The end result is a much lower net financial return to both fishers and the Australian community. There is a need to reorientate fishery resource management away from 'biology' and toward industry profitability. Resource management solutions will need to be tailored to the circumstances of individual fisheries.
12. Resource access – there is a strong trend toward decreasing access to fishing grounds over time. Access reductions are linked to both fishery resource management policies and other community objectives (marine protected areas, recreational fishing, etc). Further marine protected areas were gazetted in NSW and Commonwealth waters during the course of this study.
13. Sustainability – the top 30% of fishers who produce 80% of industry output are economically and environmentally sustainable. Other fishers will have difficulty with economic sustainability (i.e. capacity to generate a sustainable profit).
14. Research and development – industry expenditure (measured as a ratio of dollars invested to industry GVP) is low in comparison to other industries. There has been a high emphasis on environmental R&D at the expense of initiatives to increase industry efficiency.
15. Integrated value chain – highly sophisticated in large corporate players. Small/part-time operators disengage after the product is landed. Margins potentially available to small/part-time operators who disengage from the value chain are handed over to other parts of the industry.
16. Product differentiation - by species and catch quality only. Room for additional product branding focussing on food safety, freshness and sustainability. Proposed country-of-origin-labelling should assist with product differentiation on domestic markets. The wild-catch industry will need to drive country of origin labelling. A recent survey completed by Sydney Fish Markets indicates that retailers do not see benefits for their business in this change.
17. Promotion – there is no category-based promotion and the industry is reliant on private brand marketing. Consumers are relatively unsophisticated in their purchase decisions (eg almost anything sells as a 'king prawn') and imports at the same price as chicken meat risks moving the whole category 'down market'. Promotion is needed to educate consumers and reduce the risk of prawns becoming a single low cost commodity.

¹ The consultants note the 2005 Ministerial announcement that the Northern Prawn Fishery (NPF) will have access to a structural adjustment package subject to it moving to output (quota) controls.

18. Eating quality – consistent and no major problems. Imports are often used in cooking (eg Asian food dishes) and ‘eat well’.
19. Food safety – imports meet all domestic standards. Australia has an issue with meeting cadmium Minimum Residue Limits in the EU and is perceived in some parts of this market as not addressing customer requirements. Australia (rather than individual exporters) is on ‘rapid alert’ in the EU for cadmium and this also risks making buyers in other markets (eg China) wary of Australian product. Reports of dioxin residues in Sydney Harbour prawns were reported in the Chinese press.
20. Competition – wild-catch prawns compete with other special occasion seafood categories, farmed Australian prawns and imported farmed prawns. Currently there is insufficient differentiation between wild-catch and low cost farmed imports.
21. Price - in both export and domestic markets Australia achieves premium prices for its prawns. Whether promotion is capable of lifting price in these markets or only protecting existing premiums is unknown.
22. Imports – very low cost and increasing in volume to Australia. The USA has responded to a similar surge in imports in their country with anti-dumping provisions (in part exacerbating the Aust situation). It is unlikely that Australian Government would respond with similar anti-dumping intervention.
23. Exports – 46% of production is exported. The volume of prawn exports has declined as the \$A has increased. A high reliance on East Asia (Japan, Hong Kong/China) has been offset by growth in exports to the EU. Australia has a genuine export culture backed with established commercial relationships. Export success is dependent on exchange rates and capacity to favourably differentiate the Australian wild-catch.
24. Export market access – priorities include the lowering of tariffs, especially in the EU, and non-tariff issues with the potential to derail trade (eg heavy metals in the EU and turtle protection in the US).
25. Trade policy – nationally, there is bipartisan support (government and opposition) for removal of trade barriers on both imports and exports. The cost to industry of imports, including those supplied at less than the cost of production, must be balanced against the benefit to consumers of lower prices. As a small open economy reliant on international trade, Australia is poorly placed when it comes to imposing punitive trade barriers such as anti-dumping measures.
26. Industry information and statistics – a statistical database exists for most fisheries and market prices in Sydney and Melbourne. Information driving resource assessment decisions is more piecemeal. Industry would benefit from national communication that would encompass news from other fisheries and the market along with a cohesive and consistent source of industry data.

27. Industry culture and leadership – there is a tendency for the industry to be production rather than market focussed and individual fishery rather than nationally oriented. Industry has demonstrated a willingness to embrace a national agenda and invest in representative capacity. There is a need to secure ongoing funding for the new body and build industry leadership capacity.

Wild-catch prawn industry performance against Industry Partnership Programme criteria for industry success (CIE 2005) are summarised in Table E1.

Table E1 Performance Against Industry Success Criteria

Criteria	Performance
Profitability	<ul style="list-style-type: none"> Many in the industry are marginally profitable. Current management arrangements, which hamstring initiatives to increase production efficiency and a continuation of current weak market conditions will force further structural adjustment.
Sustainability (economic and environmental)	<ul style="list-style-type: none"> Top 30% of fishers (300 enterprises) who produce 80% of industry output are economically and environmentally sustainable. Other producers will have difficulty with economic sustainability.
Growth or consistent performance	<ul style="list-style-type: none"> Consistent output and production value. Gross Value of Production of approx \$300 million. The industry is mature. The potential for industry production growth through stock management and stock sustainability is limited.
Flexibility	<ul style="list-style-type: none"> The industry is only moderately flexible. Most fishers are at least 80% reliant on prawns, value added is limited to grading and the industry services a relatively small number of reasonably static markets.
Reliance on government assistance	<ul style="list-style-type: none"> There is no tariff assistance afforded to the Australian wild-catch prawn industry. Domestically there is an expectation that government will provide structural assistance when fishing effort increases and returns fall. Current fishery management arrangements have fuelled this expectation.

Source: Project Analysis

A key point summary of the industry's strengths, weaknesses, opportunities and threats (SWOT) informed by project analysis is provided in the table below.

Table E2 Industry SWOT

<p><i>Strengths</i></p> <ul style="list-style-type: none"> • Well-regarded premium product associated with celebrations and special occasions. • Strong focus on exports to a limited number of high paying markets. • A fecund resource with production at reliable volumes. • Increasing consumption fuelled by low cost imports, rising incomes and (potentially) the health benefits of seafood. • A geographically diverse and year-round production base. 	<p><i>Weaknesses</i></p> <ul style="list-style-type: none"> • High cost of production linked to labour, fuel and R&M. • Fisheries management arrangements (input controls) that add to the cost of production. • Export value and volume down on historical levels. • A static production that cannot be expanded to meet additional demand. • Policy dominance by biologists rather than those with commercial/market experience. • Lack of understanding of the supply chain including the end consumer (Major processors are highly focused and integrated). • An absence of a national agenda (a strategic plan and lobbying effort/representation), product promotion and a funding base to support it.
<p><i>Opportunities</i></p> <ul style="list-style-type: none"> • National representation of the industry to ensure appropriate policy and fisheries management (Major determinant of industry cost structure). • Better positioning of the product to possibly capture additional premium prices and protect existing premiums (certification and branding suggested). • Change public perception of the industry and educate on its improving environmental management record. • Improved export market access through tariff reductions and more appropriate protocols. • Supply chain knowledge and integration. • Value adding including additional onboard grading and sorting. 	<p><i>Threats</i></p> <ul style="list-style-type: none"> • Import growth that results in further loss of domestic market share and price reductions. • Loss of export market share if the industry does not respond appropriately to emerging environment and contaminant concerns. • Further area closures or fishing restrictions linked to community concern for the marine environment. • Potential for imports to result in a repositioning of prawns as an everyday low cost protein (same price point as chicken).

Source: Project Analysis

Future Environment

The future environment for the Australian wild-catch prawn industry is likely to incorporate:

1. Ongoing *relative* decline in market share for Australian wild-catch product. Credible research (FRDC 2005) suggests that Australian wild-catch fish production could, over the next two decades, decline in absolute terms (by 14%) and in relative terms from a market share of 45% to 24%. The market share of Australian wild-catch prawns has declined from 91% of the domestic market in 1996/97 to 62% in 2003/04. Given the relative greater importance of imports and Australian aquaculture production, wild-catch is likely to find higher relative returns from niche and higher value added markets.
2. Prawn consumption will continue to trend upwards as consumers enjoy relative prosperity, the popularity of mid priced casual restaurant eating, lower prices and the health benefits of omega-3 rich prawns. The risk for the wild-catch industry is that prawns become an everyday low cost/low value food.
3. The supermarket chains will increasingly dominate domestic seafood marketing. This raises issues in relation to increasing market power and the need for training of supermarket staff in the handling of premium wild-catch prawns.
4. Internationally the marketing of prawns is more likely to occur through fully integrated supply chains that will lock out opportunistic suppliers and demand the highest levels of product traceability and food safety.
5. Food safety – the importance of testing and traceability will only intensify in the future providing both threats and opportunities for the Australian wild-catch industry. Current EU concerns relating to farmed and wild-catch prawns include sustainable and uncontrolled farming, bycatch and seafloor damage, antibiotic regulation, ethical employment standards, genetically modified feed ingredients, bio-terrorism, fishmeal sustainability, animal welfare, genetics in shrimp breeding, dioxins, polychlorinated bi-phenyls (PCBs), heavy metals (cadmium, mercury, etc), agrochemicals and irradiation. The US and China are closely monitoring developments in the EU.
6. Labelling – will be an essential tool for producers looking to differentiate their product as safe. Customers and consumers in Australia, the EU and US will seek out ‘seal of approval’ style labelling.
7. Post purchase retail vacuum packing – will provide opportunities to increase the convenience of seafood purchase (smells, leaks) and provide product differentiation information on a label – i.e. country of origin, food safety seals of approval, freshness, environmental status of the fishery, the story behind the product, how to prepare it, etc.

8. The sustainable seafood movement will build on its present success. This movement includes the certification of fisheries environmental credentials with branding that is maintained through the chain to retail. The Marine Stewardship Council (MSC) certification program is already well established internationally and especially in the EU. The Western Australian rock lobster fishery has MSC certification, which an independent review attributes to increased market penetration (see case study 2).
9. Organic seafood – increasing importance to EU, US and no doubt in time with Australian consumers. The certification of Australian wild-catch as organic may be problematic given high background levels of heavy metals in some fisheries and species.
10. Biosecurity – to assume increasing importance, both as a means of assuring imports are safe (e.g. avoiding the introduction of white spot syndrome virus) and ensuring workable protocols are married to market access opportunities (e.g. heavy metal MRLs are appropriate).
11. Future environmental issues – trend analysis confirms the importance of maintenance of both current Australian environmental standards and the need to capitalise and communicate Australian environmental credentials. Trends include sustainability certification, the ‘story behind the meal’ (its environmental, economic and *social* impact), contaminants, mangrove and seafloor protection, food chain impact, organics, OH&S, and the potential for commercial returns from sustainable production.
12. E-commerce and use of information technology - worldwide leading fishers in high value fisheries are increasingly ‘fishing to market requirements’. IT and e-commerce is used to identify real time prices and the harvest is managed to maximise price. Once caught, product is sold electronically to the range of buyers offering current best prices. Sales are completed before vessels return to the wharf. Leading Australian wild-catch prawn fishers should be investigating this technology and developing support systems for its adoption now.
13. Labour supply and skills – ongoing shortages of both crew and skippers that will require sophisticated representation by industry to ensure additional initiatives and appropriate policies.
14. Exchange rates and fuel prices – both the Australian dollar and fuel prices to remain ‘uncomfortably high’ for the next three to five years.
15. Fisheries management – the Australian government has signalled its intentions to link structural adjustment assistance in the Northern Prawn Fishery to a move from input controls to output controls. Industry needs to be aware of the potential importance of this change.

16. Regulatory environment – future regulation is likely to embrace food safety and traceability (bio-terrorism), labelling (including country of origin labelling) and environmental controls (requirements to further reduce bycatch, reduce damage to benthic species and the seafloor).
17. Outlook for Asian aquaculture – the Asian farmed prawn sector is forecast to grow at 12-15% pa over the next 3 to 5 years despite falling prices and increasing costs associated with competition for feed and the need to meet international standards on product quality and environmental management. Disease management has improved and there is unlikely to be a repeat of mid 1990's disease induced stock crashes to provide a respite from current low prices. Longer term (5 to 10 years) Asian domestic consumption will absorb an increasing share of supply.
18. Outlook for Australian aquaculture – only those with substantive scale economies and the capacity to embrace technological innovation that lowers cost of production will survive. The industry is currently investing in initiatives to differentiate its product and improve its marketing.

Industry Capacity

The wild-catch industry has taken an important step toward unification; it has the commitment of both small fishers and, perhaps most importantly, the well resourced larger vertically integrated corporates. It is vital that the industry big players stay committed to the Council and that an appropriate business plan with accountability and KPIs is prepared for its management. As an industry, wild-catch prawns currently lacks leadership capacity and there is a strong need for investment in capacity building. Capacity building activities will need to include training for willing existing players and the nurturing of young potential leaders.

The '*taking stock and setting directions*' process has revealed a number of strong reasons to support the foundation of a national peak industry body, these include:

- *Representation of the industry nationally:* there is a need for the industry to participate in public policy formulation and present a unified case to government for change that is of benefit to fishers. Nationally, government prefers to work with fishers on this basis. Furthermore, individual fishers operate in multiple fisheries and states. A state based system of representation is not adequate. Fishers need to be represented nationally on resource access, fishery management and policy issues (eg labour supply policies);
- *Generate a positive public profile:* the public is concerned by trawl and improvements in environmental impact are currently not being communicated to the Australian public;

- *Fisheries management reform and learning opportunities*: beneficial reform in one fishery creates learning opportunities for other fisheries. For example, self-managed fisheries are working in SA and this could be extended to other states. There is a role for a peak industry body in facilitating this process;
- *Product positioning*: nationally and internationally there is a need for a unified approach to promoting the prawn category. In time this might include Australian aquaculture product;
- *Coordination, industry planning and R&D*: there is a need for industry strategic planning and R&D planning in a time when industry change is preceding at an unprecedented rate. Issues need to be coordinated and managed rather than dealt with on an *ad hoc* basis. Issues management includes ensuring that the wild-catch prawn industry is linked into sector initiatives such as seafood promotion and the National Food Industry Strategy;
- *Communication and information exchange*: including regular exchange of information on market trends, seasonal performance of fisheries, import reports, etc; and
- *Industry development activities*: including development of leadership capacity and the reorientation of the industry from 'biology' and toward 'profitability'.

The ACPF will not be able to address even a small number of these issues with current funding.

Priorities for Industry Strategies

The review of industry attributes, the enabling environment, the external environment and measures of industry success revealed a number of gaps. These gaps were reviewed with industry through a series of regional workshops and the consensus position on priorities for industry action is:

1. Unity, leadership and the power to influence;
2. A program to address public perception of the industry; and
3. Marketing, branding and wild-catch product positioning.

Key elements of each of these priorities are presented below.

Unity, leadership and the power to influence

1. ACPF Board to appoint an independent Chief Executive Officer
2. Develop an agreed vision and common goals for the Council
3. Secure funding from industry, FRDC, DAFF and others
4. Form strategic alliances – ASIC, state organisations, etc
5. Set clear milestones and objectives with timeframes (a strategic plan)
6. Develop a working structure for ACPF – regional and state associations
7. Address industry communication
8. ACPF to be driven by appointed leaders not elected fishers
9. Benchmark and adopt best practice in peak industry bodies

Outcome: A single voice that is able to effectively represent the industry in relevant decision-making forums, capacity to set and drive the agenda for issues ranging from R&D to marketing and an avenue through which to influence resource access decision-making.

A program to address public perception of the industry

1. Prepare a public perception improvement project brief
2. Seek professional assistance from an appropriate organisation
3. Develop a national identity – who and what is a professional fisher
4. Showcase environmental responsibility
5. Target fishers, consumers, the public, green groups, government, etc
6. Promote the industry to itself to address fisher depression
7. Use appropriate language eg harvest not trawl

Outcome: Public support for the wild-catch industry.

Marketing, branding and wild-catch product positioning

1. Prepare a marketing, branding, product positioning project brief
2. Seek professional assistance from an appropriate organisation
3. Win back the domestic market first
4. Brand: Australian wild-caught
5. Seek out industry spokespeople
6. Review and learn from APPA's failure
7. Review the relevance of brands such as MSC
8. Story behind the meal/person catching the meal
9. Country of origin labelling – make the most of this opportunity
10. Highlight the omega-3 health benefits of wild-catch prawns

Outcome: Additional and higher priced demand for Australian wild-catch prawns.

The above priorities should now form the basis of the industry's first strategic plan.

Concluding Comment

The Australian wild-catch prawn industry has a clear-cut and sustainable competitive advantage. Industry investment is needed to maximise this advantage and secure a profitable future for the industry.

The Australian Council of Prawn Fisheries hopes that all industry stakeholders will read the full text of the report, apply the findings to the operation of their business and contribute to the development of the industry's first strategic plan. The complete document will serve as a reference resource for the ACPF.