Can strategic planning be used to revitalise the NSW Oyster Industry?

What are the key steps to develop a strategic plan within the Industry?

A report for



by Ewan McAsh 2012 Nuffield Scholar

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Executive Summary

Globally, seafood consumption is on the rise. This rise in demand provides this Aquaculture Industries with the opportunity to increase production and profitability. The New South Wales (NSW) Oyster Industry in particular, has a huge potential to capitalise on this trend.

The NSW Oyster Industry has a world-class quality assurance program and healthy, export classified estuaries producing high quality shellfish. However, the industry is in serious decline. It is plagued by decreasing production and poor profitability and without significant intervention in the next few years, the industry is at real risk of disappearing.

Strategic planning was critical in the success of the once failing Australian Wine Industry. Key aspects of that, and other successful industry strategic plans include:

- An ambitious and engaging vision for the future;
- Industry ownership of the strategic plan; and
- Strong leadership with a whole of industry approach.

An industry driven strategic plan is vital to create an envisioned future of the NSW Oyster Industry and unlock its potential. A NSW Strategic Plan would detail the scale and scope of opportunity. It would also form the framework so that on a day-to-day basis, individual businesses, the NSW Farmers Association, the Government and supportive Non-Government Organisations (NGO's) can all work towards this vision together. Furthermore, it will serve as a catalyst and rallying point to revitalise the NSW Oyster Industry and help ensure its long-term survival, growth and success.

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Foreword

My name is Ewan McAsh. I have been farming Sydney Rock Oysters for 10 years. In 2004 after completing a degree in Marine Biology, I took over an existing oyster farm on the Clyde River, Batemans Bay in NSW, with my father, Kevin. We had no previous experience in farming or in running a business. Since 2004 we have converted what was a traditional labour-intensive stick and tray oyster farm, over to single seed cultivation using efficient integrated grading and plastic baskets system. We also own and run the Ulladulla Oyster Bar, an oyster and wine bar that retails and promotes our oysters.

My Nuffield Study is based on the dismaying decline of the NSW Oyster Industry despite favourable market conditions and the availability of modern cost-saving technologies. My interest in strategic planning for the NSW Oyster Industry is driven, not just by a passion for our oysters and the unlimited potential of the industry, but also the realisation that after 10 years of farming, my business will never truly thrive unless the supporting industry is thriving as well.

The seeds of strategic thinking were planted very early in my farming career when I attended a lecture by Ian Sutton of the Wine Makers' Federation of Australia, in Sydney 2004. In this lecture, Ian detailed how an ambitious and visionary strategic plan transformed a \$200 million industry into the \$5 billion industry it is today.

The purpose of my Nuffield Study is to investigate the role strategic planning could take to revive the NSW Oyster Industry and identify the initial steps to developing a Strategic Vision and Plan.

In this paper I do not intend to write a NSW Oyster Industry Strategic Plan nor attempt to identify the root causes of the industry's problems or come to conclusive strategic solutions. The purpose of this report is to start a conversation within the industry about the future; who we are, what we want to be and how are we going to get there. It is our livelihood, our passion and our responsibility to ensure that the NSW Oyster Industry has a future.

Acknowledgements

I would like to acknowledge my father, Kevin McAsh, for his support of my Nuffield Study and his unflinching commitment to our business, despite all the hurdles.

I would also like to thank all the people who help contribute through interviews, conversations or just by providing the resources. These people include Ian Sutton, Tony Troop and the staff at NSW Fisheries.

And thank you to Nuffield Australia and Fisheries Research and Development Corporation (FRDC) for providing this great opportunity.

Abbreviations/Glossary

EMS - Environmental Management Systems

NGO – Non Government Organisation

NSW – The State of New South Wales, Australia

NSWFA - New South Wales Farmers Association

PO – Pacific Oysters

Spat – Juvenile Oysters (2 - 20 millimetres in size)

SRO – Sydney Rock Oysters

SWOT - Strengths, Weaknesses, Opportunities and Threats

Wild catch – Spat derived from the natural settlement of oysters

WFA - Wine Maker's Federation of Australia

Objectives

The main objective is to investigate:

- If strategic planning could be used to revitalise the NSW Oyster Industry; and
- What the key steps are to developing a strategic plan for the industry.

Introduction

The NSW Oyster Industry is Australia's oldest aquaculture industry. Commercial farming of the Sydney Rock Oysters (SRO) has been carried out for over 130 years. It is Australia's single largest Oyster Industry, producing 96 million oysters per annum, with a farm gate value of \$28 million. The NSW Oyster Industry consists of 380 permit holders cultivating oysters in 29 estuaries (OISAS 2007).

The NSW Oyster Industry has huge potential. There is unmet domestic demand for oysters and a growing demand for seafood worldwide. A 2013 World Bank report estimated that by 2030, 62% of the seafood we eat will need to be farm raised just to meet growing demand (The World Bank, 2014). Much of this demand includes increasing consumption of shellfish.

In addition to the above, the NSW Oyster Industry has a world-class quality assurance program and healthy, export classified estuaries. It has the support of the NSW State government (evident in the Oyster Industry Sustainable Aquaculture Strategy, 2006) and unlike many fishing and aquaculture sectors the NSW Oyster Industry operates with the added benefit of high community acceptance. The Oyster Industry easily attracts new entrants, as living on the coast and working daily on the river is an attractive lifestyle.

However, despite this the industry has been in serious decline for the past 30 years. It is plagued by decreasing production and poor profitability. Without a serious turn-around in the next few years the industry is at risk of falling below the critical threshold needed to sustain its already subsidised food safety programs and other government services.

It now seems that market forces or hard work and innovation by individual farmers will not be enough for the NSW Oyster Industry to thrive. A more strategic whole of industry approach may be what is required.

Trends in Seafood Consumption and Seafood production

Confidence in the NSW Oyster Industry is based on consistently rising seafood consumption in

Australia and across the World. Globally, seafood provides an estimated 15% of the average annual human protein intake and this is on the rise. An increasing world population and the increasing wealth of countries is driving this consumption with a preference for seafood (particularly Asia). It is generally agreed that wild catch fisheries are being exploited to their full potential leaving aquaculture to take up the slack. In 2008 aquaculture production equalled 37% of the volume of world fisheries production (53 million tons) and 88% of aquaculture is produced within the Asian region (ABARE 2011).

Australians currently consume above average amounts of seafood (21kg/head/year) and every year the demand for oysters exceeds supply. The Australian Oyster Industry has a reputation for a having clean, healthy waterways and producing safe quality product (PIRSA 2012).

By world standards, Australia is not a large seafood producer (249,000 tonnes). However, we are a significant exporter of high quality and high value seafood, exporting nearly a quarter of our seafood production by weight. Overall, the average unit value of seafood exports in 2002-03 was \$24.68 a kilogram. This compares with an average unit value of seafood imports of \$5.77 a kilogram (ABARE Outlook, 2011). The majority of our current seafood production is from wild-caught fisheries, indicating that any future increase in production will, by necessity, stem from the Australia aquaculture sector.

Oyster Species grown in NSW

Sydney Rock Oysters

Sydney Rock Oysters (Saccostrea glomerata) account for 90% of NSW oyster production (DPI Fisheries 2013). These oysters are native to the East Coast of Australia and are cultivated in estuaries extending from Moreton Bay in Southern Queensland down through NSW to Wonboyn Lake on the Victorian border. They are an oyster unique to Australia and are grown nowhere else in the world. Sydney Rock Oysters are characteristically sweet and delicate in flavour. They are also a hardy animal and can stay healthy and alive out of water for 10 days or more.

Although a genetic breeding program is in place, Sydney Rock Oysters are notoriously hard to spawn in a hatchery. Consequently, spat tends to be obtained from the annual settlement of wild oysters on slats or sticks. There are some dedicated spat farmers collecting and on-selling spat but it is more common for individual farms to collect a majority of their own spat. It typically takes three years to grow a Sydney Rock Oysters to sale size. Farm gate prices range from \$4 - \$9 /dozen.

Pacific Oysters

Up until recently the cultivation of Pacific Oysters (an introduced oyster of Japanese origin) was restricted to one estuary, Port Stephens. In all other estuaries they were a pest species and it was illegal to cultivate them. However a line of reproductively sterile Pacific oysters (via triploidy) is now available and these oysters are being cultivated in 8 of 29 estuaries in NSW (DPI Fisheries 2013).

Pacific Oysters are a fast growing oyster and grow to large sizes. In the warm, productive waters of NSW they typically grow to maturity in 18 months. Spat is sourced from dedicated hatcheries in Tasmania. The fast growth and ready market acceptance of Pacific Oysters makes them an attractive farm species, however production is under threat by a disease, Pacific Oyster Mortality Syndrome (POMS). This disease has already wiped out oyster industries in France and

New Zealand and is now present in two estuaries within NSW.

Pacific Oysters currently account for 9% of the total production of oysters in Australia. Farm gate prices of Pacific Oysters range from \$6 - \$10 per dozen (DPI Fisheries 2013).

Angasi Oysters

Another native species; the Angasi oyster (more commonly known as flat oysters) was once highly abundant on the east and southern coasts of Australia, including Tasmania. These oysters fell foul to overfishing (dredging) and an introduced pest (mudworm) as well as the sedimentation of oyster estuaries. They now account for less than 1% of total oyster production in NSW with similar production in other southern states (DPI Fisheries 2013). A relative of the French grown 'Belon oyster', flat oysters are well accepted in export markets and have a growing profile in the Australian restaurant scene.

The uptake of modern baskets systems, plus the need for diversification in NSW, South Australian and Tasmanian oyster industries, has renewed interest in commercialising this oyster species. In NSW Angasi spat is supplied by several small farm-based hatcheries. Angasi oysters typically grow to maturity in 2-3 years. Farm gate prices for Angasi oysters range from \$12 - \$16 per dozen.

NSW Oyster Industry background & Status: An Industry in Decline.

The NSW Oyster Industry is Australia's oldest aquaculture industry. Commercial farming of the Sydney Rock Oysters (SRO) has been carried out for over 130 years in NSW. This industry is the largest aquaculture industry in NSW, producing 55 million dozen oysters per annum, with a farm gate value of \$28 million. The NSW Oyster Industry consists of 322 permit holders cultivating oysters in 29 estuaries. Two other species of oysters Pacific and Angasi are also cultivated but to a lesser extent (ABARE 2012).

The majority of NSW oysters are sold live in wholesale bags (averaging 60 dozen per bag) to oyster processors in the Sydney Market (50% of annual production), NSW regional areas (36%) and interstate (13%). Less than 1% of the total NSW oyster production is exported overseas.

Although extremely productive and profitable up to the 1980s the NSW Oyster Industry has undergone a sharp decline (36% in 20 years). See Figure 1 below:

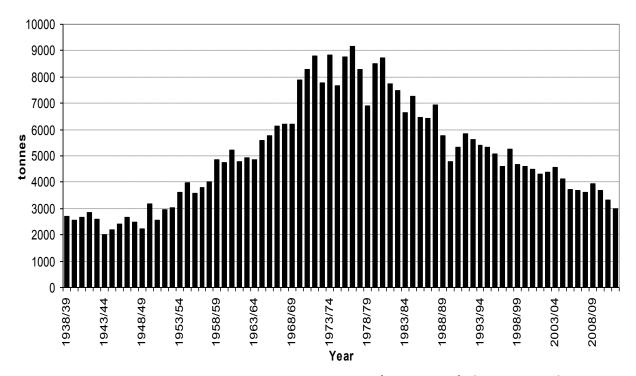


Figure 1: Graph of Annual NSW Oyster Production 1938/39 to 2008/9 (OISAS, 2007)

A recent benchmarking project by the Seafood Cooperative Research Committee (Seafood CRC) further demonstrates the poor performance of the NSW Oyster Industry, showing that the NSW industry lags behind the South Australian and Tasmanian Pacific Oyster Industry on profitability return on equity and production per hectare. See Table 1 & 2.

Table 1: The Profit & Profit as a Percentage of Income of Oyster farms across Three States

	Profit (before tax & after labour input)		Profit as a Percent of Income	
	2010/11	2011/12	2010/11	2011/12
South Australia	\$71,060	\$76,643	4.7%	16.8%
Tasmania	\$37,087	\$113,754	5.5%	10.6%
New South Wales	\$17,848	\$34,421	-29%	12%

Data from a 2013 benchmarking study of Oyster farms in South Australia, Tasmania and New South Wales on behalf of Oysters Australia and the Australian Seafood Cooperative Research Committee (Rural Directions 2013).

Table 2: The return on equity & dozens per developed hectares for oyster farms across three states

	Return on Equity		Dozens per Developed Hectare	
	2010/11	2011/12	2011/12	
South Australia	2%	13%	10,772	
Tasmania	4%	4%	17,440	
New South Wales	-5%	3%	4236	

Data from a 2013 benchmarking study of Oyster farms in South Australia, Tasmania and New South Wales on behalf of Oysters Australia and the Australian Seafood Cooperative Research Committee (Rural Directions 2013).

This decline has been attributed to many factors. These include:

Supply-side factors such as:

- QX oyster disease (Tweed to Clarence river in early 1980's, Georges River in 1994 and the Hawkesbury River in 2004);
- The effects of a feral Pacific Oyster introduction (early 1980's);
- The degradation of water quality in many coastal rivers, estuaries and lakes; and

Demand-side factors such as:

- Non-contested competition in the market place from oysters grown in other Australian states; and
- The diversification of consumer tastes (OISAS, 2006).

However these effects do not entirely account for why this downward trend has continued in more recent years (Figure 2). Especially as many estuaries are unaffected by QX disease and some are rated at near pristine status (Clyde River, Merimbula and Wonboyn Lakes in NSW). There has also been notable uptake in new technology and investment in efficient basket systems, supported by environmental grants.

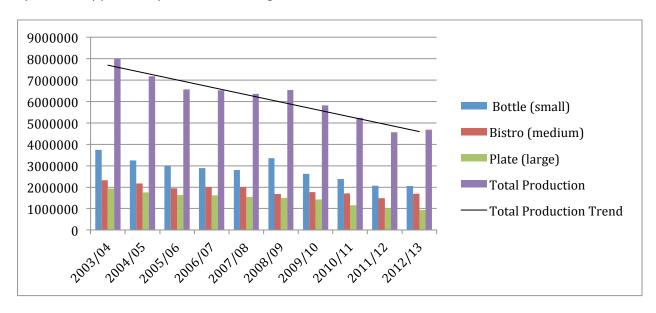


Figure 2: Production values of Sydney Rock Oysters by the dozen between the 2003/04 and 20012/13 financial years. Line indicates a falling trend in Total Production

Rise of the Pacific Oyster Industry

Comparative Observations between the NSW Oyster Industry and the South Australian and Tasmanian

Pacific Oyster Industries

In contrast to the decline of the NSW Oyster Industry, the Pacific Oyster Industry in both Tasmania and South Australia has undergone a period of significant growth. Since the establishment of a commercial hatchery supply in the 1980's, the combined total production from these states equates to 60% of Australia's total production. The sharp rise in production is evident on Table 1. It shows that the South Australian Pacific Oyster Industry has increased its production by a remarkable 300% over the last 20 years (PIRSA 2012).

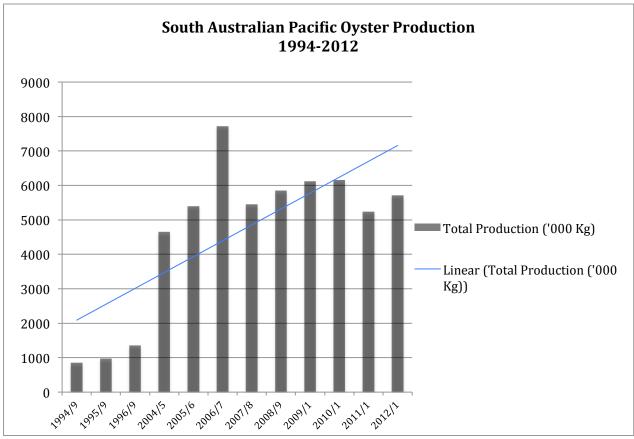


Figure 3: Production values by kilogram of Pacific Oysters between the 1994/95 and 2012/13 financial years. Line indicates sharp rise in total production. Data source from Primary Industries and Regions South Australia. Note years 1997/98- 2003/4 missing due to non-

compatible data

Several factors that may have contributed to this growth include:

- Access to high quality hatchery supplied stock (year round) and
- Innovation and significant on-farm investment (basket cultivation systems and automatic graders (Routledge, 2014).

The Pacific Oyster Industry is also characterised by large-scale farms. More importantly however, it contains specialist operations such as:

- Dedicated hatcheries
- On-grown spat farms and
- Finishing farms.

Interestingly, anecdotal evidence suggests that at the height of its productivity the NSW Sydney Rock Industry also had similar specialised structure. This structure was disrupted by the introduction of feral Pacific Oysters in the 1980s. The introduction limited the movement of oysters up and down the coast as well as heavily impacting on the Port Stephens Estuary (a renowned spat supplier). This is considered to be a significant factor in the NSW Oyster Industry's decline in production.

Despite this the NSW Oyster Industry has many competitive advantages over the Pacific Oyster Industries of South Australia and Tasmania. These include:

- The NSW industry operating in warmer climates that facilitate faster growth rates
- Cheaper transport rates (closer to our major markets in Sydney and Brisbane) and
- A marketing advantage in freshness and convenience.

Also, being close to large city centres allows for easy access to export markets. NSW farmers have access to the same basket systems and grading technology as those in the southern states and, in many cases, have work sites located on the water thus reducing travel time to and from leases.

Clearly then, the NSW Oyster Industry has enough competitive advantage, access to technology, community support and market demand to enable it to be a growth industry. This poses the question that if market forces and investment by individual businesses are not enough to revitalise it, then perhaps a strategic vision and planning at industry level is necessary.

Strategic Planning

The concept of strategic thinking is long established and the benefits of strategic planning and strategic vision have been well documented (Porter, 1980). It is now commonly accepted that some kind of strategic planning is a pre-requisite for any successful business, industry or government department (Russell-Walling, 2007). In short strategic planning can be summed up as:

"A systematic approach to defining a vision or objective and identifying the goals, actions and resources required too achieve that objective" (Russell-Walling, 2007).

A strategic vision and plan not only identifies the investment and actions for the purpose of changes that would be required within the industry. It also communicates these ambitions to the industry members, government, private businesses and supportive NGO's and recruits them to the cause (Sutton, 2014).

Oyster Farmer Perceptions of Strategic Planning

During the course of study, it proved challenging to find any oyster farmers with a positive attitude to the idea of strategic planning. The widely held perception of strategic planning is that it:

- Would be purely academic
- Would not result in any new outcomes
- Would not be acted upon
- Would be expensive to implement.

Quotes from discussions with other oyster farmers include:

 "We don't have time to do a strategic plan, we have too many other issues to deal with right now." "It's just another expensive document that will sit on the shelf and won't have any real outcomes for farmers."

These viewpoints indicate that oyster farmers are not currently engaged with the concept of strategic planning. These beliefs may well have been key elements in previous failed attempts at strategic planning. Several business plans and marketing strategies for the Oyster Industry have been produced in the past (Marketing 88, 1988 and Ruello *et al*, 2002), however these were not industry driven and as a result were not successful.

Australian Wine Industry – a case study

In 2004 at the AustAsia Aquaculture Conference, Ian Sutton of the Wine Makers' Federation of Australia (WFA) detailed how, in 1996, a \$200 million wine industry launched an ambitious strategy that created the \$5 billion industry it is today. At the time the strategy was launched the wine industry was considered sunset or artisan. It was suffering from poor export sales, a domestic wine glut and increased government taxes. Poor profitability within the industry and the public failures of several wine companies meant confidence was low or non-existent (Sutton, 2014). The strategic plan was titled Strategy 2025 and it unashamedly laid down a vision:

"that by the year 2025 the Australian wine industry would achieve \$4.5 billion in annual sales by being the world's most influential and profitable supplier of branded wines."

Strategy 2025 committed Australia to "innovation and style from vine to palate" and recognised opportunities for branded wines in specific global market segments, in the premium domestic market, and in wine tourism. It also outlined the resources needed:

- 40,000 hectares of new vineyards
- 570 million litres of extra processing capacity
- 1,100 million litres of new storage
- 10,500 new workers, and

• \$5 billion in corporate, grower and equity funding (WFA, 2014).

Importantly, Strategy 2025 became the roadmap for wine company business plans and industry organisation action agendas. It also initiated a period of frenzied development — especially in viticulture. In August 1999, almost 12 months ahead of target, the Australian wine industry announced it had achieved its 1991 goal of \$1 billion in export sales. In 2007, 18 years ahead of target it reached its goal of \$4.5 billion in annual sales (WFA, 2014).

It was Ian Sutton's opinion that the ambition and vision of the strategic plan attracted the investment required to make happen. It became almost self-fulfilling. One quote from Ian's lecture was:

"Our vision for our industry was so ambitious, that even if our investors did not believe we could achieve it... they couldn't afford <u>not</u> to be involved."

This ambitious goal captivated the industry and investors. Yet when broken down it only required the industry to increase annual sales by 3% a year, something that was entirely achievable. This positive outlook was the kick-start the industry needed (Sutton, 2014).

lan Sutton also contributes the success of Strategy 2025 to strong industry leadership. The WFA was originally founded by the amalgamation of three organisations (the Australian Wine & Brandy Producers' Association, the Australian Winemakers' Forum, and the Wine & Brandy Cooperative Producers' Association of Australia). The key players within these organisations recognised that, no matter how well they represented their constituencies, there was greater advantage in a single and united voice. When they founded WFA, to ensure the required unity and inclusivity, they allowed for only one vote per industry member no matter their size or structure of their business. This voting system was a structural acknowledgement that for any one business to thrive the whole industry must be healthy and thriving.

Key aspects of WFA Strategy 2025 are:

- An ambitious and exciting vision for the industry that could not be ignored
- A short concise document Strategy 2025 consisted of only 24 pages

- One industry association to take ownership of the strategy to coordinate, implement, monitor and revise the strategy in consultation with the industry members and other stakeholders and
- Developed by strong industry leaders with a whole of industry approach.

Creating a Vision for the NSW Oyster Industry

A strategic vision should be made up of core ideology combined with an envisioned future (Collins JC *et al*, 2011). The core ideology is the enduring character of an organisation. It is the core value or trait that remains constant even if the organisation's goals change (Collins JC *et al*, 2011). In the case of the Australian Wine Industry's Strategy 2025, the core ideology is:

"To act with integrity (which will ensure community acceptance), a pioneering and innovative spirit, a culture of collaborative competition, a strong and demonstrated customer focus, an emphasis on quality and a commitment to financial success."

In the case of the NSW Oyster Industry, core values could be co-opted from the Environmental Management Systems (EMS) developed by oyster industries in 8 of the estuaries south of Sydney. An example of core values for the Oyster Industry could be as follows:

"The NSW Oyster Industry commits to grow shellfish in an environmentally and socially responsible manner, to communicate and collaborate with natural resource managers and the community to protect and improve the environment of our catchments, that is vital for oyster growth. Our emphasis is on professionalism in our operations and excellence in our product, we are committed to sustainability, quality and financial success."

The envisioned future should be a BHAG, a <u>big hairy audacious goal</u>, with a vivid description (Collins JC *et al*, 2011). The BHAG is easily identified in Strategy 2025 as:

"By the year 2025 the Australian wine industry would achieve \$4.5 billion in annual sales by being the world's most influential and profitable supplier of branded wines."

This goal, as stated by Ian Sutton, was too ambitious to ignore. A BHAG for the Oyster Industry could read something like this:

"To triple the value of the NSW Oyster Industry and increase NSW shellfish production to above 12 million dozen by 2040 and become the world's most trusted and profitable supplier of premium quality shellfish."

Developing an Action Plan for the NSW Oyster Industry

One of the key aspects of Strategy 2025 is that it is a short concise document. Its aim was only to set a vision of the industry, identify areas of strategic importance and specify the scale and scope of growth opportunity that was feasible and desirable. It then called on the individual commercial entities within the wine industry to determine how they could use the framework of opportunity identified by Strategy 2025 to create their own business future (Strategy 2025).

It Starts with a SWOT

A SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis is one way to identify areas of strategic importance as well as competitive advantage. In the case of the NSW Oyster Industry it is also handy to use the successful South Australian and Tasmanian Pacific Oyster Industry to draw comparisons.

A SWOT analysis of the NSW Oyster Industry would look something like this:

STRENGTHS

- Unique Product
- World class quality assurance program
- Australian reputation for safe, high quality seafood.
- Close to major markets including major airports (export)
- State Government support
- Strong community acceptance (social license)
- Year round supply of product

OPPORTUNITIES

- Rising demand for seafood domestically and overseas (export)
- Availability of modern labour saving equipment and cultivation techniques
- Modern dynamic cultivation systems will cultivate other shellfish species.

WEAKNESSES

- Declining production
- High variation in product quality
- Reliance on wild spat production
- Poor business performance not attractive to new investment.
- Oyster Industry assets including leases and stock not commonly recognised by banking or insurance organisations.
- Poor business planning and governance relative to pacific Oyster Industry.
- Industry undertakes no marketing

THREATS

- Degradation of water quality population pressure, development, industry, climate change
- Disease

Identifying areas of Strategic Importance

From within the categories of weakness, opportunities and threats; areas of key strategic importance can be identified. For example Spat Supply, Capital Investment, Research & Development, Water Quality, Business Support and Marketing. Once identified, the issues associated with these areas can be investigated and then strategies formulated for each one. It is at this point the strategic vision becomes important to lend scope and scale to the strategies. Table 3 below contains examples of this:

Key Areas	Issues/Comments	Actions	Objectives
Spat Supply	A reliable supply of quality, affordable spat in commercial volumes will be key to industry growth Question: what factors are currently hindering wild catch spat growers from supplying affordable and reliable spat; do they need research and development? Question: what has stopped hatcheries from achieving this? Abandon leases/ tarred products	Address obstacles identified by wild catch growers. Boost capacity of small-scale hatcheries. Expertise, brood stock, algae. Planning and feasibility for a NSW industry / private /university hatchery for all potential shellfish spat	Capacity greater than 12 million dozen shellfish by 2040 Sourced from a variety of small and large scale hatcheries
Investment	Industry growth is stifled by inability of farmers to borrow money against oysters leases – no value attributed to oyster leases, why? New entrants are cobbled with liability of old redundant infrastructure.	Find out and address the barriers to using oyster leases as capital assets Free up the NSW oyster lease bond money for a strategic ongoing clean-up of abandoned leases – make existing water available Support farmers wishing to leave the industry to get their farms 'new age' ready (clean water, clean land philosophy).	Facilities for borrowing against farmer land and lease assets. \$100,000,000 in new investment by 2040 100% productivity of lease areas.

Table 3: Comparison of key SWOT areas, actions and objectives

Industry Ownership and Key Players in the Development of the Oyster Industry Strategic Plan

A key aspect of the Australian Wine Industry's highly successful Strategy 2025, is that the Wine Maker's Federation of Australia took ownership of the strategy by stating:

"The Wine Makers' Federation of Australia (WFA) on behalf of the Australian Wine Foundation, will take responsibility in consultation with the Winegrape Growers' Council and other wine industry bodies for implementing, monitoring and revising Strategy 2025."

A NSW Oyster Industry's Strategic plan should be developed with the aid of industry members, government and NGO's. It is important however, that an industry body take ownership of the strategy to ensure its success.

Key Players in the NSW Oyster Industry include:

- The NSW Farmers Association (NSWFA) Oyster Committee
- NSW Department of Primary Industries Aquaculture Division
- NSW Department of Primary Industries Food Authority
- NSW Local Land Services
- NSW Aquaculture Research Advisory Committee (ARAC)
- NSW Shellfish Committee
- OceanWatch Australia
- Oysters Australia
- The National Aquaculture Council

The NSW Farmers Association (NSWFA) - Oyster Committee

The NSW Farmers Association (NSWFA) became the sole remaining Industry Association in 2006 when the Oyster Farmers Association (OFA) was disbanded. Interestingly the NSW Oyster Industry has a history of fragmentation with as many as three different industry associations being active at times. This lack of unity may have been a contributing cause for the industries decline over the past 30 years. As the sole remaining industry association the NSWFA – Oyster Committee is the organisation best suited to coordinate, monitor and revise an industry wide strategic plan with the aid of the other key players.

The NSW Shellfish Committee

As a round table consisting of the major players, including non-NSWFA associated industry leaders, the NSW Shellfish Committee is the ideal forum to develop, refine and review a NSW Oyster Industry Strategic plan. This committee is an advisory statutory body providing advice to the Minister and the NSW Food Authority on operation and administration of the NSW Shellfish Program. However, it has also taken on the role of the now defunct Peak Oyster Advisory Committee and advises the Minister on other Shellfish related matters. It includes six representatives from the shellfish industry including a representative of the NSWFA Oyster Committee, the Manager of Aquaculture from NSW DPI Fisheries, the CEO of the NSW Food Authority, the NSW Shellfish Program Manager and an independent chair. It is a well-resourced and highly equipped committee and is the perfect forum through which to develop a strategic plan for the NSW Oyster Industry.

Relevant Observations from Nuffield travels

Nuffield travels provide scholars with unique life changing experiences by gaining wide-ranging perspectives of the scope and scale of agriculture and aquaculture. Information gathered from farming industries all over the world can be applied back home within the scholars industry. The knowledge gained assists in developing recommendations for the study topic and in this case on strategic planning and vision in the Oyster Industry.

Small farms can produce big results: The India Experience

A visit to India challenges the perception that farming has to be large scale with efficiency in volume and mechanisation. In India traditional land ownership rules allow ownership of only small plots of land (one hectare on average). This results in many small farmers. For example, 6,000 cane farmers supplying one sugar refinery, 120,000 dairy farmers supplying one dairy factory. Another. 7,000 farmers supplying a baby corn packing plant.

Although not ideal from an efficiency standpoint, ultimately these farmers are still doing business and are productive enough to supply value value-adding businesses at a scale to service both domestic and export markets.

The NSW Oyster Industry also has a relatively large number of farmers with (350 permit holders). Most of these farms are owner operated and often rely on off farm income. They are extremely resistant to hardship. A strategic plan would recognise that this large number of farmers are an asset to the industry. The diversity of cultivation techniques, resilient business models and expertise should be harnessed to achieve its objective.



Pictured above: A typical dairy farm in India

If we cannot work co-operatively then we need to work collaboratively: The secret to Dutch co-operatives and why working collaboratively could be the first step

The Dutch do cooperatives very well. This is evident on visiting Flora Holland flower auctions and listening to representatives of Flora Holland and Friesland Campina Milk co-operative.

These speakers outlined the key aspects to successful co-ops that include:

- Focus on maximising farmers profits at the lowest possible cost
- Separation of the Members Committee Board and Executive employees
- Executive decisions communicated in layman's terms to members and
- A big co-operative will attract talented people.



Pictured above: The flower auctions at Flora Holland, Netherlands

Cooperatives can, without a doubt, give smaller fragmented industries greater power over the market. However it is not easy to establish one and both speakers acknowledged that the Dutch seemed to have a cooperative 'X' factor that may not exist in Australian farming industries. Certainly, attempts at establishing cooperatives in the NSW Oyster Industry have not been successful to date.

However, oyster farmers in NSW share the same resources and must by default work collaboratively to maintain their shellfish quality assurance programs. In recent years oyster farmers in 8 of 29 oyster estuaries have collaborated to develop Environmental Management Systems (EMS).

The EMS process recognises that oyster farmers share the same water resource and are affected by the same impacts. These impacts may originate upstream from other river users or landowners. The integrity of the estuary and its catchment is vital to ensure oyster growth. It is in an oyster farmer's best interests to work in partnership with other farmers, natural resource managers and the community to ensure they can protect and improve water quality vital for oyster growth (CROF & OceanWatch. 2007). The catch cry of the Clyde River Oyster Farmers EMS is that:

Good Water Quality = Good Oysters = Regional Employment and Investment.

Overall Observations from Nuffield Travels

Observations from Nuffield travel identified that farming operations do not need to be big however collaboration and partnerships are vital to achieve and sustain a successful farming business and/or industry. The NSW Oyster Industry already works collaboratively to maintain shellfish safety as well as manage water quality. It now needs to collaborate further to secure an economically viable future.



Pictured above: Oyster Bar in Kiev, Ukraine

Conclusions

The NSW Oyster Industry has the unlimited potential to grow and to become more diverse and profitable. The product is undeniably in demand. The NSW Oyster Industry has a world-class quality assurance and is graced with an abundance of healthy oyster growing estuaries. It has a supportive government and community and can offer an attractive lifestyle to new entrants.

However, market forces, or the success of any single business, are unlikely to turn around falling production and profitability. It will require a whole of industry approach. An industry driven strategic plan is vital to create an envisioned future of the NSW Oyster Industry and unlock its potential. A Strategic Plan is needed that will detail the scale and scope of opportunity and form the framework necessary so that on a day-to-day basis, individual businesses, the NSWFA, Government and supportive NGO's can all work towards achieving a shared vision that will secure the future of the NSW Oyster Industry.

Recommendations

- The NSW Oyster Industry adopts a Big Hairy Audacious Goal (BHAG) as a Strategic Vision
 something the industry, government and the investors can rally behind.
- The NSWFA Oyster Committee in collaboration with other industry leaders (NSW Shellfish Committee) develops a short concise strategic plan to achieve this Strategic Vision.
- The NSWFA Oyster Committee takes ownership of the development, implementation and review of the Strategic Plan in collaboration with government and other stakeholders.
- The Strategic Vision should be broken down into smaller goals so that it can be demonstrated to be achievable.
- In developing the NSW Oyster Industry's Strategic Plan, the success and strengths of the South Australian and Tasmanian Pacific Oyster Industry should be taken into account.

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Plain English Compendium Summary

Project Title: Can strategic planning be used to revitalise the NSW Oyster Industry?

Nuffield Australia Project No.: 1217

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Objectives

- To investigate if strategic planning could be used to revitalise the NSW Oyster Industry.
- What the key steps are to developing a strategic plan for the industry.

Background

The NSW Oyster Industry is 130 years old and is Australia's oldest aquaculture industry. On paper it has a lot going in its favour, the industry has a world-class quality assurance program and healthy, export classified estuaries producing quality shellfish that is in high demand. It has the support of the NSW State Government and operates with high community acceptance. However, the industry is in serious decline. It is plagued by decreasing production and poor profitability and without significant intervention in the next few years, the industry is at real risk of disappearing.

Research

For the purpose of this report the NSW Oyster Industry was compared against the meteoritic production rise and success of the South Australian and Tasmanian Pacific Oyster Industries. Also examined was the role of strategic planning in the success of the once failing Australian Wine Industry.

Outcomes

Strategic vision and planning was the key factor in the growth of the Australian Wine Industry. Key aspects of successful industry strategic plans include:

- An ambitious and engaging vision for the future;
- Industry ownership of the strategic plan; and
- Strong leadership with a whole of industry approach

Implications

An industry driven strategic plan is vital to create an envisioned future of the NSW Oyster Industry and unlock its potential. A NSW strategic plan would detail the scale and scope of opportunity. It would also form the framework so that on a day-to-day basis, individual businesses, the NSW Farmers Association, the Government and supportive Non-Government Organisations (NGO's) can all work towards this vision together. Furthermore, it will serve as a catalyst and rallying point to revitalise the NSW Oyster Industry and help ensure its long-term survival, growth and success.

Publications

Nuffield Farming Scholars Annual Conference, Launceston, 2014