STEERING A NEW COURSE

Strategy for a Restructured, Sustainable and Profitable Irish Seafood Industry 2007-2013

Report of the Seafood Industry Strategy Review Group

DECEMBER 2006

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Bord Iascaigh Mhara	BIM
Common Fisheries Policy	CFP
Co-ordinated Local Aquaculture Management System	CLAMS
Department of Communications, Marine & Natural Resources	DCMNR
Department of Transport	DoT
Enterprise Ireland	EI
European Fisheries Fund	EFF
European Union	EU
Foras Áiseanna Saothair	FÁS
Food Institutional Research Measure	FIRM
International Council for the Exploration of the Sea	ICES
Individual Transferable Quota	ITQ
Integrated Coastal Zone Management	ICZM
Maximum Sustainable Yield	MSY
Marine Institute	MI
Marine Survey Office	MSO
Modified Atmosphere Packaging	MAP
National Development Plan	NDP
New Product Development	NPD
Producer Organisations	POs
Refrigerated Sea Water	RSW
Seafood Development Centre	SDC
Seafood Development Programme	SDP
Special Area of Conservation	SAC
Transferable Vessel Quota	TVQ
Údarás na Gaeltachta	ÚnaG

Foreword

Over the past five months, the Strategy Review Group has listened carefully to the views of individual fishermen, fish farmers, processors, marketers and other stakeholders in order to address the Terms of Reference defined by Ministers Noel Dempsey and John Browne. This has entailed convening four public consultative meetings at venues around the coast, a number of other meetings with representative organisations, the consideration of over 70 submissions from interested parties and 21 ordinary meetings of the Review Group to determine its findings and recommendations.

It is fair to say that much of the discussion with industry stakeholders was dominated by concerns over declining fish stocks reflected in falling quotas for most fish species, the perceived lack of even-handed conservation and enforcement for the fishing activities of all fleets in Irish/EU waters and the impact these factors are having on the viability of Irish fishing vessels and processing plants. The concerns of the industry in this regard were sometimes tied to a strong sense of grievance among the fishing community at the low share of stocks allocated to Ireland under the Common Fisheries Policy but the Group made it clear that this issue was outside the Terms of Reference for the Review.

The view of the Group is that all stakeholders and especially the EU and the Irish Government must now face-up to the inescapable fact that the scientific evidence, largely borne out by industry experience, is that 75% of the fish stocks in the waters around Ireland are harvested beyond their safe biological limits, notwithstanding the fact that these waters are potentially among the most productive in the EU.

The stark reality is that decisive and radical action is now called for at national and EU level to safeguard the seafood industry, the fish stocks and the future of coastal communities. This will entail the adoption of environmentally-friendly conservation measures and an equally compliant approach by both Irish and other EU vessels. The cost of inaction now would be incalculable in years to come, faced with further and possibly irreversible stock depletion and dismantling of the same coastal communities who directly or indirectly have come to depend on the industry for their livelihood.

In this report, the Group sets out its vision for a sustainable, profitable and self-reliant industry that will maximise its long-term contribution to coastal communities based on fish stocks restored to sustainable levels in the context of a healthy and diverse marine environment. This vision will require a more innovative and co-ordinated approach to the marketing of seafood, capitalising on its healthy and nutritious image and maximising the value of seafood at every stage from the sea to the table. Essential to the achievement of this vision will be a further sharp reduction in fishing capacity and effort, more effective management and conservation of fisheries and a much bigger role for aquaculture in meeting the increasing demand for seafood. Achieving these objectives will involve a painful adjustment process for the industry. It will also require significantly increased financial commitment by the Government starting in 2007.

In undertaking its review, the Group has benefited from the wholehearted co-operation of the industry, the Department of Communications, Marine and Natural Resources, State Agencies and other stakeholders. We would like to record our appreciation and thanks to everyone who contributed to the review process, especially the fishing industry representative organisations. Last but not least, we would like to record our thanks to Bord Iascaigh Mhara who provided the Secretariat to the Review Group, especially Pat Keogh, Chief Executive and the Senior Management Team and Helen O'Connor who was Secretary to the Group.

As a final comment, the Group is firmly convinced that a more cohesive approach both within the industry itself and between the industry and the State is essential to effectively address both its deep-seated problems and its undoubted potential, in the knowledge that all sides are striving towards the same goal of maximising the industry's long-term contribution to the island of Ireland and particularly its coastal communities.

Noel Cawley
Chairman

Joey Murrin
Member

Ruán O'Bric
Member

SECTION 1: EXECUTIVE SUMMARY

Section 1: Executive Summary

Scope and Focus of the Review

This comprehensive and independent seafood strategy review was based on extensive consultation with the Irish seafood industry and other stakeholders.

The Minister for Communications, Marine and Natural Resources, Mr. Noel Dempsey T.D. and the Minister of State, Mr. John Browne T.D., announced on 29 June 2006, the commencement of a comprehensive review process with the objective of developing a strategy for a sustainable and profitable Irish seafood industry over the period 2007-2013. An independent three person Strategy Review Group chaired by Dr. Noel Cawley along with Mr. Joey Murrin and Mr. Ruán O'Bric was appointed to carry out the review with secretariat provided by Bord Iascaigh Mhara. Over the past five months the Review Group has engaged in extensive public consultation with the seafood industry, its representative organisations and other stakeholders. The Group's findings and recommendations are summarised in this Section and presented in greater detail in Sections 2 to 6.

Profile of the Irish Seafood Industry

The Irish seafood industry is critical for the sustainable development of remote island and coastal areas which in turn is dependent on sustainable fish stocks and a healthy marine environment.

Generating total annual revenues of over €702 million and providing direct employment for some 11,615 people the Irish seafood industry is a vital indigenous industry, making a significant contribution to the economy in terms of output, employment and exports. Based on the utilisation of Ireland's indigenous natural marine resource, the industry makes an enormously important contribution to regional and local development in of remote rural coastal communities. The National Spatial Strategy 2002-2020 has identified the development of marine and natural resource based industries as critical to the future prosperity of these coastal areas where there are few alternative industries.

A healthy marine environment and maintaining fish stocks at levels which support the highest sustainable catches are fundamental for a vibrant seafood industry. It is estimated that over half of all fish stocks internationally are fully exploited and a further quarter are either over-exploited or depleted. The waters around Ireland contain some of the most productive fishing grounds in the EU and it is estimated that in 2004 the total catch by all fleets within the Irish Exclusive Economic Zone was 700,000 tonnes of fish valued at €500 million, the greater proportion of which was taken by non-Irish vessels. Furthermore the scientific assessment is that over 75% of these stocks are outside safe biological limits with either a low stock size or unsustainable levels of exploitation. Accordingly the Irish seafood industry is currently facing serious challenges to its survival and future development primarily related to declining stocks and quotas and consequent structural imbalances at catching and processing levels.

Nevertheless, given the growing demand for seafood products, described later in this report, this industry offers significant development potential. The realisation of this potential is, however, dependent on both Government and industry working together in a concerted and co-operative manner to address these challenges and to build on the progress made to date to deliver a profitable, competitive and sustainable seafood industry. Furthermore, increased financial support under the NDP 2007-2013 will be required for vital industry restructuring thereby ensuring that it can continue into the long term as the essential economic engine for Ireland's coastal communities.

The Market for Seafood

A buoyant and growing market for seafood exists both in Ireland and throughout key export markets.

The market for seafood is buoyant. With EU import dependence currently estimated at 74%, there is growing reliance on imported products to satisfy an increasing demand for seafood on European markets. Unlike the agrifood sector, there are little or no direct EU price supports for seafood and trade with third countries is characterised by low or zero import duties and no export refunds. On the domestic market, growth in the demand for seafood is outpacing consumption growth for most other protein products, with significant scope for future growth. Across all markets seafood enjoys an extremely positive image and is associated with a healthy lifestyle. Consumers are increasingly aware of the nutritional and health benefits to be obtained from eating seafood products and are developing a greater understanding of the range of fish on offer. In addition, significant untapped opportunities exist to develop new seafood products and particularly fish-based functional food products.

It is against this backdrop that the Irish seafood industry operates. Whilst the industry must address a range of structural and supply related challenges, it is imperative that the clear and growing opportunity within the market is captured. The Group is firmly of the view that the market should be the guiding light for all development activity within this industry.

The Industry Landscape - Challenges that the Irish Seafood Industry Must Address

The industry must address a range of policy, structural, market and relationship related challenges all of which are critical.

While the marketing fundamentals for Irish seafood are strong, it is also clear that, based on feedback from the consultation process, the industry is facing a range of significant challenges. These must be urgently and comprehensively addressed if these opportunities are to be realised. These challenges include:

1. **Need for a more innovative market-focused strategy throughout the industry – aimed at achieving the maximum possible return for each tonne of fish landed.**
   - *Currently the industry's approach to the market, its performance within the marketplace and its understanding of market dynamics is well below that which exists in other sectors of the Irish food industry.*
   - *The performance and investment of the seafood industry in the area of innovation/new product development is weak with only a few minor exceptions.*
   - *The position is compounded by the almost complete absence of seafood-related innovation/new product development activity within publicly funded research institutions.*
   - *Where such activity does occur, it is fragmented, at times unknown to the sector and can be difficult to access.*

2. **Lack of profitability, fragmentation and uncertainty of supply within the processing sector.**
   At an overall level, the Irish seafood processing sector can be described as highly fragmented, operating at significant overcapacity, unable to maximise efficiencies and generating very little profit (loss making in many instances). A declining supply of raw material, due to reducing quotas and a tendency for larger vessels not to land fish in Ireland has contributed to the overall poor state of the seafood processing sector, particularly in the case of pelagic processing.

3. **Imbalance between catching capacity and resource availability – requiring significant but managed industry restructuring and rightsizing.**
   Due to declining fish stocks, reduced quotas and the requirement for strict regulatory compliance, a significant imbalance currently exists between the available fish resources, which can be sustainably harvested and the catching capacity of the national fleet. Essentially this means that the current quota allocations are below viability levels for large sections of the whitefish and pelagic fleet.

4. **Need for stakeholder-supported, commercially-aware fisheries management policies and procedures, based on strict compliance with quotas and other National and EU regulations.**
   The current fisheries management regime is regarded by industry as inflexible and having a significant negative impact on the profitability and commercial development of the industry. This can only be effectively addressed once fleet capacity has been re-aligned to available fish resources and, with the active self-reliant management of quotas by fishermen themselves, utilising a professional and transparent business structure.

5. **Need for a comprehensive industry development programme supported by an appropriate regulatory framework, to encourage market-led investment to expand the aquaculture sector.**
   Due to a range of issues, including growing competition in key markets, disease outbreaks/bay closures, supply chain failures, competing demands and opposition from other stakeholders and poor financial performance, the aquaculture sector has failed to reach its potential. Difficulties experienced by promoters with licensing and regulation have contributed to this failure.

6. **Obstacles preventing the sustainable exploitation of inshore fisheries.**
   The traditional preoccupation with the off-shore sector and the lack of a clear and coherent resource management policy is threatening the sustainable development of the inshore sector, coupled with the lack of State resources, both in administration and enforcement.

7. **Inadequate fish conservation and fishing practices, including mis-reporting, high-grading and discarding (often the consequence of EU regulations) need to be addressed to achieve fish stock/environmental sustainability.**
   Insufficient attention is paid to environmental issues and their potential impact on the industry. Conservation issues are not tackled with the required degree of urgency by the industry and at State and EU level.

8. **Need for a level playing pitch throughout the EU with respect to regulatory compliance and conservation practices.**
   It is in the interest of both the industry and DCMNR to ensure that a level playing pitch prevails throughout the EU both with respect to regulatory compliance and on the issue of conservation.

9. **Need for improved relationship between the industry and the State and its policymakers/regulators.**
   At the various consultative meetings, industry members were critical of the Government/Minister/DCMNR's stance towards the industry and highlighted the issue of poor communications and customer service. A failure to address this issue will inhibit development of the Irish seafood industry. There is also a need for the industry to become more self-reliant and focused on business and commercial solutions rather than being over-dependent on political intervention.

10. **Fragmented representation in a fragmented industry.**
    The task of identifying solutions to some of the critical problems facing the industry is made more difficult due to the absence of a single coherent representative voice for the industry.

In order to deliver a sustainable and profitable seafood industry, it is paramount that these challenges are addressed in the coming years and this will require a concerted effort on the part of all industry stakeholders – including fishermen, fish farmers, processors, marketers, industry representative organisations, Government Departments and State development and research organisations.

Industry Vision

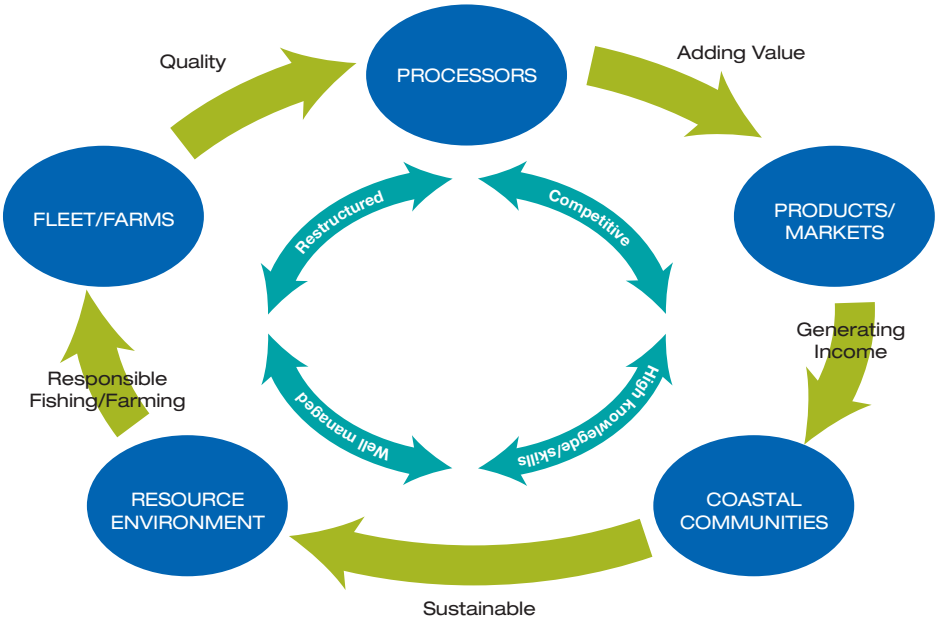
Profitability, competitiveness, and sustainability must be the key drivers of the Irish seafood industry vision.

The Strategy Review Group vision for the Irish seafood industry can be described as follows:

'A sustainable, profitable, competitive and market-focused seafood industry making the maximum long-term economic and social contribution to coastal communities and Ireland as a whole'.

This vision envisages the emergence of a restructured, commercially-focused, self-reliant industry with market forces driving success and founded on a well-managed fisheries resource and a healthy and diverse marine environment.

Vision for a Sustainable Seafood Industry

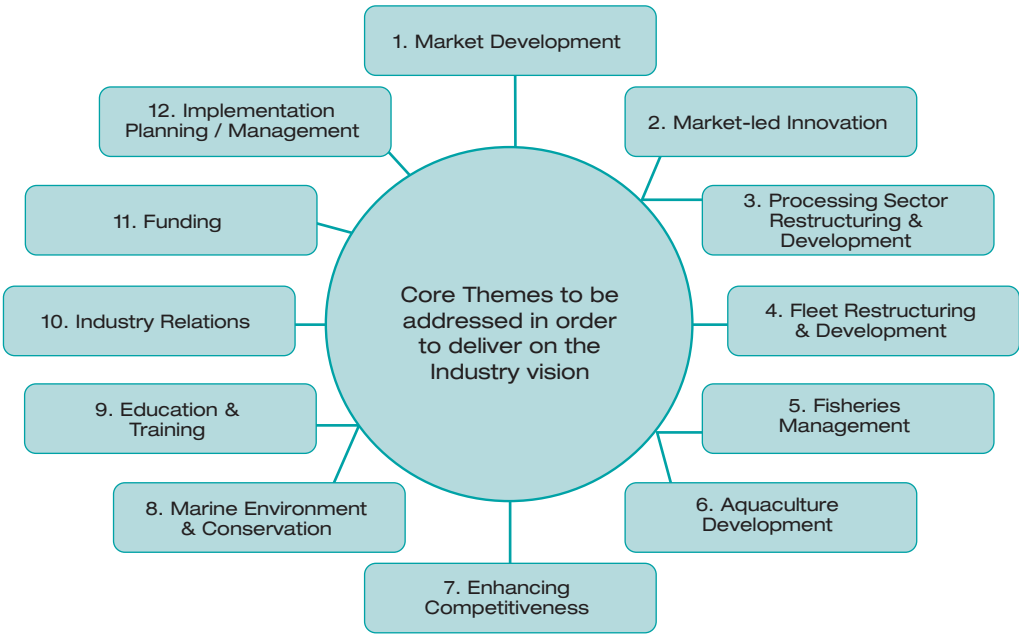


Core Themes and Recommendations

It is paramount that all industry stakeholders work in a concerted and co-operative manner to implement without delay a range of recommendations focused on delivering this industry vision.

In order to ensure that the Irish seafood industry delivers on this vision, the Strategy Review Group has made a series of recommendations, which are focused on addressing critical issues impacting on the industry's development. These recommendations, which are grouped under ten core themes, are summarised below and are presented in greater detail in Section 5 of this report. Associated with each of the development themes is a 'key priority', which defines the overall objective for each of the core themes.

Core Themes, Funding and Implementation



Core Theme 1: Market Development

In the context of establishing the market as the key driver and focus of all industry activity, and with the objective of ensuring that the industry capitalises on the enormous potential offered by this market, the Group is recommending a significant enhancement of State financial support for marketing. It is proposed that a budget of €55 million be allocated for marketing over the seven-year period, which on an average annual basis amounts to €7.8 million. This compares with an average annual allocation for seafood marketing of €2.5 million over the 2004-2006 period. In terms of how this increased financial support is to be invested, the following recommendations are made:

1.1 Invest further in market research and intelligence.

In order to give effect to the proposed market-focused and customer-led strategy, further significant investment will be required in market research and intelligence capability to inform the proposed strategy on driving market-led innovation at customer and consumer levels with particular regard to supporting effective trade and promotional activity in marketing seafood and the launch and establishment of new products.

1.2 BIM to focus marketing support in a targeted fashion on key export markets in addition to the domestic market.

In conjunction with the industry, BIM should focus its marketing support to target key export markets alongside the domestic market in developing targeted plans to assist exporters/processors capture retail, foodservice and ingredient customers in these markets

and, where feasible, to shorten the industry supply chain. Outside of the core EU markets, support in research and marketing should be delivered by BIM on a cost benefit basis to the sector. This is in recognition of the fact that, while exports of Irish seafood have a wide export profile, over 70% of Irish seafood exports are sold within five EU markets (France, UK, Spain, Germany, Italy) with the domestic market accounting for nearly 47% of total seafood sales (€311 million).

1.3 Establish a 'Seafood Island' identify for Irish seafood.

A new Seafood Island identity should be established and promoted to strengthen Ireland's market position and establish Irish seafood as a premium proposition with positive quality and environmental attributes, supported by effective customer service and proactive market-led R&D. The Food Island concept/identity promoted by Bord Bia is recognised in this respect as a similar marketing tool and should be examined to leverage guidance in the establishment of this new seafood identity.

Core Theme 2: Market-led Innovation

Complementing the Marine Institute's National Marine Research and Innovation Strategy there is a need for, and opportunity to significantly enhance the seafood industry's performance in the area of market-led innovation and new product development (NPD). It is against this background that the following recommendations are made:

2.1 Adopt a structured approach to providing services for commercially-focused R&D/NPD more effectively through BIM's Seafood Development Centre.

Despite good co-operation between Agencies, State support and industry access to services for R&D, NPD and innovation are recognised as obstacle for the sector in their current fragmented structure, with the need for a co-ordinated approach to be taken by the relevant agencies involved. Bord Iascaigh Mhara (BIM), Enterprise Ireland (EI), Údarás na Gaeltachta (ÚnaG) and Teagasc should work more closely to align their marketing, research, NPD and financial supports through a central gateway structure to facilitate ease of access to support and services for the sector.

The Seafood Development Centre, within BIM's Market Development Division, should be considered as the appropriate gateway based on the need for a market-focused approach to innovation within the industry. However, it is also recommended that further examination is required to study the need for developing a seafood product research and development centre of excellence, mirroring the Dairy Products Research Centre, Moorepark in Cork.

2.2 Adopt a twin-track approach to innovation in the pelagic sector.

With specific regard to the pelagic processing sector, a twin-track approach is recommended to achieve economies of scale and cost efficiencies in the processing of bulk seafood products combined with a concerted drive to identify alternative market opportunities for pelagic raw material.

This will rely on increased efforts through BIM, in conjunction with industry, to undertake detailed research of potential market opportunities and to consider the feasibility of converting a small number of existing plants into higher value-added operations in an effort to alleviate the current overcapacity difficulties.

2.3 Invest in identifying the potential usage of fish and marine biodiversity in functional foods.

Recognising the potential of the functional foods market, support is recommended for a programme of investment to create a strong interdisciplinary research capability in the identification and utilisation of fish and marine biodiversity as a source of materials for use in functional foods by developing the capability to process marine based materials for use by the functional food sector. The three specific areas of research proposed by the Marine Origin Functional Foods Steering Committee under the auspices of the Marine Institute are: pelagic species, seaweed and marine origin functional materials. Support should be leveraged through the FIRM Programme[1] where possible for this programme.

Core Theme 3: Processing Restructuring and Development

In order to establish a profitable, competitive and sustainable Irish seafood processing sector, significant restructuring to the current processing configuration needs to occur, accompanied by a major performance uplift. This critical need for restructuring and development calls for the following recommendations:

3.1 Prioritise support for businesses with good potential.

Acknowledging the large number of companies in the seafood processing sector and the challenges that this fragmented structure poses in development terms, a Step-Up Programme is recommended to incentivise consolidation and prioritise support for the development of seafood businesses where there is good potential for the creation of sustainable long-term value. This Step-Up Programme, should aim to fast-track the development of the sector through channelling financial support in a focused and targeted manner to achieve measurable results. However, the approach should also aim to assist companies that do not qualify for financial support to improve business performance through the establishment of a co-ordinated Business Options Programme operated by BIM in conjunction with EI and ÚnaG. This would assist at an advisory level in resolving performance-related issues, assisting companies planning to exit the sector, in addition to providing support to encourage companies to consider partnerships by way of joint ventures, amalgamations or other types of commercial strategic alliances.

1 *Food Institutional Research Measure*

3.2 Encourage investment in seafood processing from the wider food processing sector.

In light of strong demand and the positive future market potential for seafood, a concerted effort should be made by BIM, EI and Údaras na Gaeltachta (ÚnaG) to encourage and attract investment into the sector from the wider food processing industry to fast-track the development of scale and the capability to drive innovation and value-added development within the seafood category. Given the supply constraints, a partnership approach is recommended with a number of existing seafood processors, which would allow for acceleration of investment in R&D, NPD, marketing and logistics based on the capability of the larger food companies without displacement of existing seafood businesses.

3.3 Introduce measures to improve competitiveness.

To compete effectively internationally, a concerted effort is required by EI, BIM and ÚnaG in conjunction with industry to improve the competitiveness of the processing sector and deal with the issues of poor productivity levels, operational inefficiencies and the need for modernisation of plant and equipment. Focus is also required on achieving energy efficiencies and addressing the issue of waste disposal and treatment and should if possible be facilitated through the provision of performance benchmarks. The Group recommends that a benchmark study be undertaken by BIM and EI to establish clear targets for State-supported investment in the processing sector and identify critical performance weaknesses impacting on competitiveness to allow for the introduction of a Seafood Processing Competitiveness Programme.

3.4 Co-ordinate State support to the processing sector.

Notwithstanding the good co-operation which already exists, an integrated and co-ordinated support structure needs to be established to overcome the existing fragmented delivery of services by the State Agencies responsible for the development of the seafood processing sector. The Group recommends that a committee under the chairmanship of DCMNR be established to co-ordinate State support to the processing sector with representatives from BIM, EI, ÚnaG and FÁS. A holistic approach is recommended in the way that State support is delivered through the proposed Step-Up Programme by all key stakeholders involved (BIM, EI, ÚnaG, FÁS) to ensure that the objectives of the strategy for the processing sector are achieved.

Core Theme 4: Fleet Restructuring and Development

The future profitable and sustainable development of the whitefish sector can only be achieved when the significant imbalance between the available resource and catching capacity has been eliminated. This requirement forms the background to the following recommendations:

4.1 Extend and develop the current Whitefish Fleet Decommissioning Programme and provide support for crewmembers.

Extend and develop the current Decommissioning Programme to bring about a better alignment between fleet capacity and resource availability through the permanent removal of 45% of the capacity of the demersal fleet 18 metres in length and over, which has been partly (10%) achieved through the present decommissioning scheme. The pace of decommissioning can be quickened by providing an incentive premium for a defined time period, a selective reduction in the qualifying age of vessels and by treating decommissioning monies as capital gains rather than income for tax purposes. A proportion of the overall fund for restructuring should be set aside to support crewmembers impacted by the Decommissioning Programme.

4.2 Further investigate the need for a targeted decommissioning scheme for vessels less than 18m in length.

While recognising the need for a targeted decommissioning scheme for vessels less than 18 metres in length, the Group recommends that a comprehensive analysis be conducted in advance to determine the eligibility, urgency, scope and costs of any such scheme.

4.3 Pelagic RSW Fleet Restructuring

Industry-led restructuring is recommended by the Review Group. For a variety of reasons, the decommissioning of RSW vessels is not considered to be an appropriate or viable option for the pelagic segment of the fleet. Additionally, the Group is recommending the introduction of a quota management system that is sufficiently flexible to ensure maximum returns to vessels, crews and shore-based processors/marketers dependent on landings; the phasing out of Olympic fishing; the establishment of an industry-led pelagic quota management structure as part of a new devolved quota management system; a review of some aspects of the current fleet management policy; investigating mechanisms for acquiring additional pelagic quota; new and improved means of pelagic marketing; and increasing the pelagic resource base by gaining access to sustainable overseas fisheries through third country and private agreements.

4.4 Undertake restructuring of the polyvalent pelagic fleet.

The Group recommends that restructuring of the polyvalent pelagic fleet should be accommodated in the overall Whitefish Fleet Decommissioning Scheme and that the additional value of active pelagic capacity should be reflected in the decommissioning grant rates made available to these vessels.

In relation to under 65 foot vessels, the Group recommends that the 1,500 tonnes mackerel quota allocation set aside for these vessels is maintained and that new management arrangements be introduced to ensure that the mackerel and other pelagic quotas are widely distributed within this sector.

4.5 Review entry-exit regime for all fleet segments.

Whilst recognising that fleet restructuring should, in the main, be undertaken through a combination of fleet decommissioning, industry-led restructuring and a fleet licensing policy review, the possibility of modifying the existing entry-exit regime to require remaining vessel owners to withdraw additional capacity (beyond the current 100% or tonne for tonne requirement) for both new and existing vessels should be considered in the event that the restructuring approach outlined herein is not sufficiently delivered. An initiative such as this may become necessary to prevent future over-capitalisation within the catching sector thus dissipating some of the benefits of decommissioning.

4.6 Establish a Register of Commercial Sea Fishermen.

As a means of facilitating the organised development and support of fishermen/crew, an official Register of Commercial Sea Fishermen should be established and maintained by BIM. The provision of accurate and up-to-date information for the purpose of maintaining the Register should be a pre-requisite for eligibility for State support.

Core Theme 5: Fisheries Management

The profitable development of the industry requires a commercially responsive, and regulatory compliant, fisheries management regime to be put in place. This requirement forms the basis for the following recommendations:

5.1 Implement a new and devolved fisheries management regime.

Establish a new devolved fisheries management regime with a view to bringing about a commercially aware, stakeholder supported and regulatory compliant management framework for the whitefish, shellfish and pelagic sectors.

5.2 Establish an industry-based legal entity to oversee quota management.

The Group recommends that the Fish Producer Organisations set up a legal entity to administer the devolved quota management regime for whitefish and pelagic fish under the advice and direction of an Industry Quota Management Committee with appropriate representation from POs, non-PO members, processors and marketers.

5.3 Update fisheries management objectives.

The Minister should establish clear fisheries management objectives that:

- maximise the long term return from fisheries resources to Ireland
- protect the marine environment and
- promote better and more transparent decision making.

Additional objectives should be established covering economic, social, safety and governance issues.

5.4 Update fleet management policies.

Fleet management policies and related licensing policy should be updated with a view to continuing the substantial work undertaken since the Fisheries (Amendment) Act, 2003 to establish efficient and transparent policies and procedures. This should include the establishment of a new inshore fleet segment and the designation of specific coastal areas with exclusive or priority access for inshore vessels.

5.5 Enhance institutional support for inshore fisheries.

Issues affecting the inshore sector which need to be addressed include, inter alia, the development of a coherent policy on access and licensing arrangements; enhanced institutional support for the Shellfish Management Framework; management of recreational/leisure fisheries; integration between the shellfish management framework and any new devolved quota management structure; managed entry to inshore fisheries; support for lobster v-notching; and the possibility of a new fleet segment specifically for the inshore fleet. Sustainable fishing or other opportunities must also be found for registered fishing vessels displaced from the salmon drift net fishery.

Core Theme 6: Aquaculture Development

The aquaculture industry still has some way to go to achieve its development potential – despite State support, the absence of quotas and the scope at national level that exists to influence this sector's development. Currently the Irish aquaculture sector contributes 38% by value of total primary production and in this respect is lagging behind the world-wide trend where close on half of all fish supplies now emanate from farmed sources. The following recommendations are made with a view to enhancing this sector's contribution to the overall seafood industry and to the income and welfare of coastal communities.

6.1 A sustained, fact based, communications programme, run by State Development Agencies with industry support, should be undertaken to engender greater acceptance of aquaculture as a sustainable and legitimate activity by other stakeholders in the coastal zone.

The ultimate objective of such an initiative would be to assist with the creation of an economic and regulatory climate conducive to increased flows of equity and capital investment into the sustainable development of the Irish aquaculture sector. Such an approach would, over time, also serve to underpin the existing policy, encourage industry best practice and would sustain the necessary impetus to alleviate the various constraints that are currently holding the sector back. The aquaculture communications initiative would also serve to correctly 'map' the sector amongst the competing interests of other stakeholders as the process of Integrated Coastal Zone Management (ICZM) is developed in line with EU policy.

6.2 Review the current licensing and regulatory regime.

A review of the existing procedures and processes used to administer and implement the current licensing and regulatory regime for the aquaculture sector (finfish and shellfish) should take place with a view to strengthening current systems and procedures and delivering an improved service to customers.

6.3 Implement an Aquaculture Industry Development Programme.

BIM, in partnership with ÚnaG in Gaeltacht areas, should implement an Aquaculture Industry Development Programme, which must be fully integrated with the marketing, training and seafood processing programmes proposed in this review. The programme must be constructed in full accordance with the EFF and will incorporate provisions taking onboard the new aquaculture related elements of this Regulation. Although the new programme will continue to provide assistance for investment in increased capacity, where appropriate, it will also have a broader focus dealing with key areas such as improving competitiveness, reducing environmental impact, encouraging the farming of new species, applied R&D, the adoption of accredited quality assurance and environmental management systems and locally based actions to maximise the benefit of aquaculture to coastal and rural communities. The establishment of a Seed Capital Scheme, designed to accelerate the cultivation of new species and the speedier adoption of new technologies, should also be fully explored.

This integrated and holistic programme will be delivered locally in consultation with the Co-ordinated Local Aquaculture Management System (CLAMS) network and nationally via the relevant agencies and the Aquaculture Forum. In addition, the recommendations contained in the recently completed review of the rope mussel sector should be implemented. The review of the mussel seed resource, which is being carried out in association with the Northern Ireland authorities will provide a blueprint for the management of this critical resource and when this section of the review is complete it will allow for a further review of other elements of the bottom-grown mussel sector including; structure, marketing, infrastructure etc.

Core Theme 7: Enhancing Competitiveness

Given that the seafood industry is operating in an increasingly competitive market, there is a critical requirement to ensure that the industry is operating at maximum efficiency. Significant scope for improvement exists under this heading and this forms the background for the following recommendations:

7.1 Establish efficient landing and distribution infrastructure.

To enhance the competitiveness and attractiveness of landing fish in Irish ports, significant operational, infrastructure and cost issues need to be addressed to bring them in to line with best-in-class competing ports. In addition, BIM should work with seafood companies to identify efficient and effective distribution solutions for both the domestic and international markets with a drive towards developing a greater degree of direct access to retail, foodservice and ingredient customers and reducing the industry's dependence on intermediaries.

7.2 Implement more effective and co-ordinated arrangements for first-point-of-sale for seafood.

The Strategy Review Group supports the pelagic sector's proposal to establish a first-point-of-sale auction system modelled on the Norwegian system. Such a system should be initially established by the relevant Producer Organisations (POs) with EU/State support and thereafter financed and operated by the industry itself.

More co-ordinated whitefish marketing at first-point-of-sale based on adherence to certified quality and responsible fishing practices from the net to the customer and consumer, can ensure that both skipper/owners and crewmembers secure a higher share of the buoyant market prices for whitefish on home and European markets. The Group recommends the appointment of a Whitefish Marketing Co-ordinator by BIM to spearhead the co-ordination and consolidation of the current fragmented marketing structure at first-point-of-sale, utilising the proposed programmes for marketing and restructuring the processing sector.

7.3 Proactively support cost reduction and performance improvement

BIM should develop a systematic approach to working with fishermen, fish farmers and processors to identify sustainable performance-improvement, cost-reduction initiatives and technology transfer opportunities. Where possible, this process should be facilitated through the provision of benchmarks allowing fishermen/fish farmers and processors compare their performance with the best-in-class operators.

7.4 Enhance onboard technologies.

The development and adoption of enhanced onboard technologies to add value, utilise by-products and improve the shelf life of fish and shellfish landed that will enable them to be marketed in best condition and at times of optimal price and demand. BIM should support this through the Fleet Restructuring and Marine Environment Protection Programmes outlined elsewhere in the strategy.

7.5 Substantially enhance quality throughout the full supply chain.

Throughout all stages of the supply chain, from catching/harvesting, onboard handling, landing at port, processing and distribution to the end market, significant support should be provided for improving quality. In addition, support should be provided for the adoption and promotion of Accredited Quality Programmes. This development approach must be accompanied by measures to achieve price differentiation based on quality.

7.6 Engage in succession planning and attract and retain new entrants.

The industry should be encouraged to engage in long-term succession planning and provide incentives to attract and retain new entrants into the industry as applies in other sectors of the economy competing for school leavers or skilled immigrant labour.

7.7 Introduce a tax incentive for commercial sea fishermen.

The Group recognises that the extension of the Seafarers Tax Free Allowance already granted to Irish merchant seamen would be a very significant incentive for crew retention. Strict conditions should apply to a Fishermen's Tax Free Allowance and in negotiating this concession, consideration should be given to crewmembers being registered as commercial sea fishermen, with skippers/owners accountable for recording sea service and complying with revenue regulations. The Register of Commercial Sea Fishermen (proposed under Recommendation 4.6) should be leveraged to assist in implementing this recommendation.

7.8 Introduce a tax life for qualifying fishing vessels.

The possibility of a balancing charge arising on receipt of a vessel decommissioning payment is a significant disincentive for a skipper/owner to decommission. Consideration should be given to the introduction of a tax life for fishing vessels which would result in no balancing charge on vessels that have passed their tax life.

7.9 Publish and adhere to a grant-aid decisions timetable.

To reduce industry uncertainty and facilitate orderly planning and implementation of programmes and projects, a timetable should be published setting the deadline dates for project applications and subsequent grant-aid decisions by the relevant State Agencies.

Core Theme 8: Marine Environment and Conservation

The long-term future of the seafood industry depends on a sensible and responsible approach to conservation and to the industry's environmental performance. This, however, requires positive action from all EU Member States, not just Ireland. It is with this in mind that the following recommendations are made:

8.1 Increase awareness and response to environmental policies.

Given the significant developments in environmental policy in the context of international commitments under the Johannesburg Agreement on sustainability, the *Natura 2000 Framework* and the CFP, the State sector must put in place structures that facilitate efficient interpretation and rapid response in a consolidated manner to such developments so that the industry is properly informed in good time to effectively fulfil its obligations.

8.2 Promote local area management strategies and the Coastal Zone Management approach.

The two-way interaction of fisheries and aquaculture with the environment should be paramount in considering the future development of the industry. In this context, local area management strategies should be promoted for sensitive stocks (particularly inshore species) and the Coastal Zone Management approach should be further developed.

8.3 Promote the introduction of Environmental Management Systems.

Develop Environmental Management Systems (EMS) for aquaculture and fishing operations and promote their uptake by the industry. Capitalise on EMS by identifying and promoting Irish seafood produced in accordance with such systems.

8.4 Ireland to take a lead role on Regional Advisory Councils and industry to improve performance on conservation.

The Irish fishing industry should take a lead role through the Regional Advisory Councils (RACs) to ensure that sensible conservation policies are developed and implemented across the EU that take account of the impact of fisheries on the environment and vice versa. The industry must be proactive in meeting its environmental obligations through the further development and adoption of environmentally-friendly fishing gears and technical conservation measures such as the introduction of closed areas.

8.5 Develop management strategies that specifically aim to reduce discarding in fisheries.

The Irish Government and industry should actively promote and lobby the EU to adopt management strategies and fishing practices to avoid large catches of juvenile fish with the ultimate objective of moving to a full-scale discard ban system. This is in line with current EU recommendations for management of stocks at Maximum Sustainable Yield by 2015 in accordance with the Johannesburg Agreement.

8.6 Promote the development and uptake of environmentally friendly and fuel-efficient fishing gears.

Building on work carried out since 1990, Ireland should take a lead role in promoting fuel efficient fishing gear that is species and size selective, minimising the impact of fishing gear on sensitive habitats and protecting non-target species.

8.7 The industry and DCMNR to take a joint proactive approach at EU level to ensure EU wide compliance is enforced.

Following the establishment of the Sea Fisheries Protection Authority and the completion of current measures to ensure a fully compliant Irish catching sector and in circumstances where evidence exists that vessels from other Member States are not compliant, a joint proactive approach by the industry and DCMNR must be taken at EU level to ensure that EU regulations on compliance and control are strictly enforced throughout the Community.

Core Theme 9: Education and Training

The following recommendations are made in the belief that a significantly increased emphasis should be given to commercially-focused education and training programmes:

9.1 Increase investment in education and training for the seafood industry and others directly interacting with it and improve industry participation in commercially focused training programmes.

In supporting the significant industry developments envisaged above, increased investment in training will be required to address profitability, efficiency, environmental responsibility and sustainability across all sectors of the seafood industry. Modules supporting these concepts should be firmly embedded in existing training programmes. Accordingly BIM should be the central co-ordinating body for the development and provision of nationally accredited training to all sectors of the industry in accordance with identified needs. Specialist expertise to provide new training programmes can be acquired through the expansion of BIM's strategic training alliances with other State Agencies and educational institutions and upskilling training staff, thus maximising returns on investment. Training should also be provided to support those intending to diversify or seek alternative employment outside the industry, in co-operation with other training providers such as FÁS.

9.2 Increase the focus on training and qualifications in the inshore and coastal sectors.

BIM should focus more training resources in support of competence, safety, sustainability and profitability in the inshore and coastal sectors. In view of the significantly higher rate of accidents and machinery failure on inshore and coastal vessels affecting safety, profitability and crew retention, unqualified skippers and mechanics on these vessels should be required to hold formal Department of Transport Certificates of Proficiency or Competency as deemed appropriate.

9.3 Provide increased training to the aquaculture sector.

BIM's aquaculture training provision needs to be significantly expanded to reflect its increasing contribution to sustainable Irish seafood production, through strategic training alliances with other State Agencies and educational institutions and by refocusing existing training resources as required.

9.4 Provide increased training to the shore-based sector and establish a Graduate Placement Programme.

BIM should increase its training provision to the shore-based seafood processing sector in partnership with FÁS and a BIM/EI Graduate Placement Programme, to include FETAC/HETAC accredited training, should be established as a means of attracting more young graduates into this sector.

9.5 Make grant aid conditional on a training audit.

Grant-aid should be conditional on a training audit and satisfactory completion of prescribed training programmes to rectify identified skills deficiencies.

Core Theme 10: Industry Relations

The successful implementation of this strategic development plan will require a concerted effort by all stakeholders and will require a focused and co-ordinated approach. In this context, it is vital that the following recommendations are acted upon:

10.1 Establish a single representative organisation for the fisheries sector.

Whilst recognising the very different issues/dynamics prevailing in the various industry sub-sectors, there is a real need for the industry to speak with one clear and coherent voice.

At catching level it is recommended that all existing representative organisations should set up a new, single representative organisation. The first phase of this process should involve the immediate establishment of a federated structure moving quickly to the setting up of a single organisation with its own Board and Chief Executive and made up of distinct sectoral/regional interests to speak with a strong clear and coherent voice on behalf of the catching sector vis-à-vis the Government, the EU, other stakeholders and at the various other fora where the interests of the sector have to be represented. Strong and unified representation for each of the main sectors of the seafood industry, where differences between competing interests are settled internally enabling each sector to speak with one voice and with greater strength in representing the interests of a very disparate and fragmented industry, will significantly benefit the industry as a whole.

10.2 Appropriately structure and resource DCMNR.

Given the onerous regulatory regime surrounding the seafood industry, serious commitment is required on the part of Government and senior officials to appropriately structure and resource its seafood administration, policy making and regulatory responsibilities. In this context the Strategy Review Group endorses the current re-organisation whereby policy and regulatory functions will be separated from control and enforcement, the latter being vested in the new Sea Fisheries Protection Authority from January 2007. The adoption of a more responsive customer-facing approach will pay dividends in terms of building bridges with the industry in due course.

10.3 Co-ordinate the provision of all support by the State to the industry.

The Group strongly recommends that a more co-ordinated approach should be adopted by the various State Agencies with research and development responsibilities for the seafood industry namely BIM, Enterprise Ireland, ÚnaG, FÁS, the Marine Institute and Teagasc. The co-ordination of State development programmes and initiatives should be spearheaded by DCMNR.

10.4 Ensure effective and prompt implementation of the Strategy Review Group's recommendations.

A series of Operational Programmes should be prepared with the twin objective of giving effect to the recommendations set out in this Strategy Report and to accessing the maximum possible financial support from the new European Fisheries Fund and from the Exchequer in the forthcoming National Development Plan 2007-2013.

As a number of the recommendations may fall outside the scope of the Operational Programmes, it is strongly advocated that a Seafood Strategy Implementation Group should be formed by January 2007, to oversee the implementation of all the recommendations set out in this report. The Implementation Group should be chaired by the Minister for Communications, Marine and Natural Resources or in his absence by the Secretary General of DCMNR with representatives from each of the catching, aquaculture and processing/marketing sectors as well as the Department's Seafood Policy Divisions and relevant State Agencies.

Funding Requirements

Public funding of €334 million will be required over the period 2007-13 to implement these recommendations complementing a further €263 million from the private sector and leading to an overall investment of €597 million.

The funding now being sought under the NDP 2007 – 2013 is outlined in the table below. In all, a total of €334 million is proposed over the seven year duration of the programme. Of this total, €37.5 million will be provided through the EFF, as announced by the EU Commission on 4 October 2006, with the balance coming from the Exchequer. This State supported investment will in turn be used to leverage a further €263 million by way of private sector funding.

Table 1.1
Industry Funding Requirements (2007 – 2013) € million

Measure	Current	Capital	Total Public	Private Sector	Grand Total
Sea Fisheries	30	96*	126	46	172
Aquaculture	16	85	101	111	212
Training	18	4	22	1	23
Processing	-	30	30	70	100
Marketing	40	15	55	35	90
Total	**104**	**230**	**334****	**263**	**597**

* Includes funding for fleet decommissioning of €66 million.

** A further €40 million should be earmarked by EI/ÚnaG to support in-company R&D and NPD.

Impact of Strategy and Investment Programme

By establishing a platform for a self-reliant market focused industry, the impact of this investment will have positive implications well beyond 2013.

The implementation of the strategy recommendations and the proposed investment programme will result in a sizeable direct and indirect benefit to the seafood industry, the Irish economy and in particular to coastal/rural communities where this industry is mainly located. As a result of this investment, by 2013 the Irish seafood industry will have:

- Evolved to become a restructured, sustainable, self-reliant and commercially-aware industry with the market, as opposed to production/policy related concerns being the key industry focus;
- Secured a leading position across a range of target markets, both within Ireland and internationally, with Irish seafood clearly identified within the marketplace;
- Undergone substantial restructuring to the point where the catching capacity of the national fleet is aligned with the available resource and where a competitive, profitable processing sector has been established;
- Established a leading role in terms of environmental performance and be recognised as a key advocate and practitioner of fish stock conservation measures and regulatory compliance at national and EU level;
- Secured its position as a key contributor to balanced economic growth ensuring that the industry continues to be recognised as a vital indigenous natural resource based industry and an essential part of the fabric of coastal/rural communities; and
- Contributed significantly to meeting the goals of a range of national and EU policies relating to fisheries, the marine environment, rural development and in particular the Government's National Spatial Strategy as it relates to remote coastal/rural areas.

Industry restructuring, better management of fisheries, improved fish conservation practices, expansion of aquaculture and market-led product and process development can yield a significant and sustainable increase in industry revenue. Due to investment lead times, the benefits of the new NDP 2007-2013 will not be fully realised until 2015. On this basis, Irish sales of seafood are projected to grow by some 30% from €702m to €911m over the period 2005 to 2015. Within these totals, home market sales are projected to increase by 22% from €311m to €379m while export sales are expected to increase by 40% from €354m to €495m over the period.

The benefits to be derived from this investment will continue to accrue to the State far beyond 2015. Essentially, this investment should be seen as the provision of critical assistance to an industry, which is in transition, in order to establish the seafood industry on a sound platform that will allow it to prosper into the future. The investment should also be regarded as a strategic investment by the State in an industry which is indigenous, is based on a renewable and highly-prized natural resource producing a healthy, nutritious and highly marketable food and which makes a vital contribution to the economic, social and cultural fabric of remote coastal and rural communities.

SECTION 2:
SCOPE AND FOCUS OF THE STRATEGY REVIEW

The following Section presents a brief account of the background to this Review along with the Terms of Reference. In addition, an overview of the approach and process used to undertake the Review is set out – highlighting the highly consultative nature of the process employed.

Section 2: Scope and Focus of the Strategy Review

Following detailed discussions with representatives of the Irish fishing industry, concerning the current problems and the future viability of the industry, the Minister for Communications, Marine and Natural Resources Mr Noel Dempsey T.D. and the Minister of State Mr John Browne T.D., announced their intention in May 2006 to develop a comprehensive strategy for a sustainable and profitable Irish seafood industry over the period 2007 – 2013.

The strategy review process, which was officially launched on 29th June 2006, was overseen by a three person independent strategy review team chaired by Dr Noel Cawley former Chief Executive of the Irish Dairy Board, along with Mr Joey Murrin, Chairman, National Salmon Commission and Mr Ruán O'Bric former Chief Executive, Údarás na Gaeltachta. Secretariat to the Review Group was provided by Bord Iascaigh Mhara. The Review Group was also provided with input/advice from strategy consultants in PricewaterhouseCoopers's Strategy Advisory Services Unit.

2.1 Terms of Reference

The Terms of Reference for this Review required the development of a comprehensive integrated market-led vision for the future of the Irish seafood industry based on a strategy centred on innovation, product development, sustainable management of marine resources and ecosystems and value maximisation for Ireland's coastal communities. The Terms of Reference required the strategy to:

- Address the potential for development in sea fisheries (both inshore and offshore), aquaculture, seafood processing and marketing.
- Concentrate on improving the management, competitiveness, structures and profitability across all sectors of the industry including sea fishing, aquaculture, processing, marketing and support industries.
- Examine the potential for innovation, product development and value enhancement of primary aquaculture production and shellfish, whitefish and pelagic fish landed into Ireland.
- Examine impacts of shortages of crew and associated training issues.
- Prioritise the delivery of an environmentally sustainable aquaculture and sea fisheries sector that maximizes employment and economic activity in Ireland's coastal communities dependent on fishing and aquaculture.
- Achieve an urgent adjustment of fishing effort and fleet capacity to achieve a balance with available fishing opportunities so as to contribute to the long-term sustainability of those fishery resources on which the industry critically depends.

- Achieve structural adjustment in the processing sector to enhance coordination nationally of processing and marketing of uniformly high quality products with strong competitive impact on markets.
- Take a holistic view of all fleets operating proximate to Ireland and seek in the context of increasing energy costs to maximize the growing opportunities to benefit Irish land based industries and coastal communities from these fishing activities.
- Promote the growth of a competitive, consumer orientated, market-led, added value seafood sector.
- Maximize the possibilities of synergies with other sectors of the Irish food industry in the areas of food research, innovation, product development and integrated marketing.

The strategy was to be developed in full consultation with all key stakeholders. It was to map out, on a prioritized basis all necessary initiatives (both private and public) including rationalization and restructuring required to achieve the vision. The strategy was also to set out a roadmap for the management of the changes required in respect of both private sector operations and national policy and instruments, setting timeframes for delivery. It was to identify and quantify the funding requirements necessary to support the initiatives outlined and to recommend mechanisms for measuring and reporting on progress and for adjusting and amending the strategy as necessary.

The development of the strategy was to proceed within the framework of the Common Fisheries Policy and National Fisheries Law and was intended, as one of the outputs, to feed into the National Strategic Plan, which is required under the European Fisheries Fund 2007 to 2013.

2.2 Approach and Process

In undertaking this Review a highly consultative approach was taken. This included engaging throughout the process, with fishermen, fish farmers, processors, policy makers/ regulators, industry representative organisations, the Naval Service and the relevant State Research and Development Agencies. As a core part of the consultation process, four regional public meetings were held to provide an opportunity for stakeholders located throughout the country to outline their views and to propose solutions to be considered by the Review Group. Invitations to attend these meetings which took place in Waterford, Kerry, Donegal and Galway were placed in the national and local media and a total of 320 people attended. Apart from the public consultation meetings the Review Group met on 21 occasions over the period of the review, which ran from July to November 2006.

In addition to regional consultation and other meetings, interested parties were invited through an advertisement in the national press to make written submissions to the Strategy Review Group. In total some 73 submissions were received and a list of those who made submissions is set out in Appendix 2. A resume of the views and recommendations put forward at the consultative meetings and in the various submissions is attached in Appendix 3.

SECTION 3

SOCIO-ECONOMIC AND REGIONAL PROFILE OF THE IRISH SEAFOOD INDUSTRY

The seafood industry in Ireland makes an enormously important contribution to the coastal and rural communities. In this Section of the Review a profile of the seafood industry is set out, highlighting the industry's important economic contribution, along with an account of the impact that previous NDP funding has had on the development of the industry.

Section 3: Socio-economic and Regional Profile of the Irish Seafood Industry

The Irish seafood industry, while small in an overall national context, is worthy of strategic recognition particularly due to its enormously important contribution to employment and wealth generation in remote coastal and rural areas. This section profiles the seafood industry in Ireland, its economic and socio-economic significance and provides an overview of the level of investment provided under the NDP 2000-2006 and the impact of such investment.

3.1 Profile of the Irish Seafood Industry

While consumer demand for seafood is growing strongly, the supply of seafood is facing difficulties mainly due to declines in fish stocks, declining quotas and structural imbalances at catching and processing levels. The long-term sustainability and development of the Irish seafood industry will require a more integrated approach on the part of the various stakeholders along the value-chain, with a greater focus on deriving maximum value for fish, adopting more responsible fishing/farming practices, whilst safeguarding the environment and resource base. The main players within the seafood industry include the primary production sectors involving fish catching and aquaculture, primary and secondary processing, marketing and ancillary industry such as net-making, vessel repair, transport, and a number of other services.

The Seafood Market

Irish seafood sales amounted to €702 million in 2005. Sales of seafood on the Irish market amounted to €311 million (€136 million into retail and €174 million into foodservice), exports were valued at €354 million, with a further €37.5 million earned through direct landings of fish by Irish vessels at foreign ports.

Between 2000 and 2005 the overall value of the seafood market increased by 14%, the home market by 23% and exports by 7%. Seafood imports for human consumption in 2005 were valued at €123 million and are showing strong growth. According to industry sources, up to 70% of farmed salmon and 50% of whitefish consumed in Ireland is now accounted for by imports and form the key species required for both retail and foodservice sectors.

Export Markets

Between 2000 and 2005 seafood exports increased from €331 million to €354 million. Approximately 85% of seafood exports are directed to EU markets with the balance going mainly to Far Eastern and African markets. The top markets have remained largely unchanged over the years with France being the premier market accounting for 23% of exports with a value of €82.1 million in 2005. This was followed by Spain, €66.5 million, Great Britain €56.2 million, Germany €26.8 million, Italy €22.6 million and Netherlands €10.7 million. Table 3.1 shows the composition of seafood exports by main product category in 2000 and 2005.

Table 3.1
Irish Seafood Exports 2000 - 2005

Product Categories	2000		2005	
	Tonnes	€'000	Tonnes	€'000
Freshwater Fish	17,554	68,143	9,095	42,152
Pelagic	126,134	110,473	109,956	107,640
Demersal	28,875	43,753	17,512	58,991
Shellfish	29,858	102,954	39,172	126,545
Fishmeal/Oil	13,835	6,270	22,888	18,723
Total Exports	**216,256**	**331,593**	**198,623**	**354,051**

The Fish Catching Sector

Fish and shellfish are landed at the five major Fishery Harbour Centres (Killybegs, Castletownbere, Howth, Rossaveal, and Dunmore East), at 40 secondary ports (each with landings exceeding €1m) and a further 80 piers and landing places where fish landings are recorded. Figure 3.1 illustrates the distribution of landing activity at main fishing ports around the coast. The seafood industry operates within the framework of the Common Fisheries Policy, on the basis of which annual quotas are allocated to Member States on a fixed percentage of Total Allowable Catches. Table 3.2 profiles the Irish fishing fleet in 2006.

Figure 3.1 Sea Fish Landings by Home Port for Year 2004 (€'000)

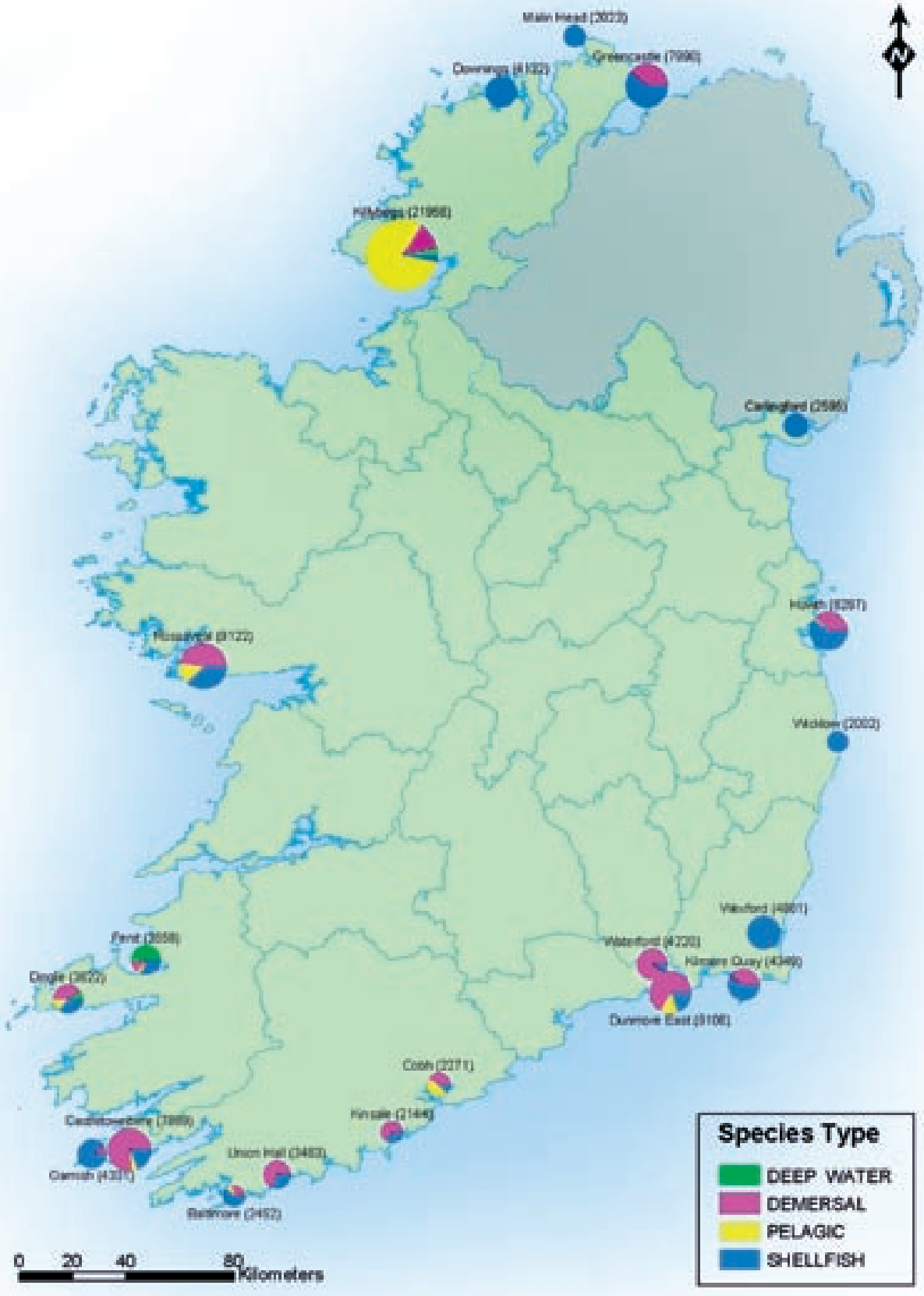


Table 3.2
Profile of the Irish Fishing Fleet in 2006

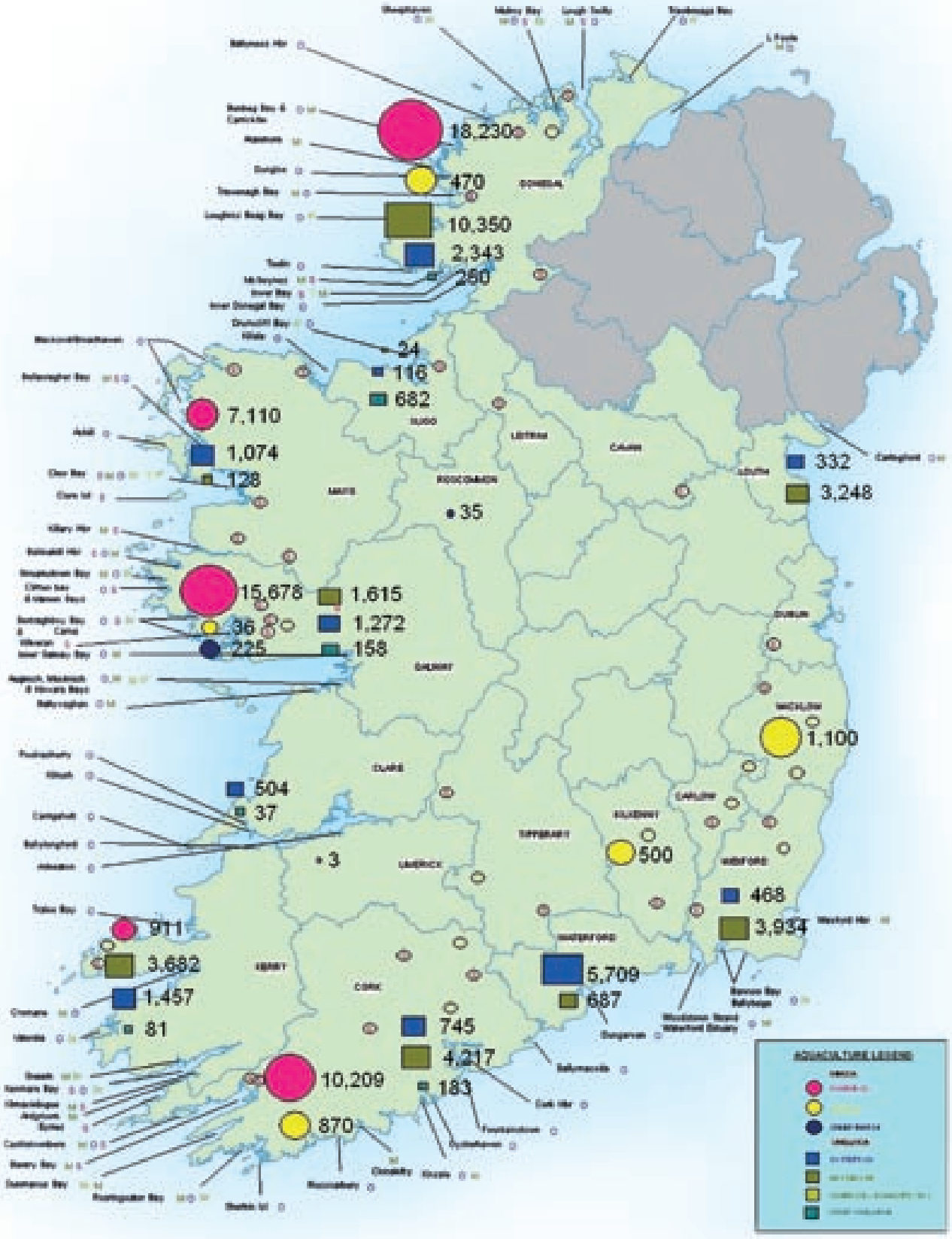
		Employment		
Segment	**No. of Vessels**	**Full-time**	**Part-time**	**Total**
Pelagic	23	276	-	276
Polyvalent	1,650	3,320	872	4,192
Beam-trawl	13	73	-	73
Specific	158	255	191	446
Total	**1,844**	**3,924**	**1,063**	**4,987**

The Aquaculture Sector

Aquaculture activities are located right around the coast (see Figure 3.2) with particular concentrations in Donegal, Connemara, West Cork, Waterford, Wexford and Carlingford Lough. The sector includes the farming of finfish species such as salmon and trout, Arctic char and perch and shellfish species such as mussels and oysters and to a lesser extent clams scallops, abalone and sea urchins.

There are 13 operations producing salmon and six producing freshwater and sea reared trout as well as three new perch farming operations. Development work with char juveniles and turbot rearing is ongoing. There are around 80 mussel farms with sites in the southwest and western coastal areas as well as a substantial bottom-mussel fishery. This provides raw material for five mussel-processing plants which produce a range of value-added products. There are 150 operations producing Pacific oysters concentrated mainly in Wexford Waterford, Cork, Mayo and Donegal but also at other locations around the coast. The number engaged in aquaculture production was 1,936 in 2005.

Figure 3.2 Irish Aquaculture Production by County for Year 2004 (€'000)



Primary Output

The primary output from the fisheries and aquaculture sectors in 2000 and 2004/2005 is presented in Table 3.3 below. In 2004/5 output amounted to 345,155 tonnes valued at €263.1 million.

Table 3.3
Primary Production from Fisheries and Aquaculture

	2000		2004/2005*	
	Tonnes	**€'000**	**Tonnes**	**€'000**
Landings at home ports	197,197	155,085	171,769	126,036
Landings at foreign ports	75,679	33,946	114,168	37,500
Total landing at all ports	**272,876**	**189,031**	**285,937**	**163,536**
of which:				
- Whitefish	36,772	65,330	27,551	51,913
- Pelagic	206,576	65,912	226,783	56,287
- Shellfish	29,528	57,789	31,603	55,336
Total landing at all ports	**272,876**	**189,031**	**285,937**	**163,536**
Aquaculture Production - Finfish - Shellfish	 20,170 31,110	 75,362 21,510	 13,318 45,900	 54,990 44,600
Total Aquaculture	**51,280**	**96,872**	**59,218**	**99,590**
Total - Fishing and Aquaculture	**324,156**	**285,903**	**345,155**	**263,126**

* Aquaculture data relates to 2005

The volume and value of fish landed by Irish vessels in 2004 (the most recent year for which data is available) amounted to 285,937 tonnes and €164 million. In volume terms, the bulk of landings is comprised of pelagic species (i.e. herring, mackerel and horse mackerel) at 226,783 tonnes valued at €56.3 million. Landings of shellfish amounted to 31,603 tonnes valued at €55.3 million and whitefish amounted to 27,551 tonnes valued at €51.9 million.

The value of output from the aquaculture industry reached almost €100 million in 2005 from 59,218 tonnes of fish and shellfish, which is 38% by value of total primary production. The shellfish sector contributed 45,900 tonnes of this output valued at €44.6 million while output from finfish farms was 13,318 tonnes valued at €55 million.

The Seafood Processing Sector

The processing sector is concentrated in the coastal regions of Donegal, Galway, Cork, Kerry, the southeast and Dublin. Ports such as Killybegs, Castletownbere, Dunmore East, Rossaveal, Dingle and their hinterlands are heavily dependent on the seafood processing and services industries. There are 198 firms, mainly SMEs, engaged in handling/distribution, processing and marketing of fish, of which just ten companies have more than 50 employed full-time, while a significant number of small operators supply a local market or sell to niche market outlets. The majority of these small operators supply fresh whitefish for domestic consumption through the foodservice sector and account for over 70 of the total number of companies.

The main activities of the sector vary from processing of herring and mackerel for commodity trade to European, African and Asian markets, to whitefish, shellfish and salmon in both fresh and added-value form for the domestic and continental markets, with some export business to the US and the Far East.

Employment

The seafood industry supports the economic viability of rural communities, generating 11,615 jobs in the coastal regions (see Table 3.4 and Figure 3.3), and as noted earlier makes an important contribution to the national economy with final output at trade prices amounting to €702 million in 2005. While employment in the fisheries sector has been declining (as is also the case for agriculture), these jobs are nevertheless enormously significant as they maintain working populations and communities in remote coastal regions typically characterised by: high rates of unemployment and out migration, low population densities, high dependency rates, below average levels of educational attainment and higher than average levels of deprivation. Table 3.4 provides details of employment by sector in 2000 and 2005.

Table 3.4
Industry Employment 2000-2004/05

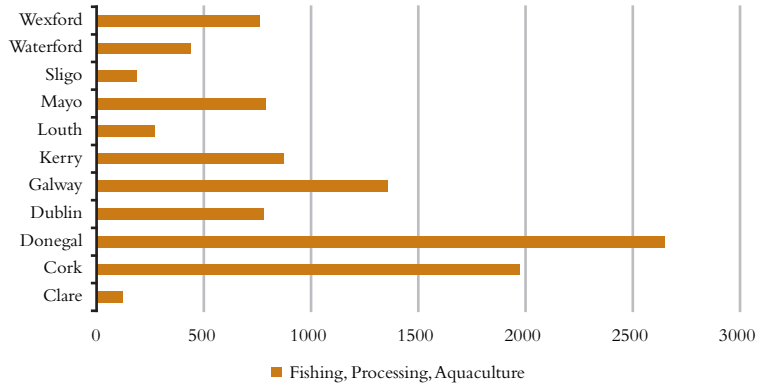
	2000			2004/05		
	Full time	**Part time /Casual**	**Total**	**Full time**	**Part time /Casual**	**Total**
Fisheries	4,767	1,433	6,200	3,924	1,063	4,987
Aquaculture	830	2,075	2,905	718	1,218	1,936
Processing	2,110	2,097	4,207	2,205	1,302	3,507
Ancillary	*1,500		1,500	*1,185		1,185
TOTAL	**9,207**	**5,605**	**14,812**	**8,032**	**3,583**	**11,615**

* Includes part time.

Since 2005 employment in processing is estimated to have fallen by a further 640 jobs.

Figure 3.3 below shows the distribution of employment in 2005 by region. This trend remains largely unchanged in the past five years emphasising the role of the seafood industry in sustaining remote, rural and coastal communities.

Figure 3.3
Distribution of Seafood Industry Employment 2005 (Full & Part Time)



3.2 National Development Plan 2000-2006 Investment and Impact

Under the NDP 2000-06, €150 million in Exchequer and EU funds was allocated for investment in the development of the seafood sector. Development funding was channelled through four Operational Programmes (OPs) namely, the Productive Sector OP, the Border Midlands and Western (BMW) and the South and Eastern (S&E) Regional Programmes and the Employment and Human Resources Development Operational Programme.

The Productive Sector OP funded five Measures:

- Adjustment of Fishing Effort;
- Renewal and Modernisation of the Fleet;
- Supporting Measures for Fisheries Development;
- Seafood Processing; and
- Seafood Marketing

Aquaculture was funded under the two Regional Programmes, the BMW and S&E, with the Seafood Industry Training Measure supported under the Employment and Human Resource Development OP.

The investment involved Exchequer funding co-financed by the EU under the Financial Instruments for Fisheries Guidance (FIFG) for the three Sea Fisheries Measures in the Productive Sector OP and the Aquaculture Development Sub-Measures of the BMW and S&E Regional OPs.

The Seafood Processing and Seafood Marketing Measures of the Productive Sector OP and the Seafood Industry Training Measure of the Employment and Human Resource Development OP was not co-financed. BIM was the principal implementing agency along with EI and ÚnaG.

Table 3.5
Profile of Investment Under NDP 2000-2006 in €m

	Allocation of Funding	Financial Commitments to October 2006		Total Investment	% Investment By Public Sector
		Public Investment	Private Investment		
(1) Productive Sector Programmes					
Sea Fisheries Measures	51.37	52.61	46.65	99.26	53
Seafood Marketing	*19.50	19.50	10.48*	29.98	65
Seafood Processing	32.00	7.66	27.39	35.05	22
(2) Regional Programmes					
Aquaculture Measure	33.10	36.80	46.50	83.30	44
(3) H.R. Programme					
Seafood Industry Training	13.76	11.04	1.06	12.1	91
Total N.D.P. Programmes	**149.73**	**127.61**	**132.08**	**259.69**	**49**

* This relates to actual expenditure over the period. The NDP target of €8m related to only certain components of planned marketing expenditure

Assisted by the NDP investment, over the period 2000-2006 the total value of the Irish seafood industry increased from €621 million to €702 million – a significant achievement against a background of declining quotas and stricter compliance. Over this period, within individual sectors of the seafood industry, NDP funding supported a range of significant development programmes:

Sea Fisheries (Fleet Development and Supporting Measures)

Aimed at enhancing the safety, quality and competitiveness of the whitefish fleet, €49.3 million has been invested in fleet development in the commercial sea fishing area up to the end of 2005. Over this period, a further €23.3 million was invested in projects focused on sustainability and innovation. As a consequence of this investment, Ireland now has a safe, modern and efficient whitefish fleet.

Aquaculture

The Aquaculture Development Measure supports investment designed to improve sustainability, efficiency, safety and competitiveness in the aquaculture sector. Up to the end of 2005, under this Measure a total of €29 million was awarded to 97 projects. Furthermore, a new Technical Environmental Support Scheme was set up in 2006 to support the application of technology to reduce the environmental impact and increase the competitiveness on marine salmonid farms. A total of €2 million has been ringfenced for this purpose. Investment and output performance for finfish aquaculture are significantly below target but ahead of target in the case of farmed shellfish. This investment in aquaculture has however established a strong platform for growth. Given the absence of quotas in this sector and the buoyant market conditions which prevail, this growth platform can be capitalised on in the coming years.

Seafood Processing & Marketing

Financial investment in processing and marketing under the NDP targeted the development of a competitive market focused industry. Up to the end of 2005, NDP grants amounting to almost €5.7 million had leveraged total investment in the sector of just over €27 million. The funds made available under this measure, while significantly less than initially planned, were fully taken up by industry investors. Investment was prioritised for added-value development within the sector with lower levels of investment in the pelagic sector as a result of reduced raw material supplies and consequent over-capacity. A total of 60 projects were grant-aided under the programme focusing on adding value, improving quality and ensuring the optimum usage of raw material. As a result of this investment, progress has been made towards enhancing the industry's capacity to exploit the growing market demand for seafood products on both the domestic and international markets.

Seafood Industry Training Measure

During the period 2000 - 2006, BIM's training capability was significantly enhanced with the expansion of training facilities at Greencastle and Castletownbere and the provision of a new mobile Coastal Training Unit. Furthermore, major safety advances were achieved with the introduction of mandatory three-day Basic Training and occupational Health and Safety training. With the establishment of e-Learning, the opportunity for industry participants to partake in training programmes is now significantly expanded. As a consequence of this activity, the principal objectives and commitments in the *Integrated Training Plan for the Irish Seafood Industry 2000-2006* will have been achieved by the conclusion of this OP.

Conclusion

Taking a wider view of the impact of the NDP 2000-2006 on the seafood sector, many other socio-economic benefits have been achieved with the support of this funding. These include:

- Overall economic activity and private investment in the sector have been unlocked through the leveraging effect of public investment;
- At local level economic activity has been stimulated through the provision of income and employment opportunities in areas with few alternatives.
- Safety and efficiency levels within the sector have increased through grant-aiding new vessels, the modernisation of existing vessels and support for essential safety equipment and safety training;
- Progress has been made towards achieving the long-term sustainability of the sector with the commencement of a decommissioning programme for older whitefish vessels.
- A solid foundation has been laid for the future sustainability of the inshore sector by the establishment of a new fisheries management system for shellfish.
- The improved market positioning of Irish aquaculture products arising from the development and application of accredited quality assurance schemes.
- Investment in primary production and processing facilities backed by BIM supported marketing programmes has led to improvement in output and productivity especially in the shellfish sector.

It is also worth noting that unlike agriculture, the seafood industry does not benefit from price or income supports from the EU or the Exchequer. Almost all public aid for the seafood industry emanates from the NDP and is therefore largely of a structural nature.

SECTION 4

CHALLENGES AND OPPORTUNITIES FACING THE IRISH SEAFOOD INDUSTRY

Over the period 2000-2006, supported by the NDP, significant progress was made in the renewal and restructuring of the Irish seafood industry. However, across the various industry sectors significant challenges remain to be addressed. In this Section of the Review, for each of the industry sectors a number of the key challenges are highlighted along with a high level overview of some of the significant opportunities that prevail. An account of the current state of the fisheries resource is also presented.

Section 4: Challenges and Opportunities Facing the Irish Seafood Industry

The Irish seafood industry has recorded significant progress as a result of the investment made under the NDP 2000-2006. However, the industry is currently in a transitional phase and is facing a range of developmental challenges, primarily related to declining stocks and a consequent structural imbalance at catching and processing levels. In this Section of the Review an overview of the key challenges and opportunities facing the industry are presented from the perspective of:

a) The seafood market;

b) The processing sector;

c) The fishing sector; and

d) The aquaculture sector.

In order to deliver a sustainable and profitable seafood industry, it is paramount that the challenges facing the industry are addressed in the coming years. Successfully addressing these developmental challenges will require a concerted effort on the part of all industry stakeholders – including fishermen, industry representative organisations, government departments and State Development Agencies.

4.1 Marketing and Sales – Profile and Key Challenges

In an era of declining quotas and strict compliance, the key challenge facing the Irish seafood industry is to develop sales and marketing strategies, which will enable the maximum possible value to be derived from each tonne of fish landed. This will require critical supply chain weaknesess to be addressed, a greatly enhanced innovation/new-product development performance and a significant uplift in management capability and knowledge.

Introduction

Growing consumer concern regarding the role of diet in health and the desire to take a more proactive role in optimising personal well-being is a key driver in shaping food demands internationally. Equally, the demand for convenient, easy to prepare meal options continues to grow to meet the need for shorter preparation times.

In line with overall food consumption patterns, the demand for seafood has grown strongly over the last decade, fuelled by a combination of factors from the heightened awareness of the health benefits of fish to the increase in easy-to-prepare and ready-to-eat seafood products on offer, particularly in the chilled convenience category.

Key Factors Affecting Market Demand

Recent trends for seafood consumption in Europe show a positive increase in the consumption of seafood, but this increase is largely reflected in the move towards consumption of pre-packed, pre-prepared and convenience products. The growing share of the retail multiple sector in seafood sales has also been an important factor in increasing the availability of such product offerings for consumers.

Demand in the frozen fish category has not experienced any substantial growth in recent years, while the fresh fish category has seen a move from purchasing whole fish to pre-packed and pre-prepared offerings. This trend is evident throughout Europe, even in very traditional markets such as Spain, where consumers are moving away from the local fishmonger to the larger retail outlets in response to the wider range of more convenient seafood products on offer.

There are a number of significant factors affecting the market and likely future trends, which can be summarised as follows:

- With the rate of population growth declining and a growing ageing population across most developed markets, greater levels of disposable income and a keen interest in promoting wellbeing will shape future demand.
- As consumers become more conscious of their health and diet, fish will become more valued as a health food and consumption should therefore continue to be strong, particularly in the older age groups.
- However, growing environmental concerns about the state of fish stocks and the impact of fisheries on the marine environment will become a major factor in determining consumption trends.
- The response by the retail and foodservice sectors in dealing with these concerns will have an important bearing on suppliers' responsibilities in producing and promoting sustainable and eco-friendly seafood products. The move towards eco-labelling and providing reassurance at both trade and consumer level will be important in this respect.
- The continued consolidation of both the retail and foodservice sectors will add further competitive pressures with increasingly tight margins in what has become a global trading environment.
- Alongside these concerns is the reality of diminishing wild fish supplies (partly alleviated by farmed fish) and the move towards further reduction in fishing effort and increased management of fisheries, all of which have a direct impact on access to raw material for processing.
- With EU seafood consumption already 74% dependent on imported seafood, the shortage of raw material and access to imports will be critical in determining the potential market growth and shift to the convenience category.

Market Opportunities for Irish Seafood

While taking these factors into account, there are nevertheless significant market opportunities for suppliers to take advantage of in the coming years. The key growth opportunities in international markets in addition to the domestic market include:

- **Natural health and well-being products:** Focused on the natural goodness of fish and the proven nutritional benefits.
- **Products that are convenient and easy to prepare:** Targeting the premium end of the convenience category.
- **Snacking, grazing and flexi-eating opportunities:** Within the snacking category currently valued at €66 billion across Europe.
- **Eco-friendly, organic and environmentally responsible products:** Responding to consumer concerns on the welfare of the marine environment.
- **Functional foods and ingredients:** Tapping into a developing sector currently valued at €19 billion worldwide.
- **Emerging markets in new EU Member States:** As increased affluence leads to higher spend on food, especially luxury items.
- **Strong growth projected in Asian markets for nutritionals and food ingredients, in particular, China:** Accelerating market-led R&D activity in conjunction with the wider food industry.

Opportunities for commodity or bulk seafood products will be challenged with growing competition from low-cost producers, difficulties in competing with economies of scale and the ability to secure adequate raw material. China for example, is forecast to increase production of fish by 59% up to 2020, to reach an output of 53 million tonnes of wild and aquaculture product. Increases in production will in general be largely accounted for by developing Latin American and Asian countries with the focus on production for export, increasing the level of competition in key European markets.

Current Market Profile & Performance

Irish sales of seafood on home and export markets were valued at €665 million in 2005, increasing by 14% from €583.7 million in 2000. This does not include landings by Irish vessels at foreign ports, which accounted for a further €37.5 million in 2005, bringing total seafood sales to €702 million. There are a number of key trends over the 2000-2005 period:

- Sales within the domestic market grew by 24% to €311 million in 2005 showing positive growth at both retail and foodservice level. Retail sales have increased strongly to €136 million from €104 million with the growth accounted for by the fresh fish and chilled convenience categories.

- Foodservice sales also performed well growing by 15% to €174 million in 2005 from €152 million in 2000 reflecting strong demand and also indicating the trend of seafood consumption outside the home.
- With Ireland's strong economic growth continuing together with the fastest rate of population growth in Europe, the domestic market offers strong potential for development in the coming years.
- Ireland's seafood exports accounted for 53% of total sales in 2005 valued at €354 million exclusive of direct landings by Irish registered fishing vessels into foreign ports amounting to a further €37.5 million.
- With diminishing supplies, the seafood sector faces many challenges in respect of supply and this was reflected export volumes reducing by 8% from 216,256 tonnes in 2000 to 198,623 tonnes in 2005
- However, the value of exports grew by 7% or €22.5 million over the same period reflecting a higher value increase across all sectors. The current breakdown of exports by product category is shown in Table 4.1.

Table 4.1
Irish Seafood Export Profile by Volume and Value in 2005

Product Categories	Tonnes	€'000
Bulk Seafood Products	116,117	108,348
Fresh/Live Seafood Products	54,881	130,083
Prepared Seafood Products	27,625	115,621
Total Exports	**198,623**	**354,052**

Approximately 85% of Irish seafood is sold in EU markets with Far Eastern and African markets accounting for the remainder. The five most important markets for Irish seafood, accounting for 70% of exports , are France, UK, Spain, Germany and Italy and the trends in the period 2000-2005 are shown in table 4.2.

Table 4.2
Breakdown of Ireland's Key Export Markets

Country	2000 (€million)	2005 (€million)	2000-2005 % Change
France	73.9	82.1	11
Spain	54	65.3	21
UK	47.9	56.2	17
Germany	30.4	24.8	-18
Italy	28.9	22.6	-22
Total	**235.1**	**251**	**6.7**

Breakdown of Ireland's Key Export Markets

While there are a number of significant non-EU markets including Japan and the USA, the focus on European markets is not projected to change in the foreseeable future and is driven by the relative demand in Europe for seafood and ease of access to the market. The challenge for the industry going forward will be to strengthen and maintain market share in these core markets in addition to developing opportunities for new business based on market requirements.

Importance of Imports

In the context of future market requirements, the importance of seafood imports cannot be underestimated. In 2005 imports into Ireland (exclusive of fishmeal and oil) amounted to over 32,000 tonnes valued at €123 million. This represented an increase in value of 23% on 2004 on a volume increase of 10%, demonstrating the importance of such raw material to the sector. Imports included mainly whitefish raw material for the processing sector or for sale on the growing domestic market in addition to significant imports of canned fish and shellfish.

As in other European countries, demand in Ireland for consumer-ready and convenience products continues to grow. The importance of the convenience food sector can be gleaned from the import data where convenience products such as seafood-based ready meals and the more traditional breaded/battered fish products exceeded €20 million in 2005. Total imports of all whitefish including frozen products for the processing sector amounted to 8,818 tonnes valued at €38 million, which was up from the previous year's value of €30 million. Canned tuna is the largest single product component of Irish seafood imports and is still rising with 5,460 tonnes valued at €14.6 million imported in 2005 while imports of canned salmon amounted to 1,649 tonnes valued at €6.8 million. Imports of shellfish products amounted to 7,495 tonnes valued at €29 million. The main products are warm water shrimps and prawns, which account for half of the total value of shellfish imports.

The origin of leading suppliers to the Irish market in 2005 were Great Britain at €90 million and Denmark, Iceland and Northern Ireland each supplying €5 million. Central to future marketing strategy going forward will be the importance of securing raw material from outside Ireland to support the enhancement of R&D and NPD activity in the prepared seafood category.

Key Marketing Challenges

There are a number of key marketing challenges in this respect, which need to be addressed for the future development of the industry:

- Meeting market requirements through improving/developing the range of seafood products on offer. This will require better size/quality grading of fish landed, improved standards of quality and safety reassurance, introduction of new products and product formats, improved packaging and presentations and increased labelling, nutritional and sourcing information.

- Generating the maximum return per tonne of product through increasing production efficiencies, introducing cost-saving measures, reducing labour costs and meeting internationally recognised standards of excellence and quality. High standards of customer service and reliability in delivering premium seafood products to market will also be critical in sustaining competitiveness.
- Improving and creating effective supply chain practices by supporting and promoting access to local and imported raw material, improving the frequency and reliability of logistics and integrating the supply chain, where possible, reducing dependence on intermediaries.
- Developing a strong market position by focusing on building a strong marketing identity to enhance the perception and positive image of Irish seafood in addition to taking a targeted approach to key opportunities within core markets with emphasis on clustering and collective marketing where feasible.

4.2 Processing Sector – Profile and Key Challenges

Consisting of 198 companies, the Irish seafood processing sector is facing a range of significant challenges including reduced supplies of raw material, industry fragmentation and increased competition on key export markets. As a consequence, this sector suffers from low/declining profitability – with an increasing number of loss making companies.

The Processing Sector – Introduction

The seafood processing and marketing sector plays a critical role in the continued growth and success of the seafood industry. Similar to other sectors within Ireland's food industry, it operates in a challenging environment influenced by major developments in EU policy, supply constraints, changes in food markets driven by lifestyle and technological developments, growing international competition and an increasingly consolidated buying sector.

In recent years, the decline in availability of raw material has resulted in production remaining static within the sector. While this has been offset to some extent by an overall increase in the value of output, the failure to achieve any significant growth within the sector has resulted in low levels of profitability.

This section attempts to highlight the key challenges faced by the sector and the varying factors contributing to this current position.

Economic Profile of the Sector

The key features of the Irish seafood processing sector can be summarised as follows:

- The sector comprises 198[2] companies directly engaged in the processing, sales, marketing and distribution of seafood with the value of the sector estimated at €665 million in 2005.
- Allowing for recent job losses, an estimated 2,870 people are directly employed on a full and part-time basis in the processing sector in mainly coastal regions, with the heaviest concentration in counties Donegal and Cork and the remainder spread evenly along the western seaboard and along the east coast up as far as County Louth.
- Whilst there are a number of exceptions, the trend of low profitability as found in the Indecon study (2000) remains evident in the sector.
- Table 4.3 shows the breakdown of companies within the sector by the extent of processing activity across three categories – bulk, live/fresh and prepared seafood products.

Table 4.3
Breakdown of Processing & Marketing Sector by Seafood Category in 2005

Seafood Category	No. Companies	Total Domestic & Export Sales (€'000)	% of Sales
Bulk Seafood Products	16	108,348	16.3
Fresh/Live Seafood Products	111	158,407	23.8
Prepared Seafood Products	71	398,211	59.9
Total	**198***	**664,966**	**100**

* Including circa 70 wholesalers/distributors servicing the domestic market.

- The prepared seafood category accounts for 36% of the total number of companies and almost 60% of total export and domestic sales at €398 million with fresh/live seafood products accounting for 24% of sales at €158 million and 56% of all companies in the sector.
- While sales of bulk seafood account for 16% of total sales at €108 million, this category accounted for 59% of the total volume of Irish landings/aquaculture production in 2005 (116,117 tonnes out of a total annual production of 198,623 tonnes) and demonstrates the sectoral focus on commodity production.
- Table 4.4 provides a breakdown of the sector by turnover, illustrating the lack of economies of scale within the industry. Less than 10% of all companies operate with annual turnovers in excess of €10 million with the top 50 companies accounting for 80% of overall turnover in the sector.

2 *Includes circa 70 wholesalers/distributors servicing the domestic market.*

Table 4.4
Breakdown of the Seafood Processing Companies by Turnover

Annual Turnover	No. Companies	Bulk Seafood	Fresh/Live Seafood	Prepared Seafood
<€1 million	103	0	71	32
€1-€5 million	62	9	34	19
€5-€10 million	14	3	4	7
€10-€20 million	11	3	1	7
>€20 million	8	1	1	6
Total	**198**	**16**	**111**	**71**

- One of the key industry features is the fact that over half of the companies operate at less than an annual turnover of €1 million with over two-thirds of these companies accounted for by small wholesale operations in the fresh category and the remainder concentrated on prepared speciality seafood products.
- Recent years have seen the exiting of a number of companies from the sector largely due to shortages of raw material supply. The bulk seafood category has been most severely affected with a 50% decline in the number of companies over the last ten years.

Key challenges facing the processing sector

Arising from the profile of the sector, it is evident that there are a number of major challenges facing the industry and in the case of many companies threatening their survival. These challenges are presented below and form the context for the recommendations presented in Section 5.

Securing raw material supply

The issue of supply shortages and access to raw material is by far the major issue affecting the processing sector. Given that the supply situation is unlikely to change radically over the coming seven years, it raises a key challenge in terms of how the sector can alleviate supply shortages and continue to operate profitably. A number of key issues are identified in this respect:

- Quota enforcement and implementation of regulations within the pelagic fishery is posing severe difficulties for bulk seafood producers who are most heavily reliant on volume.
- As a result, processors are operating at 30-50% capacity between September and March and at 0% capacity for the remaining months of the year. This level of capacity utilisation is not sustainable.
- While there has been a reduction of 50% in the number of bulk seafood producers over the last ten years, this level of rationalisation is still insufficient to close the gap between available supply and the processing capacity that exists.

- The extent to which Irish vessels land abroad in the case of important species such as mackerel contributes to the difficulty in sourcing raw material for onshore processing and raises the issue of encouraging landings in Ireland.
- The shellfish sector is also experiencing supply shortages with resulting capacity issues particularly in the case of prawns and scallops, which has led to the recent closure of a number of processing operations in this sector.
- The same level of difficulty in sourcing supply is not as evident outside of the bulk seafood and prawn/scallop processing sectors largely due to the ability to source either farmed products or imported raw material as in the case of whitefish and salmon.
- Up to 50% of whitefish and 70% of farmed salmon processed in Ireland is now imported with companies in a stronger position operating at between 50-80% capacity in the fresh seafood category.
- However, the ease of access to imports into Ireland has created difficulties for small indigenous wholesalers which have been displaced by low-cost imports.
- Equally, the growing dependence on imports raises issues in relation to access to local whitefish landings.

Overcoming issues of fragmentation

While supply and access to raw material dominates the challenges faced by the processing sector, the issue of competitiveness at market level is also placing pressure on seafood companies. Rising production costs in addition to the costs of insurance, energy and waste are exacerbating the problems of increasingly tight trading margins. The fragmented structure of the industry is a key challenge in this respect at a number of levels:

- Economies of scale are critical in order to maximise efficiencies and reduce costs to a minimum if the sector is to remain competitive. The current structure highlights the difficulties of achieving this with only eight companies operating at annual turnovers in excess of €20 million.
- The sector is comprised of a large number of micro and small businesses, many of which are family-owned. The age profile of management within these operations is largely in the 50+age bracket with succession issues arising as a result.
- Equally, the issue of upskilling and improving management capability is evident as is typical of the SME sector.
- Where the sector is concentrated on single species production, the necessity of rationalisation and consolidation is evident, particularly where there are severe supply constraints.
- While acknowledging the value of speciality producers within the sector, the issue of access to raw material presents a serious challenge for this sector, which is largely based on the production of premium quality Irish seafood products.

- The current level of fragmentation is not conducive to high performance levels, bringing the viability of the sector into question and resulting in low investment, restricting the development capability of the sector and preventing it from strengthening its market position.

- Growing competition from low-cost producing countries such as China and Chile will continue to put added pressure on the need to take a less commodity-oriented approach and generate a higher market value for Irish production. The industry's ability to invest in technology and innovation will therefore be critical.

Improving competitiveness and profitability

Significant overcapacity, the growth in competition from low cost countries, rising production costs and competitive market pressures are all impacting on the competitiveness and profitability of the processing sector.

Need for development within the sector

Given the overriding issue of supply of raw material and the challenges faced by the sector, there is a significant need for investment in developing a market-driven sector that is capable of delivering innovative, high quality, competitively-priced products to meet market requirements and maximise the value generated per tonne of product. The industry is faced therefore with a number of challenges in this regard:

- The current investment profile of the sector is weak with levels of investment summarised over the period 2000-2005 below. These figures are indicative of all State supported investment across the three agencies involved in developing the sector (BIM, Enterprise Ireland and Údaras na Gaeltachta).

- As is evident, total investment over the six-year period amounted to less than €52.6 million, representing less than 8% of total sales (€665 million). This level of investment would need to be increased substantially if the industry is to achieve a sustained competitive market position.

Table 4.5
Summary Profile of State Supported Company Investment 2000-2005

Type of Investment	2000-2005 Total Industry & State Investment (€ million)
R&D (40% Grant)	4.8
Development/Feasibility (40-50% Grant)	2.0
Marketing (40-60% Grant)	7.6
HR/Training (50% Grant)	3.2
NDP Investment in Processing	35.0
Total	**52.6**

- As competition increases from low cost producers, pressures will grow to remain cost competitive with the need to generate a high value return from available supply.
- Increasing costs will also add to this pressure particularly for poor performing companies.
- In addition, the low levels of R&D investment are not conducive to meeting market demands with the need to improve innovation throughout the sector.
- Best-in-class technology, new product development, internationally recognised quality standards and packaging presentations will all be key to ensuring that the sector can compete effectively.
- Alongside this is the need to develop business management and operative skills at all levels with the specific objective of making the seafood sector an attractive career option.

4.3 Fisheries Sector – Profile and Key Challenges

Consisting of some 1,844 vessels operating across four defined segments, the key challenges facing the fisheries sector include the need to balance the catching capacity with the available resource, the requirement for a more commercially focused fisheries management regime and the ongoing need to enhance competitiveness within the various segments.

Introduction

Ireland's fishing industry remains an important and valuable source of economic activity both nationally and, in the remote coastal communities in which it is largely based. In 2004 the national fishing fleet of 1,844 vessels landed 286,000 tonnes of fish at home and foreign ports, with a first-point-of-sale value of €164 million. This compares with 373,400 tonnes and a first-point-of-sale value of €152 million in 1995.

Landings of demersal species (whitefish and Dublin Bay prawns/*Nephrops*) in 2004 amounted to €66 million (40% of the total) with landings of pelagic species at €56 million (34%), while shellfish (crab, lobster, scallop, shrimp etc.) accessed mainly by the inshore fisheries sector, generated a further €42 million (25%). Landings into non-Irish ports, including ports in Spain, Norway, UK, Holland and France amounted to €37 million (23% of the total).

The fishing fleet currently provides onboard employment for 4,990 people on a full and part-time basis with substantial further income and employment generated in shore-based processing and service industry based on these landings.

Fleet Structure

The fleet currently consists of 1,844 vessels registered in 4 segments:

Pelagic segment – comprising 22 dedicated Refrigerated Sea Water Tank Vessels (ranging in size from 27 to 71 metres in length) plus one factory vessel which together comprise 1% of the overall fleet and 40% of the capacity. This fleet exclusively targets pelagic species including mackerel, herring, horse mackerel and blue whiting. The single factory vessel spends much of its year fishing in third country waters and has a catch composition that reflects this.

Polyvalent segment – comprising 1,573 vessels representing 85% of the vessels in the fleet and 48% of the capacity. The polyvalent fleet targets traditional whitefish species (monkfish, megrim, haddock, whiting, cod, etc and Dublin Bay prawns/*Nephrops*), a limited quantity of pelagic species and inshore non-quota shellfish stocks.

The Polyvalent segment is further divided as follows:

1. An inshore fleet (<12 metres) of 1,360 vessels. This includes 503 vessels that are restricted to pot-fishing for non-quota species.
2. A coastal fleet (12–18 metres) of 100 vessels;
3. A near-water (18–24 metres) and offshore (>24 metre) fleet of 173 vessels;
4. Four polyvalent RSW tank-vessels principally targeting pelagic species,
5. Six purpose built off-shore crab vivier boats,
6. Seven polyvalent beam trawlers principally targeting flatfish.

Table 4.6
Structure of the Irish Fleet (2006)

Segment		No. of Vessels	GT	kW	Average Age	Employment
Pelagic	RSW tank-vessels	22	22,300	33,371	9	276
	Factory ship	1	14,055	14,400	7	
Polyvalent	Inshore <12 metre	1,360	4,590	41,639	23	2,312
	Coastal 12 - 18 metre	100	3,702	15,456	29	320
	Near-water 18 - 24 metre	113	14,662	39,097	25	604
	Offshore > 24 m in length	60	15,976	40,374	25	780
	Polyvalent Tank vessels	4	1,247	2,881	12	52
	Vivier Tank (Crab)	6	1,052	2,105	7	33
	Polyvalent Beam Trawl	7	1,806	5,543	26	91
Beam-trawl		13	1,837	6,726	22	73
Specific	General	145	6,989	23,086	33	391
	Scallop	13	2,013	7,674	38	55
Total		**1,844**	**90,230**	**232,351**	**24**	**4,987**

Beam trawl segment – comprising 13 dedicated vessels targeting mainly flatfish species, particularly sole, plaice, megrim and monkfish. It makes up less than 1% of the vessels in the fleet and 2% of the capacity.

Specific segment – comprising 158 vessels ranging in size from 6 to 44 metres in length, targeting bivalve molluscs (e.g. mussels, scallop, and razor clams) and generally fishing with dredges. It makes up 9% of the vessels in the fleet and 10% of the capacity. Historically, many of the vessels in this segment were introduced at a time when capacity (GTs and kWs) was available at no cost and were operated only for short periods. Whilst remaining on the Fishing Boat Register many do not possess current fishing licences and are non-operational. Instead they remain tied up in harbours resulting in local over crowding problems in a number of areas. Whilst there is a clear need to permanently dispose of these vessels, as investment in the segment has been largely opportunistic and the majority of non operational vessels do not have a strong track record, the introduction of a decommissioning scheme is not warranted.

Fleet Renewal and Modernisation

In less than a decade, Ireland's whitefish fleet has undergone unprecedented restructuring funded by private investment of €91 million and supported by State/EU grant-aid of €58.5 million. Two successive renewal programmes, the Whitefish Renewal Scheme and the Fleet Development Measure, have resulted in the introduction of 79 new and

modern second-hand vessels into the fleet over the past seven years and the withdrawal of an estimated 300 older and generally smaller vessels. Additionally 130 vessels have been modernised and more than 820 have undergone safety upgrades. As much of the State and EU grant aided investment was directed at the polyvalent segment, a significant portion (25%) of the polyvalent over 12 metre capacity consists of modern all weather vessels less than 15 years old. A further 45% of the capacity is between 15 and 30 years old and the balance (30%) ranges in age from 30 to 66 years.

Table 4.7
Investments in Fleet Renewal and Modernisation (2000 – 2006)

Fleet Renewal & Modernisation	Projects	State & EU Grant Aid '000€	Private Investment '000€	Total Investment '000€	% State & EU assistance
New Vessels	62	€25,202	€66,711	€91,913	27%
Second-hand Vessels	17	€881	€10,352	€11,233	8%
Modernisation	60	€1,876	€5,697	€7,573	25%
Safety upgrades	824	€3,553	€6,462	€10,016	35%
Tonnage Re-measurement	129	€121	€198	€319	38%
Vessel Monitoring System	91	€127	€194	€321	39%
Decommissioning Scheme	35	€14,788	€0	€14,788	100%
Onboard Quality Scheme	21	€404	€603	€1,008	40%
Supporting Measures	97	€12,513	€1,788	€14,302	87%
Total	**1,336**	**€59,465**	**€92,007**	**€151,473**	**39%**

Both public and private investment given in this table includes carry-over of expenditure on fleet renewal under the previous NDP 1994-1999 as well as additional non-NDP expenditure.

Private investment in the pelagic sector too has been significant with 11 of the 23 vessels in that fleet (equal to 31% of the capacity in GTs) renewed in the past 3 years at an estimated cost in excess of €200 million. This is in addition to private sector expenditure on tonnage (including safety tonnage) of €60 - €70 million. Overall, 81% of the fleet is less than 10 years old and with an average age of 8 years, this is one of the most modern pelagic fleets in Europe.

Complementing the renewal programme, the fleet decommissioning scheme introduced in 2005 has seen 26 polyvalent vessels (over 18 metres) permanently withdrawn and 3,178 gross tonnes removed from the register (10% of the over 18 metre whitefish capacity). The average age of these vessels was 31 years and their withdrawal has further improved the age profile of the fleet as well as onboard hygiene, operating, living and safety standards. Some 180 onboard jobs have been lost to date as a direct consequence of decommissioning, however many of those affected have found employment elsewhere in the fleet or outside the industry.

Supporting Measures, promoting a range of activities including data collection, experimental fisheries, quality initiatives etc have seen 91 projects funded under the NDP with a total investment of €14.3 million.

Whilst the fleet renewal and modernisation programme has substantially delivered on the Government's commitment to the whitefish industry set down in the National Development Plan 2000-2006, investment in very large deep-water fishing vessels under the programme has with the benefit of hindsight proven questionable. Stocks of deepwater fish are now heavily over exploited and this has resulted in significantly reduced quotas for these species. As a consequence the viability of a small number (2 to 3) of the larger deepwater vessels introduced under the scheme has been seriously affected and these vessels have moved ever more to traditional whitefish species including monkfish, resulting in additional pressure on this already heavily utilised quota.

The Current Status of the Fisheries Resource

The waters around Ireland contains some of the most productive fishing grounds in the EU and it is estimated that in 2004 the total catch by all fleets within the Irish Exclusive Economic Zone was 700,000 tonnes of fish valued at €500 million, the greater proportion of which was taken by non-Irish vessels. This reflects the Principle of Relative Stability of the Common Fisheries Policy, wherein Ireland's share (quota) of the EU Total Allowable Catch is fixed for each of the key commercial species, amounting to some 20% in the case of pelagic species, 16% of Demersal species and 23% of shellfish (Dublin bay prawns/ *Nephrops* and a small, unused, quota of snow crab). Inshore shellfish stocks (crab, lobster, whelk, shrimp, etc.) are not subject to EU quota allocation; these stocks generated 25% of the first-point-of-sale value for the fisheries sector in 2004.

Despite the considerable overall catch, the Marine Institute reports that "over 75% of these stocks are outside safe biological limits with either a low stock size or unsustainable levels of exploitation". In addition the Marine Institute notes that, "misreporting of catch, discarding and poor scientific sampling data continue to undermine the scientific advice and sustainable management of the resource" and that "the misreporting issue has to be resolved if we are ever to achieve sustainable fisheries".

The very poor state of many key demersal[3] stocks is reflected both in the annual total allowable catch and quota allocations that Ireland receives and in the declared landings of the fishing fleet over the past decade. From a high in 1997, Ireland's share of the key demersal stocks has fallen from 55,470 tonnes to 32,662 tonnes in 2006, a fall of 41%. Landings also have declined by some 33% over this period, from 48,000 tonnes in 1997 to just 32,331 in 2004 (the last year for which figures are available).

For the key pelagic species (mackerel, horse-mackerel, herring, and blue whiting) a similar pattern is also evident and between 1995 and 2004 landings fell by 26% (305,000 to 226,783 tonnes). The use of combined figures for pelagic stocks, however, can mask some

3 *Key demersal stocks are cod, haddock, whiting, hake, monkfish, megrim, plaice, sole, saithe, pollack, and Dublin Bay prawns.*

important trends and when looked at on a species-by-species basis we find that herring landings are down 39%, mackerel landings are down 20%, while landings of horse mackerel have declined by 80% over the period. Only low value blue whiting and landings of other non-quota species show any sustained increase.

In contrast to the decline in landings of demersal and pelagic stocks, landings from the main shellfish stocks all increased significantly over the period with a combined increase of 48% (18,179 tonnes to 26,832 tonnes) between 1995 and 2004. However, current analysis of these stocks clearly indicates that this trend is not sustainable and effort reductions on all of the major shellfish stocks are urgently required if yields are to be maintained at or close to maximum levels.

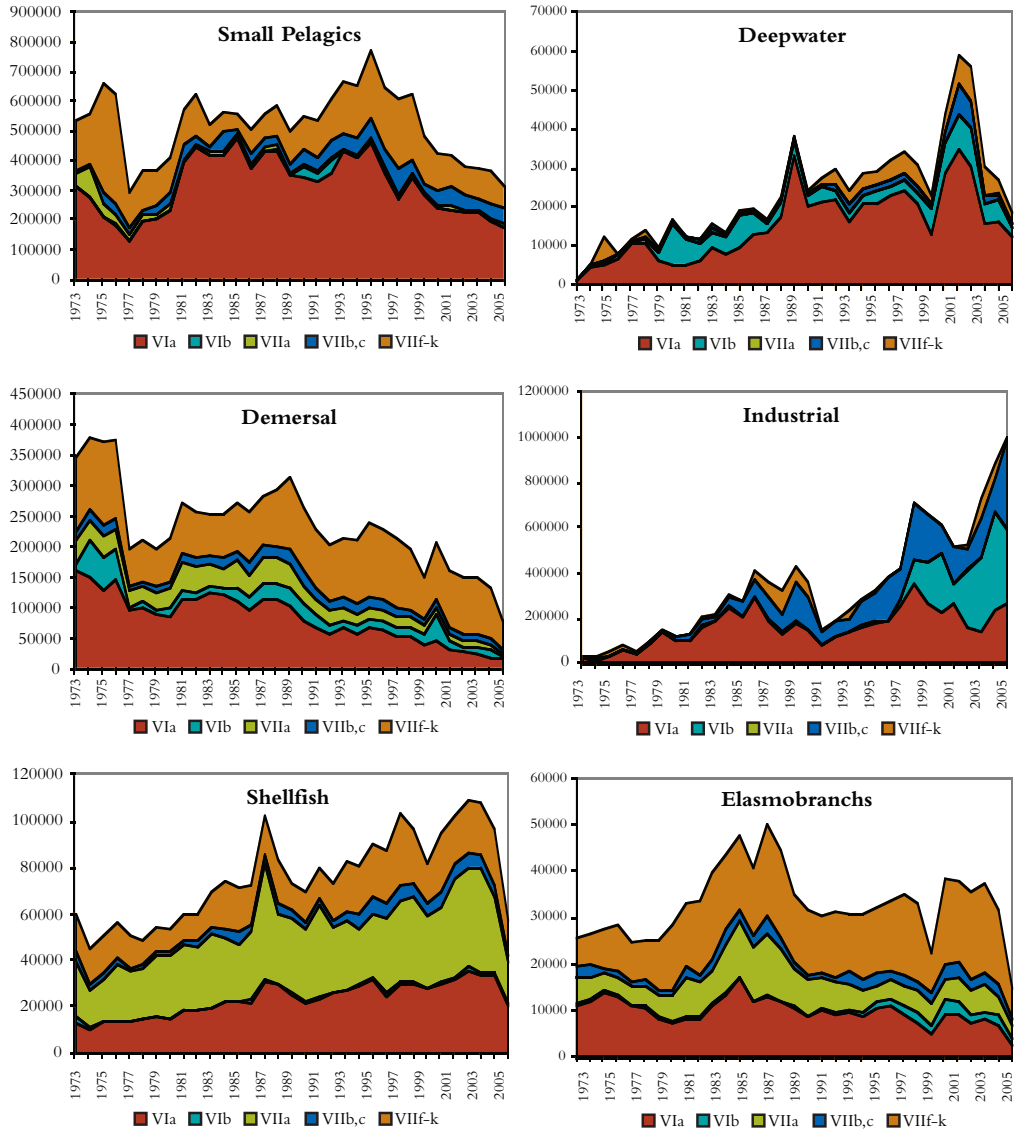
While various reasons can be postulated for the critical decline in many stocks in recent years, clearly over fishing is a major factor in every case. Furthermore this is true not just for the shared stocks that the Irish fleet exploits, it is equally the case for many stocks where Ireland is allocated the biggest proportion of the total catch; for example whitefish in the Irish Sea, herring in the Celtic Sea and off the northwest coast to mention but a few.

Apart from over-fishing there are significant problems too with mis-reporting and poor quality data generally coming from industry. Clearly there is a need to address these fundamental problems and in this regard the Group note the planned introduction of a national regime to collect sales notes, the increased commitment nationally and at a European level to the Data Collection Regulation, and the renewed efforts by the Marine Institute to promote better data collection schemes through shared initiatives with the catching sector.

The most recent assessments of the biological status of all stocks fished by the Irish fleet are reported on annually by the Marine Institute in the Stock Book. Given the large volume of information involved, it is not necessary to reproduce it all in this report. Instead the following overviews of the key stocks or stock complexes highlight the most important trends for each and the following diagrams (Figure 4.0) taken from the most recent addition of the Stock Book (November 2006), illustrate international trends in landings reported to ICES since 1973 by area and species category.[4]

4 *Landings for France are not available for 1999 and 2005 and landings are grouped for VIIbc VIIf,g,h,i,k and VIId,e. International landings comprise data supplied from all countries reporting to ICES, including Ireland.*

Figure 4.0: International Trends in Landings Reported to ICES since 1973 by Species Category.



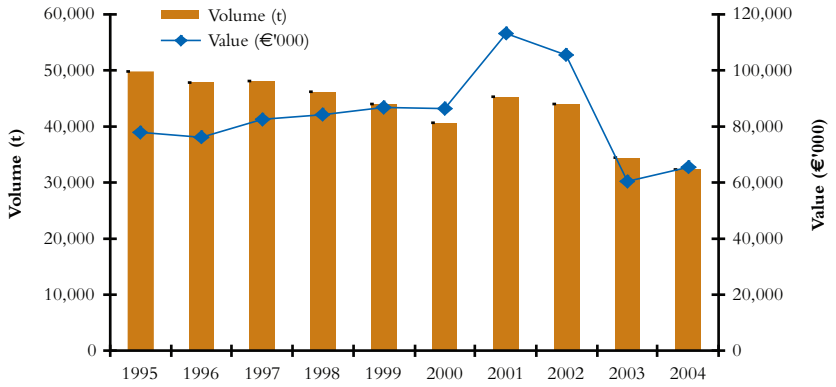
Species grouping	Most important species contributing to landings
Small Pelagics	Mackerel, Horse mackerel, Herring, Sprat, Sardines
Demersal	Cod, Saithe, Haddock, Whiting, Hake, Megrim, Monkfish, Ling
Shellfish	*Nephrops*, Scallops, Mussels, Crabs, Lobsters, Squid, Cuttlefish
Deepwater	Argentines, Atlantic redfishes, Black scabbardfish, Blue ling, Greater forkbeard, Orange roughy, Roundnose grenadier, Tusk
Industrial	Blue whiting, Norway pout and sandeel
Elasmobranchs	Various Dogfish, Spurdog, Various Rays and skates, Deepwater sharks, Pelagic sharks

Source: Marine Institute Stock Book, November 2006

Demersal Stocks: Whitefish and Dublin Bay prawns

The trend in demersal landings for Irish vessels for the period 1995-2004 is illustrated in Figure 4.1.

Figure 4.1 Irish demersal landings, volume and value from 1995 to 2004



Hake, Monk, and Megrim Fisheries

The hake, monk, and megrim mixed-stock fishery is currently the most important fishery exploited by Irish whitefish vessels, particularly those operating off the southwest and west coasts. Ireland's quota of these stocks is 9% of the EU Total Allowable Catch, and with a first-point-of-sale value of €18.9 m in 2004, the combined landings of these 3 species accounted for 29% of the value of all demersal landings that year.

While the hake stock declined throughout the 1990's as a result of high levels of fishing, the stock is now considered to be harvested sustainably and Ireland's quota has increased by 12% since 2004. Our quota of monkfish has similarly increased by 30% between 2004 and 2006. However the megrim quota has decreased over the same period by 2%. Overall, Ireland's combined quota for this group of stocks has increased by 10% since 2004.

According to the Marine Institute the quality of the science for megrim is 'poor' mainly due to poor quality landings data. The Marine Institute also notes that international misreporting is a serious problem in the monkfish fishery and as a result the state of the stock is uncertain. ICES, in its most recent advice, reports that monkfish, like hake, while harvested sustainably in relation to precautionary limits, is currently 'over exploited in relation to its highest yield'. Consequently there is currently no capacity to absorb increased effort either from the current fleet or to accommodate additional fishing pressure from vessels displaced from other fisheries.

Dublin Bay prawns (*Nephrops*) Fisheries

An important high value fishery for vessels operating in the Irish Sea, Celtic Sea and Aran grounds off Galway, the Dublin Bay prawn *(Nephrops)* fleet also takes a significant quantity of cod, and other species, as a by-catch. Where these by-catch species, especially cod, are depleted or over-exploited, management measures designed to protect them also impact on the activities of the prawn fleet.

Ireland's quota for Dublin Bay prawns amounts to 21% of the Total Allowable Catch, and with a first-point-of-sale value of €13.7 million in 2004, prawns accounted for 21% of the value of all demersal landings. In general the state of the prawn stocks are not well known. However they have sustained high levels of fishing effort and discard rates for many years and all indications suggest that the stocks have not declined substantially. There are, however, particular problems with the Aran stock – west of Galway.

Cod, Haddock, Whiting Fisheries

The main, and well documented, issue for the cod, haddock and whiting stocks has been the dramatic decline of cod in all the main fisheries around Ireland and in the North Sea. Cod was subject to very high levels of fishing in the 1990's and the stocks both in the Irish Sea and off the north-west coast (where there was an important fishery in the past) are considered to be in a severe state of decline. In the Irish Sea, for example, the spawning stock is estimated to have fallen from 21,000 tonnes in 1973 to less than 5,000 tonnes today. Whiting stocks too are severely depleted in the Irish Sea and off the north-west coast, while they are over-fished in the Celtic Sea. Furthermore while the exact status of the haddock stock in the Irish Sea is unknown, it is likewise considered to be over-exploited. All of these trends are reflected in the landing statistics for the three species and cod landings dropped 78% between 1995 and 2004 while for whiting and haddock the equivalent figures show drops of 57% and 39% respectively.

Overall Ireland's quota of cod, haddock and whiting amounts to 17% of the Total Allowable Catch, however Ireland is allocated 66% and 58% of the respective cod and whiting quotas in the Irish Sea underscoring their traditional importance to the national fleet. With a first-point-of-sale value of €12.1 million in 2004, the combined landings of cod, haddock and whiting accounted for 18% of the value of all demersal landings that year, down from 26% in 1995. The severe decline in the status of these stocks, both in the Irish Sea and off the north-west coast, has resulted in significant displacement of traditional fleets from these areas and today many of the larger vessels from the Greencastle fleet travel regularly to the Celtic Sea to fish. Likewise the traditional Irish Sea whitefish fleet has all but disappeared. It is clear too that as more vessels turn their attention to the hake, monk and megrim fishery in the Celtic Sea and to the Dublin Bay prawn fisheries both in the Irish Sea and off the south-west coast, these already heavily fished stocks are very vulnerable to further over-exploitation.

Plaice and Sole

Another significant fishery exploited by Irish whitefish vessels, in particular the beam-trawl and the near-water (18 – 24 metre) fleets, is the plaice and sole fishery. Ireland's quota of plaice and sole in home-waters is 36% of the EU total allowable catch, and with a first-point-of-sale value of €4.5 million in 2004, the combined landings of these 2 species accounted for only 7% of the value of all demersal landings that year. While quotas increased slightly (+3%) between 2004 and 2006, they are currently 17% less than they were in 2003 and almost 43% down on the equivalent values in 1995. Sole is locally important in both the Irish Sea and Celtic Seas and off the south-west, while plaice is predominantly an Irish Sea fishery with smaller quotas along the south coast and off Donegal.

The latest scientific advice for these stocks indicates that sole is overexploited both in the Irish Sea and in the Celtic Sea. For plaice, once again the advice is that the stock is over fished in the Celtic Sea. In the Irish Sea, however, the stock is harvested sustainably.

The latest scientific advice for these stocks indicates that sole in the Irish Sea is 'stable' while it is over fished in the Celtic Sea. For plaice the situation is similar with the Irish Sea stock fished sustainably, but again over fished in the Celtic Sea.

Deep Water Stocks

This small, but locally very important, mixed-stock fishery increased significantly between 2001 and 2004. While the deep-water fishery comprises a large range (>10) of species, landings by the small number of Irish vessels (<10) that have taken part in the fishery have been dominated by orange roughy. The latest advice from ICES, however, starkly underlines the severely depleted status of most deep water species (including orange roughy) and far from expecting any increase in landings from this fishery going forward, it is likely that only a small number of vessels (2 – 3 from the west/north-west) will participate in the fishery, and then only in a limited way in the future. (Current proposals from the European Commission are to reduce the overall TAC for deep-water species by 60% between now and 2008: Ireland is allocated 5% of the deep-water TAC).

Pelagic Stocks

The recent trends in landings and quotas for pelagic species are set out in Table 4.8 and Figure 4.2.

Unlike the demersal fisheries which are often mixed fisheries, pelagic fisheries are conducted on a series of largely discrete fisheries that follow one another between September and April. The most important of these is the mackerel fishery, exploited by Ireland's pelagic fleet and a number of polyvalent vessels which traditionally operate in late autumn and spring. Ireland's quota of mackerel is 21% of the EU Total Allowable Catch, and with a first-point-of-sale value of €27 million in 2004, it accounted for 48% of the value of all pelagic landings that year.

While the allowable catch for mackerel declined dramatically in the mid-nineties and again in 2005 and 2006 as a result of high levels of fishing (with possibly much of this mis-reported) and falling stock size, the spawning stock has increased over the last 3 years. Although the quota is expected to increase (by up to 15%) in 2007, ICES has pointed out that the stock is still harvested unsustainably.

Blue whiting (worth €8 million in 2004 or 14% of the value of pelagic landings), although landed mostly for fish meal, is important for a small number of vessels. It is likely that the total catch of this species will be further curtailed in the short term.

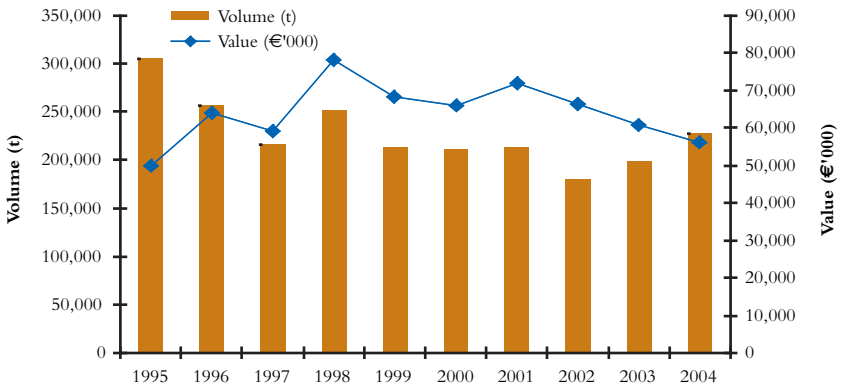
Horse mackerel (worth €6.3 million in 2004 or 11% of the value of pelagic landings), developed as a target fishery from the 1980s, is of uncertain status.

Herring (worth €5.2 million in 2004 or 9% of the value of pelagic landings) has seen declining landings for a number of years and stocks are currently outside safe biological limits.

Table 4.8
Recent Trends in Volume and Value of Key Fish Stocks.

	Irish Quota as a % of 2006 TAC	2004 Quota (tonnes)	2006 Quota (tonnes)	% Quota change '04 - '06	Value of landings in 2004 €'000	Value of landings in 2004 as a % of total
Hake, Monkfish, & Megrim	9%	6,573	7,234	10%	€18,890	29%
Dublin Bay Prawns/*Nephrops*	21%	6,589	8,167	24%	€13,665	21%
Cod, Haddock, & Whiting	17%	14,203	11,867	-16%	€12,107	18%
Place & Sole	36%	2,139	2,206	3%	€4,531	7%
Saithe & Pollack	10%	3,835	3,188	-17%	€1,510	2%
Other Demersal	n.a.	n.a.	n.a.	n.a.	€14,876	23%
Total Demersal	**14.6%**	**33,339**	**32,662**	**-2%**	**€65,578**	**100%**
Mackerel	21%	63,216	47,894	-24%	€26,993	48%
Horse Mackerel	19%	32,983	33,546	2%	€6,333	11%
Herring	28%	36,102	35,334	-2%	€5,232	9%
Blue Whiting	19%	33,544	43,010	28%	€8,042	14%
Other Pelagic	n.a.	n.a.	n.a.	n.a.	€9,687	17%
Total Pelagic	**21.3%**	**165,845**	**159,784**	**-4%**	**€56,287**	**100%**

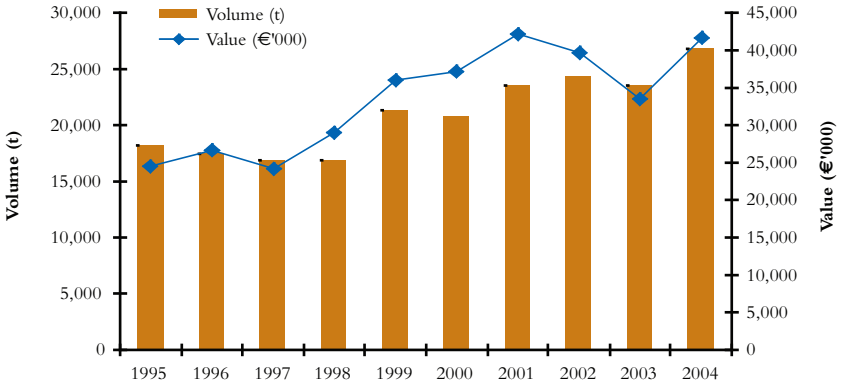
Figure 4.2
Irish Pelagic Landings, Volume and Value from 1995 to 2004



Shellfish Stocks: Crab, lobster, scallop and whelk

In 2004 crab and lobster accounted for 50% of the volume and 60% of the value of landed shellfish (excluding Dublin Bay prawns/*Nephrops* which is included earlier). The other major shellfish stocks are scallop, shrimp and whelk which account for the majority of the remainder in both volume and value terms (Figure 4.3). All of these stocks are fully exploited and generally stable, but productivity is below maximum sustainable yield. Any further effort increases on these stocks will result in reduced catch rates and correspondingly lower profitability.

Figure 4.3
Irish Shellfish Landings, Volume and Value from 1995 to 2004



Challenges

Over 75% of the fish stocks in the waters around Ireland are below safe biological limits and many will need to be rebuilt from their present low levels. Demersal quotas (whitefish and prawns) have fallen by 37% since 1995; the mackerel quota is down 40% in the same period; herring quotas are down 35%; and horse-mackerel is down 55% since 1998.

Misreporting and under-reporting of catch, discarding and poor scientific sampling data continue to undermine the scientific advice.

It is very unlikely that the resource base can be increased by changes to the quota allocation rules, and Ireland's quota share of all the key commercial stocks will, in all likelihood, remain fixed under the Principle of Relative Stability. Reducing fleet capacity, effort and fishing mortality on fish stocks and developing long term management plans will drive thinking on fisheries management for many years to come.

Increasing the resource base by gaining access to overseas fisheries through third country and private agreements remains a possibility, although such opportunities represent a new departure for Irish vessels and are only appropriate for a small component of the pelagic fleet. In addition these opportunities are, generally, only important for the individual companies involved and from a national perspective do not deliver significant direct

returns to Ireland's coastal communities. If however they result in reduced competition for traditional stocks in home waters then, clearly, third country and private agreements impact directly on the viability of the remaining fleet.

The introduction of effective technical measures supplemented with strong control and enforcement will be a key part of future management. Scientists, managers, and stakeholders must continue to work together through the Regional Advisory Councils to ensure accurate data are available to develop the long term management measures that will be required to rebuild and sustainably manage the resource.

Pursuing strategies that increase landings from non-Irish fleets is another significant challenge for the future. Such landings, whilst not directly contributing to the catching sector, provide increase throughputs and economic activity in Irish fishing ports.

Addressing the Imbalance – Fleet Restructuring

It is abundantly clear that, decommissioning to date notwithstanding, the catching capacity in most fleet sectors currently exceeds the resources available to Irish vessels in EU waters. This is exacerbated for certain stocks, particularly monkfish and mackerel, where the number and catching capacity of vessels engaged in these fisheries greatly exceeds the resources available. This has led to difficulties within the sector and also has increased tension between vessel owners and the control authorities as vessels have striven to maintain economic viability.

Whitefish Fleet

It was originally hoped that by 2007 the whitefish sector (polyvalent and beam trawl fleet over 18 metres in length) would have been reduced by 35% (or 10,937 gross tonnes). However the 26 whitefish vessels scrapped to date amount to only 3,178 gross tonnes or 30% of the target. It must also be borne in mind that decommissioning has also led to some displacement back into the fleet, an outcome that must be taken into account when planning future programmes.

It is clear too that the process of decommissioning is complementary to the renewal programme delivered over the past 8 years. The latter has seen the safety and operational standards of a large section of the whitefish fleet vastly improved, while decommissioning has removed some larger, older, and less safe vessels that are every bit as resource demanding as their modern counterparts. The completion of this twin-track approach, renewal and restructuring, is vital to the future success of the catching sector as it will ultimately deliver a smaller fleet that is modern, efficient and safe. However, it is important to deliver a balanced fleet in terms of offshore, near-water, coastal and inshore vessels and to have regard for the returns to coastal communities in any fleet rationalisation programme.

The current decommissioning scheme is based on the July 2005 report entitled, *Decommissioning Requirements for Ireland's Demersal and Shellfish Fleets*, by Mr Padraic White. That report established the urgency, scale and cost of decommissioning necessary to

tackle the imbalance between the size of the fleet and the available fishing opportunities. Its recommendations were based on the goal of ensuring a more secure future, based on better economic returns for those remaining in the industry and their coastal communities. Throughout this current review process, at public meetings and in written submissions, the need for continued restructuring of the demersal fleet has emerged as perhaps the most pressing challenge facing the catching sector. Mindful of the restructuring achieved to date, the Strategy Review Group are strongly of the opinion that there remains a serious imbalance between the current demersal fleet size and the available fishing entitlements.

Arising from recommendations in the White Report, the present decommissioning programme provides grant aid at the maximum rate permissible within current EU regulations. These rates which were established in 2002, apply in all Member States, and have not been adjusted during the lifetime of the current structural aid round (the detailed rules of which are contained in the Financial Instrument for Fisheries Guidance, or FIFG). While for some, the current premiums have proved attractive - 26 vessels have been scrapped under the scheme - for others, particularly those who had previously purchased tonnage to enter the fishery, this has not been the case.

The Group notes that the European Fisheries Fund, which will replace the FIFG in 2007, removes the ceiling on grant aid payments in this area. This no doubt reflects the present urgent need for effective decommissioning on a much greater scale within the EU fleet and the Group are mindful that the European Fisheries Council, in agreeing the European Fisheries Fund, have indicated that premiums for decommissioning should take account of this and other local factors going forward. Conversely, as the broad scope of the European Fisheries Fund has been known for some time, the prospect of increased decommissioning premiums has, no doubt, encouraged some to postpone take-up of the scheme.

The economic analysis carried out for the White Report on decommissioning demonstrated that whitefish stocks generally, and available quota in particular, would have to be some 30% greater to yield a viable and attractive return for the boats now in the demersal sector. The Group notes that, since then, the economic situation of the fleet has declined further. This is due in no small measure to the substantial increase in the cost of fuel oil experienced throughout much of the past 18 months, a further decline in the quotas of key deep water stocks and a commitment to further reduce quotas at an EU level to help meet international obligations e.g. the Johannesburg Agreement on sustainability. Thus while the approach adopted in the White Report remains valid, the value of some of the critical parameters has changed. An updated analysis, incorporating these adjustments, now indicates that whitefish stocks generally, and available quota in particular, would have to be some 45% greater to yield a viable return for the vessels now in the demersal sector.

Pelagic Fleet

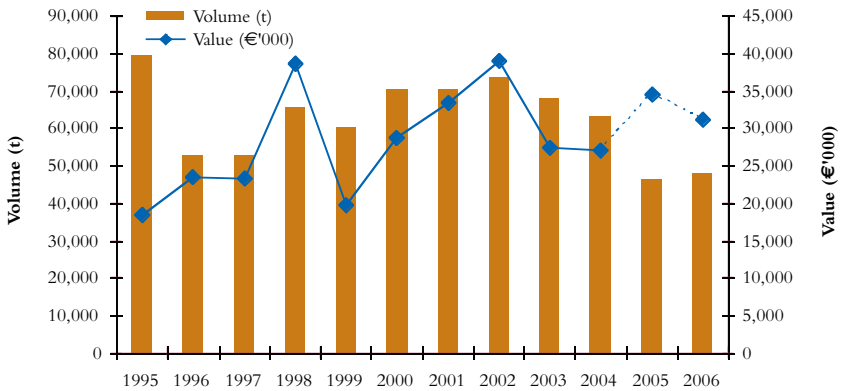
It is clear that the pelagic sector also faces significant capacity problems. This is true for both the RSW tank-vessels and the polyvalent pelagic fleet including, particularly, the polyvalent RSW fleet of 4 vessels, and also the dry-hold vessels both over and under 65 feet in length.

Mackerel remains the single most important species accessed by the pelagic fleet and variations in both the annual mackerel quota and the market price impact significantly on this sector. While the Irish mackerel quota has dropped sharply over the last number of years from 73,600 tonnes in 2002 to 48,000 tonnes this year (Figure 4.4), this has, historically, been offset by significant price increases over the same period reaching record values in 2005. This trend is not new and was also observed in the mid 90's when quota was likewise reduced significantly. However, factors other than the Total Allowable Catch of North Atlantic mackerel affect the world price of this commodity. For example, the recent upturn in the availability of Pacific mackerel is currently causing volatility in mackerel prices in Europe.

While the mackerel quota for the polyvalent pelagic fleet is fixed (7,000 tonnes per annum) the annual herring quota is currently 35% less than it was in 1995. A number of purpose built new and second-hand vessels have been added to this fleet (without grant aid) in the past 6 years and while these have delivered a modern and safe fleet, it has also led to significant new capacity without a corresponding increase in available resources catching potential. Traditionally, 1,500 tonnes was set aside for smaller vessels and the intention was that this should be a small but important element in the catch plans of many smaller vessels. In the past 2 to 3 years, however, new vessels have been introduced which are geared to catching large (for their size) quantities of pelagic stocks. There are now 4 such vessels and others may be planned. The result of this is that these vessels have the capacity to catch the full 1,500 tonnes of mackerel in a matter of a few weeks. Management arrangements are being introduced so as to allow more small vessels a share in the mackerel allocation. This approach should help discourage the introduction of more pelagic focused vessels into this segment.

Due to the very high costs involved in decommissioning RSW tank-vessels this cannot be considered as a viable option for these vessels and industry-led rationalisation brought about by means other than decommissioning is required.

Figure 4.4
Mackerel Landings, Volume and Value from 1995 to 2004



Inshore Fleet

A significant challenge for both the inshore sector and the vivier crab fleet in particular relates to the effort management system introduced on foot of the revision of the CFP in 2002 and the establishment of the Biologically Sensitive Area (BSA) off the south and west coasts of Ireland. This management system (designed to protect whitefish stocks) imposes effort or 'days-at-sea' limitations on crab and scallop boats and many now face severe restrictions on their normal operating pattern. In respect of the scallop fleet, the recently completed 2005 decommissioning scheme has fundamentally addressed the problem of over-capacity and the remaining fleet is now aligned with the effort allocation available to Ireland. For the crab fleet however, the problem remains and the scale of the fleet, if operated to its normal capacity, greatly exceeds its effort allocation. The situation is currently being managed and a more long term approach is being pursued with the EU Commission which would aim to strengthen conservation while removing the current artificial effort barrier.

Resource Management

The problems that currently beset the whitefish sector indicate that the current European and national resource management system has not delivered on its principal objectives of biologically sustainable fisheries and economically viable vessels. However, given the current over-capacity in the fleet generally and the whitefish fleet in particular, it is unlikely that any alternative management system can deliver on these objectives, unless fundamental choices are made in relation to fleet capacity. From the outset, however, it must be stressed that any change from the current quota management strategy must be strictly predicated on the assumption that fleet restructuring has been substantially delivered.

Clearly a range of alternative quota management models are in use worldwide and there exists a large body of literature detailing these using both case studies and underlying economic theory. More specifically DCMNR has recently commissioned a review of the present quota management system undertaken in the wake of the *Report on Decommissioning Requirements for Ireland's Demersal and Shellfish Fleets* (White 2005) with a view to informing the current debate on how best to ensure that fleet capacity remains consistent with fishing opportunities and economic efficiency. That review entitled *Future Quota Management Arrangements for the Irish Whitefish Sector* sets out to examine a range of possible alternatives and considers each against what must be the ultimate objective of providing a stable, profitable and unsubsidised industry capable of making a positive sustainable contribution to the regional economies of Ireland. The discussion that follows and the recommendations put forward in Core Theme 5, recommendations 5.1 and 5.2 are based on the findings of that report and the many submissions, both verbal and written, that the Group has received on this topic.

At a basic level access to the national fisheries resource is determined by the fleet segment in which a vessel is registered. While this remains, at one level, the choice of the owner, it is significantly influenced by economic considerations as owners must first purchase and remove equivalent capacity from within their segment of choice prior to entry. For example, the purchase of polyvalent capacity currently costs between €2,000 and €3,000 per GT

and €400 - €500 per kW whereas equivalent active pelagic capacity is between €6,000 and €7,000 per GT while purchase of 'full' pelagic capacity might be anywhere between €15,000 and €20,000 per GT.

Thereafter, fisheries are effectively open access in respect of what can be fished for most whitefish and shellfish stocks. Only in the pelagic sector is there a well established allocation mechanism that sees each vessel get a pre-agreed quantity across the pelagic species based on the national quota. The open access nature of many of our fisheries has undoubtedly led to a 'race-to-fish' which in turn has led to over-capacity in a number of segments and some key fisheries. This is particularly evident in the polyvalent segment where vessels are entitled to fish almost every commercial species albeit with significant restrictions on their entitlements to pelagic stocks and likewise to key whitefish and prawn stocks. While access is further restricted to some fisheries using licences, authorisations and track record, the mechanisms have varied and do not provide a consistent approach across the various fisheries. Even in the pelagic segment over-capacity is evident and this despite the more sophisticated quota allocation rules that apply therein.

Ultimately if the current system is allowed to continue there is every chance that significant over-capacity could once again develop following the completion of the current decommissioning scheme because the economic incentive to over-invest will not have been addressed. Stocks will come under further pressure, the fleet will suffer lower profits, and once again could arrive at a position where many vessels are effectively loss-making.

A second fundamental problem with the current resource management regime is that it can be insensitive to market forces. Thus landings are sometimes more likely to reflect quota restrictions and biological availability rather than true market demand. As a result Irish fishermen on these occasions are more likely to be price takers rather than price makers and will tend to drive the market price down rather than up through their actions.

Recognising the significant investment that both the private sector and the State has made in fleet renewal and the ongoing investment the State is making in restructuring, it is clear that new resource management policies and methods of implementing these must be developed as a matter of priority. Access to fisheries must be regulated firstly in terms of the productive capacity of fish stocks and secondly the quota allocations for fleet segments and individual vessels must take account of the sometimes conflicting requirements of vessel viability and the need for better continuity of supply, which is critical to the viability of shore processing. There is therefore clearly a need to involve processors/marketers in any future quota management regime.

Any future management system must likewise provide individual fishermen with the opportunity to take business orientated decisions based on resource allocations and also act as an incentive for fishermen to accurately report their landings. To do this, all steps in the management of all fisheries need to be integrated; scientific advice needs to be solidly based and understood; the biological and economic indicators used to monitor fisheries must be carefully chosen such that they are responsive to management measures; clear objectives for each fishery must be defined; the combination of strategies and regulations to be used

to achieve the objectives must be detailed and finally, how management will respond to declining or increasing fisheries should be pre-agreed. Management planning is the key to a new strategy for a sustainable and profitable fishing sector.

In arriving at any new management system it must be clearly understood that fish stocks are an EU Community resource, regulated by the European Union, and that this imposes obligations on Member States to manage that resource and enforce the Common Fisheries Policy. The legal framework is set down in Council Regulation 2371/2002 and each year the EU Fisheries Council determines the Total Allowable Catch on the basis of which national quotas are determined.

EU Regulations also set down the obligations on Member States to ensure the effective control, inspection and enforcement of the rules of the Common Fisheries Policy and a key requirement is that fish catches are fully and accurately recorded and the quantities landed are reported to the EU Commission. Member States have the responsibility to close fisheries when the quota allocated to them is taken up. In the event that a Member State does not act, the Commission has the power to stop fishing activities.

Any new management arrangement must therefore address the following:

- Its allocation methodology must be fair, equitable and transparent;
- It must deliver economic viability and stability to vessel owners;
- It must promote a greater focus on market needs and promote catch plans that take account of shore processing and market requirements;
- It must be supported by a comprehensive system of effective enforcement so that fishermen accurately record landings.

Inshore Fisheries Resource Management

For the major inshore stocks, resource assessments recently completed, have shown that most are fully exploited and declining catch rates have adversely affected the economic viability of the inshore fleet. Clearly the economic as well as the biological sustainability of these fisheries must be considered when formulating any future management plan.

Given that there are no quotas for the key species targeted in inshore waters (crab, lobster, shrimp, scallop etc), there has hitherto been little imperative to curtail the annual landings of shellfish stocks that support Ireland's extensive inshore fisheries. However, the introduction of the Shellfish Management Framework in 2005, administered by BIM, began the process of addressing this recognised deficit. It was designed to provide an integrated co-management structure and the inshore sector, State Agencies and DCMNR have all been engaged in this process since its introduction.

The Framework is in the process of delivering recommendations, in the form of management plans, for each major species of shellfish and these will raise issues such as access arrangements, effort control and policing of fisheries. The successful implementation of these plans will require an education and consultation process to create a groundswell of support for the plans within the industry and enhanced commitment from the State sector.

Performance, Competitiveness and Viability

By and large the catching sector is competent and professional and, for the newer vessels at least, generally competitive (within the constraints currently required as a result of the mismatch between fleet size and available resources). However the viability of much, if not all, of the fleet has now become a serious issue. Levels of competitiveness and performance are intrinsically linked to the availability and access to resources, the catch rates of target species, as well as operational overheads and competition in the marketplace. Increasing fuel costs have affected the performance of vessels targeting both whitefish and pelagic species by reducing their profitability, which has led to difficulties locating and retaining experienced crew.

Viability within the entire fleet is critically associated with the level of financial overhead carried by individual vessels and their ability to cover this liability. To date some vessels have responded by adding value to available resources, assuring the supply of high quality products, targeting non-quota species and by shortening the supply chain. However the degree of success in all of these areas has been limited.

With the twin impacts of resource constraints and increased operating costs, particularly fuel prices, it is vital that all sectors critically examine their current fishing operations and streamline where possible to improve operational efficiency. Today more than ever, vessels steam longer distances to and from fishing grounds and then, often, do not fish in the most fuel efficient manner. Routine maintenance is at best sporadic resulting in increased wear and tear on vessels and fishing gear is often badly matched to the vessel's capabilities. All of these factors result in vessels often working in excess of recommended limits.

It is also apparent that the majority of fish from all sectors are still landed unprocessed or simply gutted with little or no added value and a limited shelf life. In the inshore sector particularly, facilities for maintaining the quality of catch once aboard the vessel are rudimentary. As a result live and fresh product is landed with a severely reduced shelf life. Many of the industry's European competitors have identified the resolution of these issues as critical to ensuring the landing of a premium quality product and have modified their vessels accordingly thereby allowing them land fish ready for an ever more demanding market. They have also realised the potential value of by-products including fish livers, oil and cartilage and have begun to develop onboard machinery designed to exploit these by-products. Although recent grant-aid schemes administered by BIM have gone some way towards addressing these issues, uptake from the industry has been slow.

Over reliance on traditional markets and competition with increasing volumes of imports remains of concern and will dictate the financial future of vessels that choose to ignore market demands and consumer requirements. Although opportunities to target non-quota and under-utilised quota species, notably tuna, exist, entry into these fisheries has been slow. This has largely been due to reluctance amongst vessel owners to bear the financial risk associated with new and unproven fisheries and specifically the potential for losses which could ensue if alternative fisheries did not prove to be immediately financially viable.

The inshore sector benefits from an artisanal and environmentally friendly image and an increasing consumer demand for shellfish, particularly in new user-friendly product forms. However this seemingly positive selling point is not currently being exploited to its full potential. For example, the fact that the majority of shellfish are landed alive affords the industry the advantage of significant product shelf life; however this potential is not being fully realised.

For the inshore sector marine tourism, including whale watching and recreational angling, offers some opportunity to diversify its activities and income stream. While the Fisheries Inshore Diversification and Safety Programme has contributed significantly in this regard, there is still room for further development in the marine tourism area.

Marine Environment

Care and custody of the environment is a pillar upon which EU policy decisions reflect national, international and public concerns on the environment. Understanding the necessity to maintain a healthy and diverse marine environment has become essential and is seen as a key driver in maximising the economic, social, cultural and ecological benefits of a resource on which many activities depend. In order to maintain credibility with the general public, fishermen will need to proactively demonstrate a responsible approach to the marine environment.

Fundamental to the way fisheries will be managed in the future will be the implementation of a number of strategic policy initiatives including, inter alia, the Johannesburg Agreement and the *Natura 2000* framework within the Common Fisheries Policy. The Johannesburg Agreement, for example, requires that fish stocks be maintained or restored where possible to levels that can produce Maximum Sustainable Yield (MSY) by 2015. Judging by experiences in the US and other countries this will be a major challenge for the fishing industry. Natura 2000 seeks to create an extensive and coherent network of protected areas and will form the cornerstone of EU biodiversity policy. Similarly, the EU's recent Green Paper on Maritime Policy proposes to develop, with the participation of stakeholders, a set of common principles governing maritime activities and co-ordinating policies that have been fragmented up until now.

The need to reduce discarding and high-grading of species that are commercially exploited but not taken ashore (due to quota restrictions, minimum landing sizes or market considerations) has been identified throughout the consultation process and more widely by the EU as a significant issue. Discarding is still prevalent in many Irish fisheries and

there is an urgent need to change current fishing practices and assist fishermen avoid or reduce catches of undersize or unmarketable fish. This can be achieved through a package of measures that will include the use of more size selective and species selective fishing gears, a higher level of control and enforcement at sea, the introduction of real-time closures when the proportion of small fish becomes too great and, possibly, the introduction of a discard ban in some cases. A discard ban, however, should be considered as the last link in a chain of possible measures, as the regulatory and economic implications of such a ban constitute a comprehensive revision of the way the CFP operates and of the economics of many fisheries; in essence it is tantamount to a complete change in culture for fishermen. Nonetheless it must be noted that a ban on discarding is currently under consideration by the European Commission services.

The need to minimise the impact of some fishing gears on sensitive habitats and to protect non-target species including incidental by-catch species such as whales and dolphins are also issues that fishermen must address going forward. The development of environmentally friendly fishing gears and technical conservation measures including the voluntary introduction of closed areas, combined with better environmental awareness can demonstrate the engagement of the fishing industry with these environmental obligations. Uptake of such initiatives, however, must increase in the future and fishermen must be proactive in developing environmentally friendly solutions to fisheries problems. It should be recognised that the inshore sector has a head start in this regard due to its use of inherently environmentally friendly fishing methods, particularly pots and creels.

In an increasingly environmental aware society, there is a pressing need to satisfy the buyer in the first instance and the consumer ultimately, that any seafood product has been harvested in an environmentally friendly manner from a sustainably fished stock. In this regard the industry must harness recognised tools, including Environmental Management Systems (EMS), which can be used to promote and market their products. Such systems provide assurances to the buyer and consumer alike and can be either in the form of a simple code of practice supported by a clear plan for implementation and compliance or a more comprehensive third party certified system that complies with international standards.

4.4 Aquaculture Sector – Profile and Key Challenges

The aquaculture sector operates across a number of different sub-sectors, each displaying their own unique characteristics and facing different challenges and opportunities. At an overall level, however, the administration of the current licensing and regulatory regime, prevention/control/monitoring of disease outbreaks/biotoxins and improved marketing performance on the basis of eco-quality and innovative products are challenges faced by all participants in the aquaculture sector.

Introduction

Given that output from the capture fishery is constrained by TAC's and quotas there is clearly a market led opportunity for aquaculture derived seafood products to fill the widening gap between supply and demand.

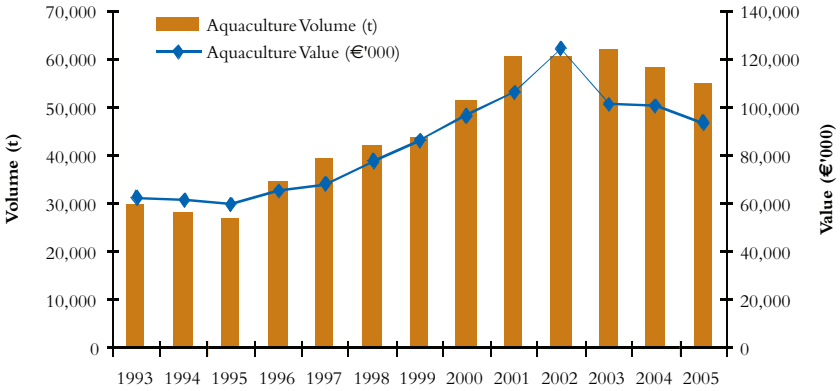
Over the last thirty years the aquaculture sector has grown and expanded its output in Ireland to the point where, in 2005, it accounted for 38% by value of total primary production of fish and shellfish (see Table 3.3 and Figure 4.5). The overall volume, value and employment figures for the Irish aquaculture sector and its relative significance in socio-economic terms have been outlined in Section 3. Ireland is fortunate in having a relatively diverse aquaculture sector with substantial shellfish farming as well as farmed finfish. The benefit of this spread is evident in terms of the recent history of the sector. It is now evident that the projected targets, in terms of actual output by species in 2008, that were set for the current NDP 2000-06 will not now be met. Overall the sector may come close to its target in terms of tonnes of output per annum, but the mix will be very different from what was predicted in 1999, as the shellfish sector has performed well in contrast to the finfish sector for reasons given below.

For the purposes of this review BIM's Aquaculture Development Division carried out a detailed analysis of the realistic potential for the expansion of output from the sector and came to the conclusion that it was reasonable to project a position where Irish fish farmers would be producing an annual harvest of 110,000 tonnes, valued at €240-250 million by 2015. This projection was made up by evaluating a number of possible future scenarios in both shellfish and finfish farming and then calculating an end position that was challenging but realistic and which allowed for the various contingencies which might arise over the course of the period.

As in the case of fisheries, Irish aquaculture production is largely located in remote coastal areas where it provides a vital source of employment and economic activity, and contributes to the preservation of viable rural communities on a year-round basis. As a business sector it is challenging, operating as it does in a highly competitive globalised market without price supports or export subsidies, and subject to a considerable burden of regulation. Because it is a relatively young industry operating in an increasingly crowded State foreshore, the regulation and licencing of the emerging Irish aquaculture sector poses particular challenges. It is necessary for DCMNR, as the competent authority, to try to balance the often opposing interests of the many stakeholders in the coastal zone in an open and transparent manner whilst at the same time attempting to foster sustainable development of fish farming in fragile coastal communities with few other sources of economic activity and job creation.

Within the Irish aquaculture sector a number of different sub-sectors exist – each displaying their own unique characteristics and faced with different challenges and opportunities. In that context it is necessary to look at it on a sub-sectoral basis – as set out on the following pages.

Figure 4.5
Aquaculture Volume and Value from 1993 to 2005

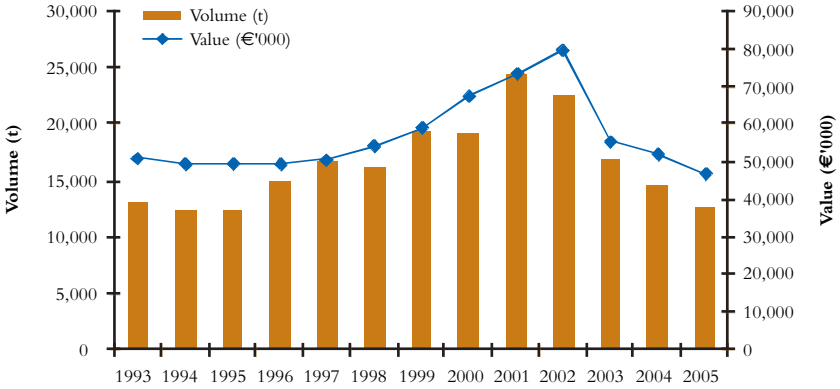


Marine Farmed Finfish - Overview

Output of salmon during 1999 was 18,076 tonnes. The NDP 2000-2006 projected an increase in production capacity of 20,000 tonnes to bring salmon and sea-reared rainbow trout farming capacity and output up to 38,076 tonnes by 2008 on the basis of an investment of €24.29 million in salmon farming production facilities. Actual investment in salmon farming in the period 2000 to 2005 was €14.16 million or 58% of the planned NDP investment and on a pro-rata basis it is estimated that installed salmon farming capacity is approximately 29,000 tonnes.

Actual farmed salmon output increased from 18,000 tonnes in 1999 to reach a peak production of 23,312 tonnes in 2001 (see Figure 4.6 below). Thereafter production has declined steadily to 12,000 tonnes in 2005. On this basis, it is estimated that the salmon farming sector is currently operating at less than half of its production capacity.

Figure 4.6
Sea-Reared Salmonid Volume and Value from 1993 to 2005



Marine Farmed Finfish - The Challenges

A lack of consistent profitability has bedevilled the sector in Ireland in recent years. This has been brought about by a number of factors, but the prime one has been an artificially distorted marketplace with consequent low prices for salmon being returned to the farmer, particularly in the period 2002 to 2004. The market imbalance has been attributable to the dumping of below cost salmon on the EU market by Norway and to a lesser extent Chile. Norwegian producers continued to increase output and had access to working capital despite occasionally selling their fish at below the cost of production, whereas their Irish and Scottish counterparts were forced to reduce output as their trading losses mounted and their reserves were exhausted.

The introduction by the EU in 2005 of Minimum Import Prices (MIP) for farmed salmon has largely addressed market issues related to dumping and farmed salmon prices recovered strongly from the beginning of June 2005. The MIP is to be kept in place for the next five years. Irish farmers have again been trading profitably, and beginning to recover financially, but their stock inventories are very low thus restricting their ability to capitalise on the recent high price regime.

A key challenge will be to try to make the recovery phase as rapid as possible so that the Irish sector has significant volumes of fish to trade at prices that yield a reasonable return, before global production volumes increase once again to the point where there is marginal oversupply and a consequent drop in the price paid to the farmer, as the cyclical nature of the global salmon industry asserts itself.

As well as low market prices, Irish farmers have also experienced sub-optimal stock performance in recent years, in terms of feed conversion ratios and survival, due to the resurgence of a fish health problem known as Pancreas Disease or PD. Recent improvements in husbandry, stock breeding and feeding practices have improved this situation and effective applied research is ongoing and expected to further ameliorate the situation in future.

These recent acute problems have been exacerbated by a number of longer term structural impediments embedded in the system. These include an unwieldy licensing regime and a regulatory framework that is seen by operators to be commercially burdensome and excessively heavy handed. At the root of this problem, cited by the industry at the consultative meetings as the major current blockage to expansion, is a lack of confidence and trust in the industry among certain decision makers in both the private and public sector and in the eyes of the general public.

Taken all together, the effect of these factors has been to create a business climate around the sector which is hostile to investment, despite the fact that the marketplace is prepared to pay a premium for Irish farmed salmon and that there is a strong demand for the product.

Marine Farmed Finfish – The Opportunity

Based on an increased placement of juveniles to sea in 2005/6 and their improved survival on transfer in comparison to earlier years, there are good grounds for believing that 2006/2007 will represent the lowest point in the recent production history of farmed Irish salmon. If the necessary regulatory reforms, called for by the industry, can be implemented, then a gradual resurgence in output can be expected beginning in 2007 and continuing in 2008 and 2009, whereby the sector should move back towards the production volumes that were seen in 2002 and then continue to slowly increase output up to the current licenced production capacity of about 35,000 tonnes per annum by 2015.

The most likely scenario to actually unfold will be a mixture of slow output growth by the existing players, together with some new inward investment to either reoccupy existing dormant capacity or open new 'off-shore' farms. The key issues to address will be achieving high stock survival and performance efficiency together with marketing the output into high value niches in the marketplace. It should be borne in mind that the global supply of farmed Atlantic salmon will almost certainly increase by 500,000 to 750,000 tonnes to an annual production of approximately 2.5 million tonnes over the period to 2013, so that the world market share of Irish farmed salmon would remain more or less static even if an increased national output of circa 35,000 tonnes per annum is achieved in the same period.

The Irish industry will need to be internationally competitive in terms of its unit cost of production and this will require ongoing investment in new technology and applied research together with the necessary training to maximise the benefit from that effort. The benefit of the world leading position that the Irish salmon farmers have already established, in terms of organic production, should be leveraged by effective marketing through differentiation to yield maximum benefit in terms of a sales price premium and this opportunity should be further consolidated by Ireland leading the way in terms of 'eco-labelling' as a further advance. There will undoubtedly be an emerging opportunity for top class organic or eco-labelled smoked Irish salmon products to fill the niche in the marketplace which will be left vacant by the ending of the supply of driftnet caught wild salmon, in accordance with the recommendations contained in the recently published report of the Independent Salmon Group.

There is also a need to create a revised set of arrangements for monitoring and regulation that deliver maximum confidence to all of the stakeholders at a cost that is economically sustainable to the farmer and the State. A series of recommendations to deal with these issues are set out in Section 5.

Commercial marine cod farming is currently in its infancy internationally, and there is a pilot phase feasibility trial underway in Ireland under the auspices of NUIG. The project has so far demonstrated that juvenile cod of 50gms can be produced to a weight of 700gms in the ambient water temperatures off the west coast. Assuming reasonable continued success with these trials in the coming years and subsequent investment to bring production to a commercial level, it is quite possible that farmed cod or some other white fish species such as haddock will become a significant feature of marine finfish farming in Ireland over the next five to ten years.

It is also likely, based on a number of projects currently being mooted, that there will be one or more marine flatfish farms established, based on land-based, pump-ashore technology, whose output would fill available niches in the growing home market for high value quality assured product. Thus it seems reasonable to project that there will be a modest but valuable marine finfish component to the Irish aquaculture sector on an ongoing basis. It will probably have salmonids at its core for the foreseeable future, but other marine fish species will begin to feature over the period and it is also likely that some 'offshore' finfish production will come on line as well bolstering overall output.

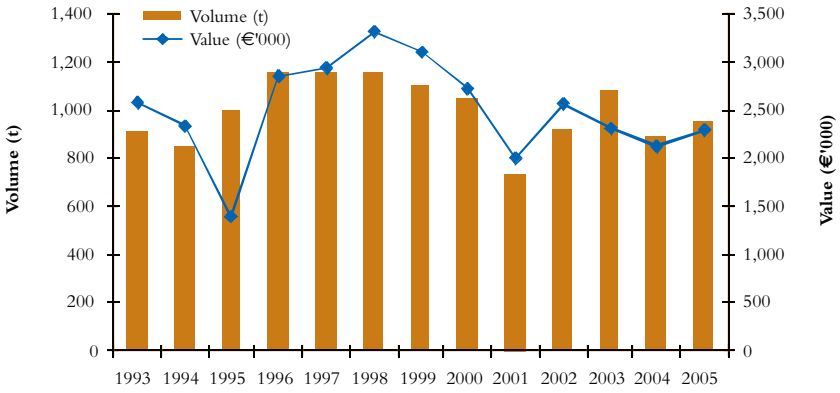
Freshwater Farmed Finfish - Overview

The fresh-water rainbow trout sector, the oldest part of the Irish aquaculture industry, is currently in a process of reorganisation around the concept of group buying and selling, spurred on by a renewed market demand for quality assured product, both at home and in the nearby UK market. The output from the sector has been relatively steady over the last 12 years (see Figure 4.7).

In addition to freshwater rainbow trout output, there is now an emerging sector in the Irish aquaculture industry dealing in the production of Arctic char and perch through the use of recirculation technologies. Small volumes of Arctic char are now being offered on the home market, to a positive consumer response and output is predicted to grow steadily in the coming years.

The current programme to establish perch farming in Ireland is progressing steadily and a broodstock programme and weaning facilities have been established. Satellite on-growing units have been set up and regular commercial harvesting albeit at a low volume is predicted to start in 2007. The market for perch, which is traditionally located in Central Alpine Europe, is in under-supply, where it is served as a delicacy in high-end restaurants.

Figure 4.7
Freshwater Trout Volume and Value from 1993 to 2005



Freshwater Farmed Finfish – The Challenges

The major challenge facing the farmed fresh water finfish sector is the need to be competitive in the face of very efficient production from producers on the European mainland and the UK. The trout farmers are now starting to react to this pressure by grouping themselves and seeking cost reductions and marketing advantages as a result of this co-operative approach. It will be necessary for them to make further investments to improve their operations from a unit-cost perspective and to upgrade their premises and practices to meet the quality assurance levels required in the marketplace. Achieving these objectives will require ongoing training, technology transfer and applied research to keep the operators up to speed with the technology advances in the sector and thus sustain their competitiveness.

Urgent regulatory reform is also a key challenge and the need to upgrade the level of knowledge of the regulators is as necessary here as in the case of marine farmed finfish.

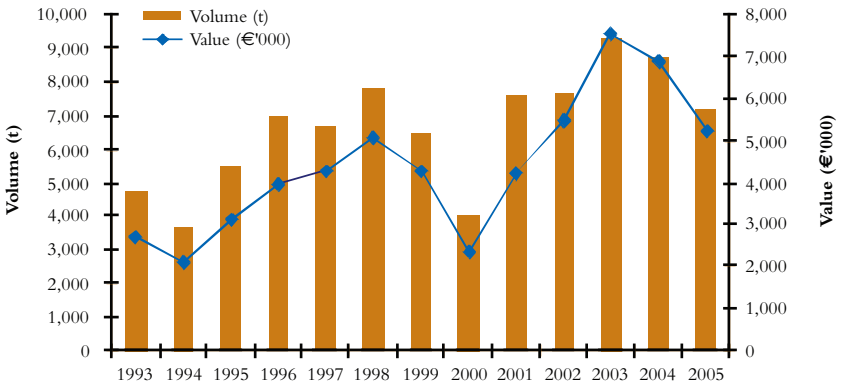
Freshwater Farmed Finfish – The Opportunity

The market research carried out to date indicates that there is a strong market opportunity both in the domestic and international markets for freshwater-farmed rainbow trout, Arctic char and perch. The impact of new farming technologies in recirculation, effluent water treatment and improved stock genetics will be to lower unit costs and to keep the sector competitive. It will be necessary to have an appropriate suite of programmes to ensure that the necessary technology transfer and applied research takes place to ensure a speedy adoption of these new techniques as they become available. A further key objective for the 2007-2013 programme must be to facilitate the sector in making investments in these new technologies and to promote more effective uptake of quality assurance. A series of recommendations to deal with the matters above, are set out in Section 5.

Rope Grown Mussels - Overview

Although output from this sector has been somewhat static at around 9,000 tonnes per annum for the last 2-3 years (Figure 4.8), there is a well founded conviction that considerable potential for increased output remains in the sector. In this context, BIM, in co-operation with Enterprise Ireland, commissioned a thorough review of the rope grown mussel sector, resulting in a comprehensive report which was published in early 2006. The report, entitled *Review of the Irish Rope Mussel Industry*, concluded that there was a viable and sustainable future for the sector in Ireland, if certain key constraints could be adequately addressed.

Figure 4.8
Rope Mussel Volume and Value from 1993 to 200



Rope Grown Mussels -The Challenges

The recent BIM/EI review of the sector identified a number of challenges facing operators, the most important being the impact of the biotoxin monitoring regime, necessary reforms to the licensing and regulatory arrangements, improved efficiency in production and processing, emerging competition from lower cost producing countries and improving the marketing and quality assurance frameworks supporting the industry.

Rope Grown Mussels -The Opportunity

The report concluded that there was a good prospect for a sustainable future for the sector, with reasonable scope for expansion in output, if the challenges, which were considered manageable, were tackled as set out in the detailed recommendations.

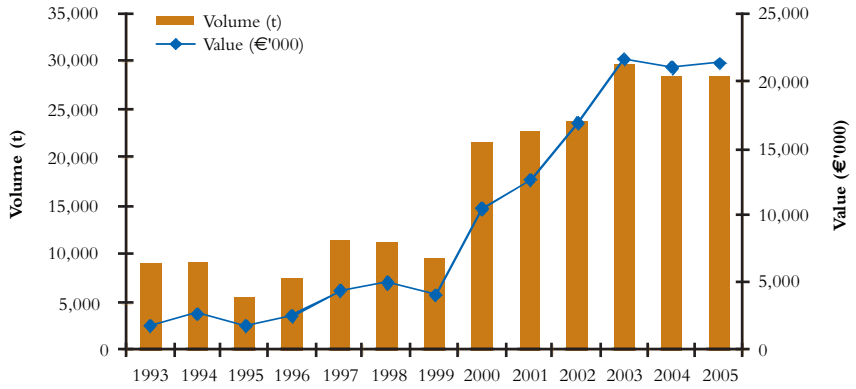
Bottom Grown Mussels - Overview

The bottom grown mussel sector has been the most successful component of Irish aquaculture over the past six years. Production of bottom mussels increased from 9,644 tonnes valued at €4.2 million in 1999 to 30,600 tonnes valued at €23 million in 2005 (Figure 4.9).

The bottom mussel industry in Ireland developed in its initial phase using imported second-hand Dutch mussel dredgers to fish for mussel seed primarily in the Irish Sea. These vessels had originally been designed for use in smooth and sheltered waters in Holland and were never suited to fishing in open sea conditions. The introduction of new EU safety regulations for sea fishing vessels signalled the forced obsolescence of many of these second-hand vessels, leaving some owners in a very difficult position.

The investment of €25 million in seven new mussel dredgers supported by BIM/EU grant-aid will underpin the economic sustainability of the bottom mussel sector in terms of access to seed mussel and improved cost competitiveness. However the introduction in August 2004 of new EU legislation prohibiting any further public aid for investment in fishing vessels will restrict the scope for further investment in new vessel capacity in this sector. Notwithstanding the above there is scope for further increases in output from this important element of the Irish aquaculture sector.

Figure 4.9
Bottom Mussel Volume and Value from 1993 to 2005



Bottom Grown Mussels -The Challenges

The fact that licences for large areas of seabed have been granted in both Northern Ireland and in the Republic of Ireland and that the seed mussel fishery is to be managed as a shared resource between the jurisdictions makes the regulation of this emerging sector a very complex prospect.

A key element for success will be an overhaul of the management regime for the seed mussel fishery. There is a pressing need to review how the sector is regulated and to develop, on an all-island basis, a set of administrative arrangements that will support the sustainable development of the bottom mussel industry into the future. Draft terms of reference have been circulated to the relevant authorities and it is expected that work on a review will commence before the end of 2006.

Leaving aside the issue of managing the seed mussel fishery itself, there are serious technical challenges facing the sector. Chief amongst these is the key issue of improving the yield from the seed mussel that is relaid. At present there is an enormous variability in the returns being experienced by operators. The more knowledgeable players make far better use of the seed they get than some of the newer entrants, which in turn has a big effect on the economics of production. A concentration on maximising the yield from relaid seed mussel, supported by the necessary training, applied research and carrying capacity studies is urgently required to ensure the sustainable future of the on-growing element of the sector.

Possible changes in EU health and hygiene regulations governing the shipping of live bi-valves, along with market access problems in Holland, also represent serious challenges to the sector.

Bottom Grown Mussels - The Opportunity

The rapid rise in output from the sector represents an exciting opportunity, in terms of a new raw material supply source, for the processing sector. At present most of the output is exported in an undifferentiated bulk form and there is scope to add significant value. Basic handling improvements such as improved grading and washing and a move from bulk bags to smaller packs would yield immediate value uplifts, while MAP packaging and other avenues of innovation in product forms offer further scope.

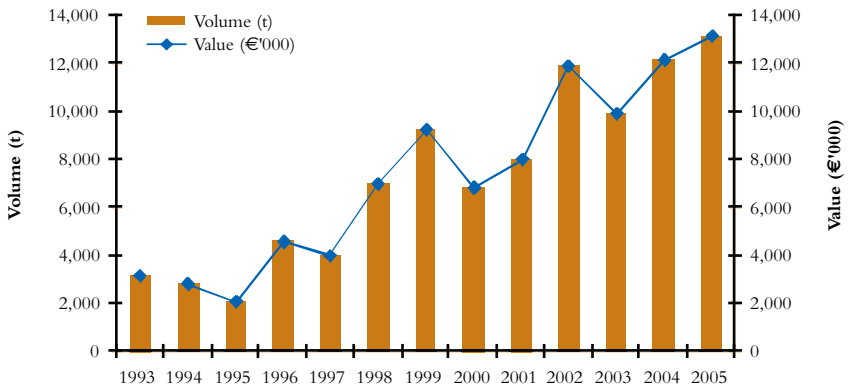
Market demand for the product is solid and if backed by appropriate differentiation strategies it is felt that the value generation from the sector in Ireland could be significantly boosted. A series of recommendations to deal with the matters above are set out in Chapter 5.

Pacific Oysters - Overview

Despite some challenges the output of Pacific oyster has increased steadily over the last decade. (Figure 4.10) The sector is characterised by having two distinct classes of operator, a substantial number (circa 85) of smaller players who pursue oyster culture as a part-time or artisanal activity and a smaller number (circa 20) of more substantial growers who farm full-time and account for the bulk of output.

In recent years there has been an increasing interest in investing in this sector on the part of established French oyster farmers, attracted by the quality of the Irish produce and by the fact that site availability in France is largely exhausted. These investors are bringing considerable farming expertise and market intelligence to the Irish sector.

Figure 4.10
Pacific Oyster Volume and Value from 1993 to 2005



Pacific Oysters - The Challenges

The traditional bag and trestle technique used in oyster farming tends to be labour intensive and in an economy like Ireland's where manpower is becoming increasingly expensive, a drive to mechanise to increase the yield per person employed is essential. The leading operators have made significant strides in this regard, but it will be necessary to continue to invest in technology transfer and applied research to keep the sector competitive in unit cost of production terms.

Changes in EU health and hygiene regulations about to come into force will also pose a serious challenge as their effect may be to restrict market access and add costs. It will be necessary to find innovative solutions to the possible need for purification of the product prior to dispatch that may arise from these new regulations. Similarly, appropriate and cost effective solutions to deal with the risk of possible viral contamination in some locations will have to be developed, as it is also likely to be the subject of new EU regulatory restrictions.

The occurrence of an algal bloom in some of the oyster growing locations in 2005 and consequent stock losses also caused a serious problem for a number of producers. Applied research into early warning and mitigation methods is required with the increasing incidence of harmful algal blooms.

Pacific Oysters - The Opportunity

Market demand for Irish oysters is strong and there is a definite opportunity to boost output and increase the value added element of the sector through the creation of a stronger quality assured identity for the Irish product. The challenge posed by the new health and hygiene regulations may become an opportunity if it serves to identify output from Ireland and preserve its identity in the marketplace. Even a modest shift along the value chain towards smaller packs of branded Irish oysters, as opposed to bulk or half grown product, would create a significant uplift in the value generated in Ireland. A series of recommendations to deal with these matters are set out in Section 5.

There is significant scope for increasing output in a number of key locations which although licenced are under-utilised and recent growing technology advances, including the use of bottom culture and suspension methods are opening up further areas for Pacific oyster farming.

New Shellfish Species

After a decade or so of pilot scale research and development a number of shellfish species are now about to reach commercial scale production. These include abalone, scallops and sea urchins. Abalone projects in particular have been the subject of ambitious development plans and two substantial ongrowing projects and one juvenile supply project have recently received grant-aid approval. These new species will broaden the base of the Irish aquaculture sector and leave it less exposed to market conditions in the future than in its current configuration, with its high dependency on a relatively small number of species. The lead-time for the full commercialisation of the culture of a species 'new-to-cultivation' can be lengthy and it will take most of the period of the next development programme for the output volumes of these shellfish to reach significant levels. On the other hand the relatively high unit value of these new shellfish species tends to counterbalance the initial low volumes and they will make a significant contribution to the sector in terms of boosting its overall worth.

SECTION 5

SEAFOOD INDUSTRY VISION AND KEY RECOMMENDATIONS

Section 5: Irish Seafood Industry Vision and Key Recommendations

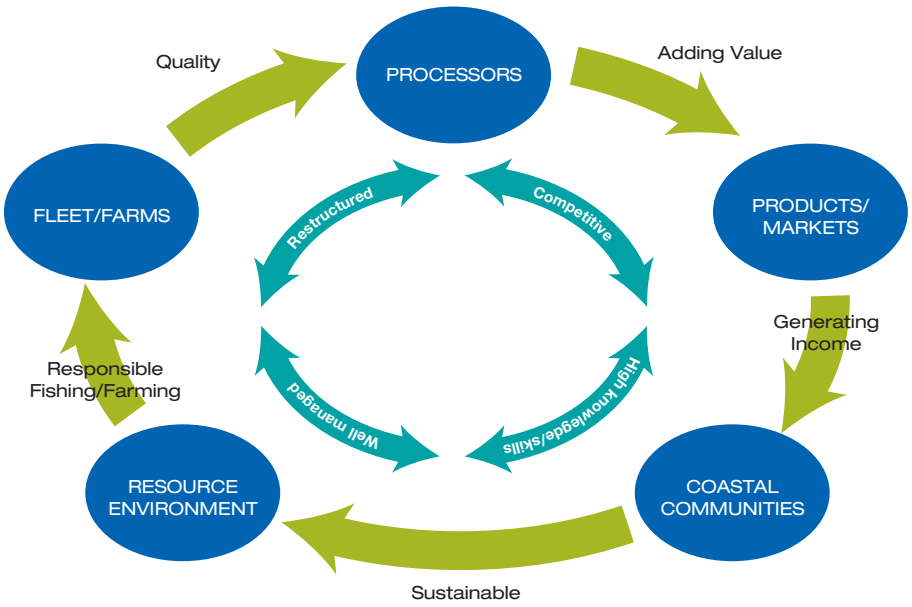
The Irish seafood industry is a vital indigenous sector, making, as noted previously, a significant contribution to the economy in terms of output, employment, exports and perhaps more importantly, to regional and local development in coastal and other rural areas. Building on the industry's achievements to date, the recommendations put forward in this Section are focused on achieving the following industry vision:

5.1 Irish Seafood Industry Vision

"A sustainable, profitable, competitive and market-focused seafood industry making the maximum long-term economic and social contribution to coastal communities and Ireland as a whole"

This vision envisages the emergence of a restructured commercially-focused self-reliant industry with market forces driving success and founded on a well-managed fisheries resource and a healthy and diverse marine environment.

Figure 5.1 Vision for a Sustainable Seafood Industry.



This vision is centred on delivering on the following strategic development priorities:

1. A seafood industry capturing the full potential value of Irish seafood through a market focused, customer-led development strategy, supported by enhanced trade and promotional activity and the development of a robust 'Seafood Island' proposition with the capability of meeting customer demands into the future.

2. A seafood industry with the capability to establish a leading position in delivering market-led innovation with specific focus on R&D, value-added development and the application of appropriate technology to remain competitive and profitable into the future.

3. A restructured seafood processing sector with the appropriate scale and operational efficiency to compete in an increasingly cost competitive market and with the capability to invest in R&D and value-added development to meet customer demands and take advantage of new market opportunities.

4. A restructured and more efficient and profitable fleet, balanced in line with the sustainable exploitation of available resources.

5. A catching sector, supporting and operating under a new Fisheries Management Regime, comprising both a Quota Management System that is equitable and workable and a Fleet Management and Licensing system that is efficient and transparent. In addition, the balanced development and sustainable exploitation of inshore fisheries based on an integrated Inshore Development Strategy, developed in partnership with the key stakeholders involved.

6. Significant development and expansion of the aquaculture sector, within the context of clearly defined national policies, output targets and an efficient licensing regime, and supported by an Aquaculture Development Programme spearheaded by BIM.

7. Addressing certain critical factors along each stage of the industry value chain that are undermining competitiveness and the ability to command a premium price in the marketplace, thereby resulting in an industry that has significantly enhanced its performance on all fronts.

8. Adoption of an environmentally conscious, responsible and compliant approach to all industry activities and taking a leading role at national and EU level in conservation practice and advocacy, whilst proactively ensuring that other EU Member States are equally compliant.

9. A significant uplift in human capital in terms of technical and business management skills and competencies, through investment in bespoke education and training programmes.

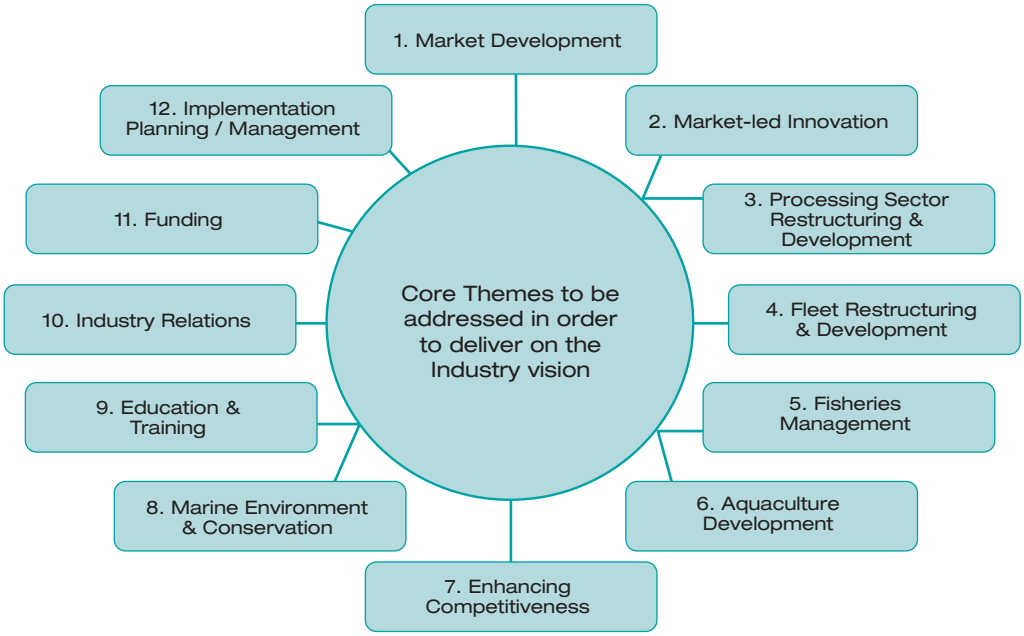
10. An industry whereby all the key stakeholders – fishermen, fish farmers, processors, DCMNR and the State Development Agencies – are operating in-concert and in a mutually respectful manner. This will require restructuring within a number of areas and certain 'bridges to be built' that will be essential to the future prosperity of the industry.

To deliver on the above will require a robust ***Implementation Plan*** to be developed along with the buy-in and commitment of all key stakeholders. Allied to this significant ***funding*** on the part of Government and investment on the part of the industry will be required.

5.2 Key Recommendations

The recommendations set out below under various core themes are designed to address a range of development issues/challenges and opportunities facing the Irish seafood industry.

Figure 5.2
Core Themes, Funding and Implementation



Core Theme 1: Market Development

A seafood industry capturing the full potential value of Irish seafood through a **market focused, customer-led development strategy**, supported by enhanced trade and promotional activity and the development of a robust 'Seafood Island' proposition with the capability of meeting customer demands into the future.

Introduction

As set out in Section 4 the market for seafood is buoyant. Across key European export markets, there is growing dependence on imported product to satisfy an increasing demand for seafood. On the domestic market, growth in the consumption of seafood is outpacing consumption growth for all other protein products, with significant scope for future growth. Across all markets, seafood enjoys an extremely positive image and is associated with a healthy lifestyle.

Consumers are increasingly aware of the nutritional and health benefits to be obtained from eating seafood products and are developing a greater understanding of the range of fish on offer. In addition, significant untapped opportunities exist to develop new seafood product offerings and to explore the unique benefits yet undiscovered for fish-based functional food products.

It is against this backdrop that the Irish seafood industry operates. The Strategy Review Group is firmly of the view that the market should be the guiding light for all development activity within this industry. If this approach is taken it is believed that, with the appropriate level of State support and a concerted effort by all stakeholders, the Irish seafood industry has significant development potential. In this context, the Group is recommending a significant enhancement of State financial support for marketing. It is proposed that a budget of €55 million be allocated for seafood marketing over the next seven-year period, which averages €7.8 million per annum in comparison to the average annual allocation to €2.5 million over the 2004-2006 period.

In terms of how this increased financial support is to be invested, this will require a radical change in the industry's focus. Throughout all sectors of this industry, predominant attention is given to production and supply related problems at the expense of the market. In an era of compliance and declining or static quotas, the industry needs to increasingly focus on adding more value to limited raw material supplies. Despite the buoyant market potential, sales growth within the Irish seafood industry has remained largely static in recent years, increasing only by 14% from €584 million in 2000 to €665 million in 2005. Largely accounted for by declining production volumes, the sector has however, managed to increase the value of output in some sectors, particularly in the shellfish category. However, the industry is still largely constrained by the predominant focus on bulk seafood trading, which accounted for 58% of the total volume of exports in 2005 and yet contributed only 31% in value terms. The prepared seafood category is underdeveloped and the industry **is predominantly trade focused** as opposed to taking a market and customer-led approach in achieving sales growth.

Within the whitefish sector and indeed even within the pelagic sector, given our relatively small quotas, Ireland will find it increasingly difficult to compete long-term in the large-scale commodity/bulk markets. Nor, given that the industry operates within a high-cost economy, will the industry compete effectively in the lower-value end of the retail and foodservice marketplace.

In this context, the long-term vision for the industry should revolve around developing a strong and positive identity for Irish seafood on the domestic market and in key international export markets – an identity which will assist in positioning Irish seafood products at the upper end of the industry's targeted market. In this context, it is paramount that all sectors of the industry work in a concerted fashion to ensure that Irish seafood is recognised for:

- Excellence in terms of product quality;
- Providing a superior eating experience – due to product freshness facilitated by the frequency of landings (same-day landing for inshore boats);
- A range of positive environmental traits e.g. 'Seafood from the Atlantic'; and
- A customer service/key account management approach second to none.

All of this, however, will require significant work on the part of the industry. Indeed for large segments of the industry a radical change in mindset is required. Currently the industry's approach to the market and its performance within the marketplace is well below that which exists in other sectors of the Irish food industry. However, this gap in performance represents the 'industry opportunity'. The potential to address this 'opportunity gap' should be enthusiastically grasped by all sectors of the industry.

The Strategy Review Group believes the potential for sales growth on both domestic and international markets is strong and can be achieved with a significant enhancement of current marketing resources to support a market-focused, customer-led development strategy through BIM. The main objective of this strategy should be to achieve **a 40% growth** in current exports (from €354 million in 2005 to €495 million by 2015) and **a 22% growth** in domestic sales (from €311 million in 2005 to €379 million by 2015).

The following recommendations are set within the context of these targets.

Recommendation 1.1 ***Invest further in market research and intelligence.***

In order to give effect to the proposed market focused and customer-led strategy, further State and industry investment will be required in significant market research and intelligence capability to inform the proposed strategy on market-led innovation at customer and consumer levels with particular regard to new product development (NPD) and to support effective trade and promotional activity in the launch, establishment and marketing of seafood products at market level.

The proposed marketing strategy to achieve domestic and international sales growth should be founded on the basis of relevant commercially-focused and robust market research and intelligence. Existing market research capabilities will need to be further resourced and developed to ensure that the targeted, customer-focused strategy is based on detailed research and market information.

Equally, trade and promotional activity within defined European markets will require further investment in researching and monitoring of market trends at both trade and consumer level. With a shift from commodity trading, it will become increasingly important to gain up to date relevant intelligence on the retail and foodservice sectors in addition to fully understanding the competition within these sectors.

In addition, any significant increase in promotional activity should be based on careful pre-planning involving trade and consumer-focused research and pre-testing of any promotional material. Evaluating the outcomes of this activity will also be critical in measuring performance against sales targets.

As recommended in the Indecon study on the seafood processing sector undertaken in 2000, this research should also aim to identify the potential for added-value development in line with market opportunities across each sector with particular focus on how to generate the highest return for the available raw material. This will require a detailed understanding of the route to market and channels of distribution within each market and an assessment of how the supply chain could be better managed and integrated for the benefit of suppliers and processors. The current supply chain for the various seafood categories is reviewed in Appendix 4.

The Strategy Review Group also believes that the potential for developing seafood within the speciality sector should receive specific attention in light of the number of speciality producers in the industry. It is recommended that BIM work closely with Bord Bia in this respect.

Recommendation 1.2 ***BIM to focus marketing support in a targeted fashion on key export markets in addition to the domestic market.***

In conjunction with industry, BIM should focus its marketing support to target key export markets alongside the domestic market in developing plans to assist exporters capture retail, foodservice and ingredient customers in these markets and, where feasible, to shorten the industry supply chain. Outside of the core EU markets, support in research and marketing should be delivered by BIM on a cost benefit basis to the sector.

While Irish seafood has a wide export profile, the Strategy Review Group believes there is a strong need to focus marketing efforts within a defined number of markets based on the supply constraints and the size of the sector. Given that five EU markets (France, Spain, UK, Germany and Italy) account for nearly 70% of exports, it is recommended that these core markets should be the primary focus of BIM's marketing activities. Outside the EU, market support should be delivered by BIM in collaboration with EI and Bord Bia as appropriate.

Within these core markets a plan should be developed detailing the targets to be achieved by industry, the opportunity for developing and introducing new products to individual customers as appropriate, the tactics and strategies for achieving the targets and an action programme with assigned work steps for both BIM and key suppliers. Trade and promotional activity should be heavily focused on supporting this targeted plan with BIM's European Offices acting as an important link between customers and Irish seafood suppliers.

Within each market, targets should be selected on the basis of the potential to grow sales and the likelihood of yielding the highest returns. Equally, the Strategy Review Group recommends that in this selection process, priority be given to establishing direct market access to the retail and foodservice sectors where possible, particularly in the prepared seafood category. In addition, the necessity of intermediaries (i.e. distributors, agents) should be reduced where feasible.

Investment outside of core markets should be determined on a cost benefit basis and the potential to increase market returns relative to selected European and domestic markets. Equally, following on from the cross-border marketing initiatives undertaken by BIM and Northern Ireland Seafood, it is recommended that opportunities for growth should be pursued on an all-island basis where it makes commercial sense.

Recommendation 1.3 ***Establish a 'Seafood Island' identify for Irish seafood***

A new 'Seafood Island' identity should be established and promoted to strengthen Ireland's market position and establish Irish seafood as a premium proposition with positive quality and environmental attributes, supported by effective customer service and proactive market-led R&D.

Based on the potential for market growth together with increased competitive pressures, the Strategy Review Group believe it is important that Ireland establishes a strong position in core markets to clearly differentiate Irish seafood and to build competitive advantage for the future. In this regard, the Review Group believes that there are lessons to be learnt from the experience that Bord Bia have gained in promoting Irish food on international markets and in particular from their success in developing the 'Ireland the Food Island' concept to establish an identity for food products from Ireland.

Acknowledging that Ireland is a small player in market terms, it is recommended that this proposition be initially targeted at trade level but should also be possible to be translated into a consumer proposition alongside the implementation of the target account management plan to support the development of retail and foodservice accounts.

In time, this proposition could be further developed and extended in core markets in line with the achievement of sales growth targets and the availability of increased funding for seafood marketing. While it will be difficult to quantify the benefits of this approach in the short-term, it is important as a strategic long-term objective for the seafood industry to ensure that recognition is established for Ireland as a competitive market player offering a premium seafood product range.

As regards the domestic market, the Strategy Review Group acknowledges the current ongoing activity by BIM in promoting the health and nutritional benefits of seafood. However, it is also acutely aware that available financial resources have limited the extent of this promotional activity, particularly in above-the-line promotion at national level. The Group recommends on this basis that a new national promotional campaign should be developed by BIM with adequate resources to raise consumer awareness and understanding of the benefits of seafood in line with dietary requirements. This campaign should also be used effectively to support target customer accounts in achieving domestic sales growth.

Where there may be synergies with other Irish food products or food promotional activities, it is also recommended that BIM continues to work closely with Bord Bia to take advantage of any opportunities to increase the profile of seafood within the broader Irish food offering

either at domestic or European level. Similarly, through further development of the existing Seafood Development Programme at cross-border level, the promotion of the proposed 'Seafood Island' identity should encompass an all-island dimension where appropriate.

Core Theme 2: Market-led Innovation

A seafood industry with the capability to establish a leading position in delivering market-led innovation with specific focus on R&D, value-added development and the application of appropriate technology to remain competitive and profitable into the future.

Introduction

The performance of the seafood industry in the area of innovation/new product development is extremely low with only €4.8 million spent by public and private entities in this area over the period 2000 to 2005. This amount of funding is not sufficient to have a meaningful impact. However, it is evident that even where grant aid is available, the uptake of this aid by private business for R&D projects is disappointingly low. This position is compounded by the almost complete absence of seafood-related innovation/new product development activity within publicly-funded research institutions. Furthermore where such activity does occur, it is not co-ordinated and lacks well informed market direction. For an industry that is constrained by a limit on raw material supply and as a consequence has a real need to maximise the unit value of output, the current emphasis on innovation/new product development is well below what is required.

The Strategy Review Group strongly supports a substantially increased commitment to the whole area of innovation/new product development. However, it is critical that any such commitment is market-focused and well co-ordinated. It is also important that the industry itself, and not just the research institutions, are engaged in this process. In that context, a restructuring of the processing sector as envisaged in this report and the inclusion of large-scale food (non-seafood) companies in the innovation/NPD process will be important in ensuring success. It is also considered important that the provision of proactive support for the commercialisation of the output of this research activity is provided.

Faced with some of the same issues as the seafood industry, other sectors of the Irish food industry have invested significantly in innovation/new product development. This has, correctly, been supported by the State through direct grant aid to food companies and through the establishment and support of organisations such as Moorepark and the Ashtown Food Research Centre acting as centres-of-excellence for food-based research and development activity. A similar approach should be considered for the seafood industry.

The long-term development of a profitable and self-reliant Irish seafood industry therefore requires a significant adjustment to the current operating model by all industry participants. A serious commitment to market-led innovation is an essential component of this adjustment. It is against this backdrop that the following recommendations are set out:

Recommendation 2.1 ***Adopt a structured approach to providing services for commercially-focused R&D/NPD more effectively through BIM's Seafood Development Centre.***

Despite good co-operation between Agencies, State support and industry access to services for R&D, NPD and innovation are recognised as an obstacle for the sector in their current fragmented structure with the need for a co-ordinated approach to be taken by the relevant agencies involved. BIM, Údaras na Gaeltachta, Enterprise Ireland and Teagasc should work more closely to align their marketing, research, NPD and financial supports through a central gateway structure to facilitate ease of access to support and services for the sector.

The lack of new seafood product offerings from the industry is notable and has been reported as a major competitive disadvantage by key European retail and foodservice buyers. It is also a contributory factor to the poor financial performance of the processing sector.

The Strategy Review Group recommends that investment in improving industry performance in this area needs to be prioritised under the Step-Up Programme proposed for the seafood processing sector (in Recommendation 3.1). In addition, opportunities for new product offerings need to be clearly identified and supported within a defined customer-led market development strategy for achieving sales growth. The Group also fully acknowledges that the delivery of new products to market to suit customer specifications may involve a range of requirements from developing new presentation and packaging formats, to new products, applying new technology practices or improving the labelling, nutritional and environmental aspects of existing products.

State support needs to be integrated in meeting industry requirements for support in delivering these market requirements in addition to supporting NPD strategies. Due to the cost of NPD, many of the existing processing businesses are unable to extend their product range. NPD is recognised as a difficult process, requiring access to market research, development chefs, food technologists, continued product refinement and testing facilities as well as wider market access for trial and in this respect, is difficult for small businesses.

In supporting a market-led approach to improving innovation within the industry, BIM's Seafood Development Centre should be considered as the appropriate gateway to accessing a wide range of available support services for NPD through Enterprise Ireland, Údarás na Gaeltachta, Teagasc (Ashtown Food Research Centre), the Marine Innovation Centre being developed by NUIG/ÚnaG, and other established centres both in Ireland and overseas (e.g. Grimsby Institute etc.).

In addition, the Group is strongly of the view that there is a need to develop a centre of excellence for seafood innovation with strong links to university research and innovation facilities, (notably NUIG and UCC) mirroring the development of the Dairy Products Research Centre, Moorepark, located in Cork and acting as the dedicated centre supporting innovation within the dairy industry. Careful consideration needs to be given to how this

would be established and whether it would require one dedicated centre or a pooling of resources through existing organisations. It is proposed that further examination of this is required based on the recommendation that it is a definite requirement for the future success of the industry.

Recommendation 2.2 ***Adopt a twin-track approach to innovation in the pelagic sector.***

With specific regard to the pelagic processing sector, a twin-track approach is recommended to achieve economies of scale and cost efficiencies in the processing of bulk seafood products, combined with a concerted drive to identify alternative market opportunities for pelagic products.

Of all sectors within the processing industry, the quota restrictions within the pelagic fishery are posing the greatest difficulties for bulk seafood producers who are most heavily reliant on volume within the sector. Capacity utilisation is therefore between 30-50% when supply is available and is at 0% for up to nine months of the remainder of the year. While there has been a significant 50% reduction in the number of businesses over the last ten years, there is still a major issue regarding under-utilisation of capacity within the sector.

While it is recognised that there is clearly no future for all of the existing number of businesses in the sector, the Strategy Review Group is of the view that urgent attention needs to be given to investigating the potential for alternative markets opportunities for pelagic processors. In this regard, it is accepted that the level of bulk seafood processing activity would not diminish completely but would reduce over time.

It is therefore recommended that support be leveraged for a small number of processors through the Step-Up Programme to ensure that where this type of bulk processing activity continues, the maximum efficiencies are achieved in assisting the sector to remain competitive internationally. This is particularly important given that the market for Atlantic mackerel may be adversely affected by the resurgence in the Japanese Pacific mackerel fishery.

However, of primary importance is the Group's recommendation to investigate the feasibility of alternative market opportunities for pelagic species. In advance of either developing a marketing strategy for existing pelagic products or undertaking new product development activity for pelagic species, the Strategy Review Group believes it is important to understand what is currently possible for this sector. In that context, the Review Group recommends that BIM work in conjunction with industry to study possible opportunities at market level for higher added-value pelagic products.

The Russian, Ukrainian and Romanian markets have been identified, but not exclusively, as a starting point for a detailed market analysis of the opportunity to pursue this approach given the developing economies of each market, strong growth of the retail sector and existing consumption patterns for pelagic species. If the results of such a study were to prove positive, it is recommended that support be accelerated to undertake the necessary investment to commence production for these markets.

BIM's Seafood Development Programme (SDP), a partnership programme with Northern Ireland Seafood, funded under the Peace II Initiative, has over the last two years undertaken some research to support this recommendation in the above mentioned markets, but this has been limited by time and financial constraints given the broad nature of the programme which extended to all sectors within the Peace region. Given that the Peace II Programme has come to an end in October 2006, the Group is of the view that this research needs to continue and be further resourced and strengthened, utilising the existing resources within the Seafood Development Programme (SDP).

Recommendation 2.3 ***Invest in identifying the potential usage of fish and marine biodiversity in functional foods***

Recognising the potential of the functional foods market, support is recommended for a programme of investment to create a strong, interdisciplinary research capability in the identification and utilisation of fish and marine biodiversity as a source of materials for use in functional foods by developing the capability to process marine based materials for use by the functional food sector.

The rationale for a marine functional food research programme is driven by the knowledge of the growing link between diet and health and the potential that exists to utilise Ireland's seafood resource and marine environment as a source of novel materials.

The market potential for marine functional ingredients is indicated by the projected growth of functional foods and ingredients worldwide with Europe being the third largest market behind the US and Japan. The value of the European functional food market was €7.5 billion in 2003 with growth set to continue and European sales to account for 30% of the world market for functional foods by 2008.

Through the Department of Agriculture and Food, Ireland is supporting the development and building of research capabilities in areas of science related to functional foods. In total, the FIRM[5] programme and its predecessor, the Non-Commissioned Food Research Programme provided funds of nearly €100 million for food research over the period 1998-2007.

To date, there has been little activity in the area of marine based functional foods. The Strategy Review Group is supportive of the newly established Marine Origin Functional Foods Steering Group's recommendation to develop a national research programme in a number of defined research areas such as pelagic species, seaweed and marine origin functional materials.

The programme, which is to be financially supported by the Marine Institute, needs to be established, co-ordinated and implemented in close collaboration with Enterprise Ireland, BIM and Teagasc with the possibility of funding or co-funding under the FIRM programme investigated. However, while the Group is supportive, a precautionary approach

5 *Food Institutional Research Measure*

is also advised in relation to the level of resources committed given that the outcome/benefit of any national research programme is likely to be some years ahead. In addition, it is recommended from the outset that the research is clearly defined and co-ordinated with targeted tangible outputs.

Core Theme 3: Processing Sector Restructuring and Development

A restructured seafood processing sector with the appropriate scale and operational efficiency to compete in an increasingly cost competitive market and with the capability to invest in R&D and value-added development to meet customer demands and take advantage of new market opportunities.

Introduction

Whilst there are noteworthy exceptions, at an overall level the Irish seafood processing sector can be described as highly fragmented, operating at significant over-capacity and generating very little profit (loss making in many instances). A declining supply of raw material, due to falling quotas and reduced mackerel landings at Irish ports due to the more northerly location of the stocks has contributed to the under-utilisation of capacity in the seafood processing sector.

As an approach to alleviating their present difficulties, during the consultation process there was a significant call by processors for recommendations to be made that would encourage a higher volume of fish to be landed in Ireland. In this context, a number of processors called for a revision of quota management policies with the objective of allocating quotas to vessels/areas where there would be an increased likelihood that fish would be landed in Ireland.

The Strategy Review Group supports the concept of creating an environment that would be conducive to landing an increased volume of fish in Ireland – both from domestic and foreign vessels. In this regard, a range of recommendations are made in this report in relation to improving the efficiency of key ports and working to improve the first-point-of-sale for both pelagic and whitefish (e.g. the electronic auction system). Fish processors and marketers should have an equally important role with catchers in devising and overseeing the operation of the new quota management system recommended by the Strategy Review Group. It is also recommended that the support agencies should work with processors to identify/source raw material for processing from outside of Ireland.

Equally in the context of increased landings at Irish ports, insufficient financial evidence was presented to the Review Group to allow it to conclude that the reallocation of quotas to specific vessels/areas (as distinct from better quota management) would of itself significantly alleviate the issue of declining landings at Irish ports. It was also felt that such an approach, while alleviating the situation for a number of processors, does not address the issue of overcapacity as a whole within the sector.

However, the Group's attention was also drawn to the fact that plants located in excess of 100km from the port of landing are currently denied the option of using in-plant flow-weighing systems as an alternative to the use of a weighbridge at port of landing (EU Regulation 27/2005). In the view of the Group, this requirement is arbitrary with little rationale for its justification and should be reviewed. The predominant focus on raw material that prevails throughout the industry is not believed to be a feasible or realistic solution nor indeed of itself a complete answer to the current industry difficulties. Instead, what is required to put this industry sector back on a profitable footing is a much more radical approach focused on achieving significant industry restructuring. Put simply, in an era of declining quotas and strict compliance the volume of fish likely to be landed in Ireland will not be sufficient to support the profitable development of all the existing seafood processors. Furthermore, the existing scale of operations involved in basic processing and in many cases management capability, is not at the level required to successfully interface with increasingly sophisticated retail and foodservice customers. Nor is the current scale of the majority of existing seafood processors sufficiently large to engage in much needed R&D/NPD activity.

The Irish seafood processing sector, therefore, requires an urgent action plan to overcome the major obstacles currently impeding its development and to facilitate the sector in utilising available supplies to better effect in order to generate higher returns from the market. Equally, and notwithstanding the increased pressure from low cost producing countries such as China and Chile, the sector requires a dramatic improvement in productivity, operational efficiency and technology transfer to compete internationally. The current fragmented structure of the sector is a major obstacle in this respect and there is a fundamental need to address the large problem of poorly performing businesses.

Despite a small level of consolidation and the increase in the number of businesses exiting the sector in recent years, the future viability of seafood processing in Ireland is open to question at this point. Without any radical action, it is possible that the sector could seriously decline over the coming decade, particularly given the fact that shortages of supply will continue to increase competition for Irish raw material from processors located outside the country.

However, from a positive perspective, the sector possesses excellent knowledge and experience of seafood processing and a good track record in producing high quality seafood products for both domestic and international markets. Despite the many obstacles confronting the sector, Irish seafood products enjoy an excellent reputation worldwide - particularly in European markets within a number of major retail and foodservice groups. There are a number of innovative, well-performing businesses within the sector that have achieved international success, demonstrating the potential to create a viable, more profitable and competitive sector for the future.

The Strategy Review Group believes there is an opportunity to harness this potential by restructuring and strengthening the processing sector, which will require an accelerated development strategy to fast-track the development of an appropriately scaled processing industry capable of competing internationally and delivering innovative products to meet market requirements. Whilst this recommendation envisages the provision of support for

the establishment of a small number of relatively large scale processors it also supports the concept of providing appropriate support to small scale/niche/speciality processing businesses which it is recognised have an important role to play within the industry. In this context, the Strategy Review Group would encourage ongoing co-operation between BIM and Bord Bia with a view to leveraging support for small scale/niche speciality seafood companies.

It is against this background that the following recommendations are made with respect to restructuring of the processing sector:

Recommendation 3.1 ***Prioritise support for businesses with good potential***

Acknowledging the large number of companies in the seafood processing sector and the challenges that this fragmented structure poses in development terms, a Step-Up Programme is recommended to incentivise consolidation and prioritise support for the development of seafood businesses where there is good potential for the creation of sustainable long-term value.

The large number of seafood processing businesses is disproportionate to the value of the sector and is contributing to the poor financial performance and slow pace of development. It is evident that a number of seafood processing companies are operating at low levels of profitability, which will most likely act as a catalyst for rationalisation within the sector in the coming years.

The Group believes this situation, whilst difficult, must be faced up to, with the need for rationalisation **involving up to 50% reduction** in the current total number of companies to support the future development of the sector. In this capacity, the Group proposes a Step-Up Programme, to incentivise consolidation and prioritise support for the development of businesses with good potential to strengthen the financial performance of the sector and ensure its long-term viability.

The Step-Up Programme should be flexible in supporting the processing and marketing of seafood and should not exclude any existing seafood business from support including the speciality and co-op sectors. However, the level and extent of both financial and advisory support must be dependent on the business meeting a number of minimum criteria in relation to scale, supply, profitability, growth potential, product range, market performance, previous track record on State support and the ability to raise matching finance. Priority should also be given for consolidation of existing businesses as part of this process.

Where a company does not meet the criteria, a Business Options Programme is recommended to assist the business in strengthening its position and addressing performance issues or alternatively assisting the company where appropriate in reviewing options for exiting the sector. It is recommended that this Programme should be fully co-ordinated and supported by BIM, Enterprise Ireland and ÚnaG to provide the necessary advisory services required, but will not involve any direct financial assistance for companies exiting the sector. Having reviewed State supported programmes for rationalisation in other food sectors,

particularly the pork, beef and dairy sectors, the Group believes this approach is the most appropriate.

There may be merit however in considering Capital Gains Tax exemption as was recommended in the Indecon Study in 2000, as an incentive to promote the core recommendation on the need for consolidation and rationalisation within the processing sector.

Recommendation 3.2 ***Encourage investment in seafood processing from the wider food processing sector.***

In light of strong demand and the positive future market potential for seafood, a concerted effort should be taken by BIM, EI and ÚnaG in encouraging and attracting investment into the sector from the wider food processing industry to fast track the development of scale and the capability to drive innovation and value-added development within the seafood category.

The food industry is Ireland's largest indigenous industry contributing an annual output in excess of €16.7 billion with exports in excess of €7 billion. Playing a vital role in the continued growth and success of the Irish economy, the industry comprises a mix of businesses including a number of large integrated processing companies that have been particularly successful internationally in developing markets within the protein and dairy categories.

To date, aside from the success of the Donegal Catch frozen product range, developed in the 1980s under the Green Isle Group, there have been no developments from within the wider Irish food processing industry on seafood. The evolutionary changes that are now occurring in the agri-food business in terms of EU policy on agriculture and rural development, WTO liberalisation and increased competition within an enlarged European Union, point to an opportunity to engage one or more of these companies to actively explore the potential to develop a seafood component to their existing business.

However, the Strategy Review Group believes that investment from the wider food processing sector should not be utilised as a means of displacing existing seafood businesses, but as a way of strengthening the sector. In this capacity and recognising the issue of supply as a major barrier to entry to the sector, a partnership approach is recommended with a number of existing seafood processors by way of joint ventures, amalgamations or formal strategic alliances. Acknowledging the current weaknesses within the sector, it is believed that this scenario would accelerate investment in seafood R&D and value-added development, enhance marketing and branding capability in addition to improving logistics and achieving the appropriate level of scale required to compete internationally.

Recognising that there is an emerging interest from the food sector in seafood, State resources should focus on identifying and assisting interested companies in pursuing this approach. BIM needs to work proactively in assisting this process by undertaking

the necessary market research to support decisions to enter the seafood business, while in conjunction with Enterprise Ireland, there is a need for both agencies to broker and foster relationships between these companies and existing seafood processing businesses. Investment support should also be prioritised for ventures emerging from this process as a means of fast-tracking development within the sector.

Recommendation 3.3 ***Increase State and industry focus on improving competitiveness and performance.***

Increased industry focus with strong State support is required to improve the competitiveness of the sector and deal with the issues of poor productivity levels, operational inefficiencies and the need for modernisation of plant and equipment to compete effectively internationally. This approach should also focus on achieving energy efficiencies and address the issue of waste disposal and treatment and should if possible be facilitated through the provision of performance benchmarks.

In line with developing the appropriate scale and investment within the seafood sector, there is a fundamental need to improve competitiveness at an international level to deal with the prospect of growing pressures in core export markets from low-cost producing countries, technological advancement and growth of seafood processing within new EU member states and continuing development and innovation by market leaders in value-added products.

Areas requiring critical attention in this respect include manufacturing improvement, infrastructure management, performance improvement, new product development and energy and the environment. Linking closely with manufacturing improvement, there is a need for management development training at both senior and supervisory level to facilitate better control of production processes and people.

Equally, engineering maintenance on production machinery, refrigeration plant and general building structure needs to be addressed to reduce downtime and implement cost reduction strategies. A significant level of technical training will be required in this respect in addition to assisting companies to improve productivity by changing to an optimised manufacturing environment with better organisation of staff and associated production flows. This in turn will facilitate achieving improved quality and food safety reassurance standards.

In addition, it is in the interest of the sector to review and plan for investment in energy saving systems given the upward trend in energy prices. Environmental issues also require planning with effluent treatment, offal disposal and water usage all having a major impact on the sector's performance.

Improving the sector's capability to develop new products is dependant partly on overcoming these current challenges in addition to enhancing investment in R&D. Given the current structure of the sector and the lack of investment to date, this has restricted the ability to pursue new market opportunities.

The Group recommends a benchmark study be undertaken by Enterprise Ireland and BIM to establish optimum levels of performance across these areas and to allow for the introduction of a Seafood Processing Competitiveness Programme. This will initially have a three-fold effect. Firstly, it will establish clear targets for State-supported investment in the processing sector and secondly, it will assist in setting the minimum criteria for support under the Step-Up Programme. Finally, the criteria will set the context for focusing the efforts of industry and the relevant agencies in dealing with competitiveness and performance-related issues.

Recommendation 3.4 ***Co-ordinate State support to the processing sector***

An integrated and co-ordinated support structure should be established to overcome the existing fragmented delivery of services by the State Agencies responsible for the development of the seafood processing sector.

Successful implementation of the recommendations for the seafood processing sector will require commitment to concerted action by all stakeholders and it is critical that there is buy-in to the strategy by all State Agencies involved (BIM, Enterprise Ireland, ÚnaG and FÁS). With this in mind it is recommended that a co-ordinating committee comprised of representatives of these agencies be established under the chairmanship of DCMNR.

Core Theme 4: Fleet Restructuring and Development

A **restructured fishing fleet**, consistent with the sustainable exploitation of available resources and the economic requirements of vessel owners and the shore-based industries dependent on it.

Introduction

It is abundantly clear that, decommissioning to date notwithstanding, the catching capacity in all fleet sectors currently matches or, more generally, exceeds the resources available to Irish vessels. This is exacerbated for certain stocks where the number and catching capacity of vessels greatly exceeds the available resources.

For whitefish, the economic analysis carried out in 2005 demonstrated that these whitefish stocks generally, and available quota in particular, would have to be some 30% greater to yield a viable and attractive return for the whitefish fleet. The Group note that since the publication of the White Report[6] the economic situation of the fleet has declined further. This is due to increased fuel costs and declines in the quotas of key deepwater stocks and traditional species.

6 *Decommissioning Requirements for Ireland's Demersal and Shellfish Fleets. Mr. Padraig White, 2005.*

Recommendation 4.1 ***Extend and develop the current Whitefish Fleet Decommissioning Programme and provide support for crewmembers.***

To ensure a basis for both stock recovery and long term viability, extend the current decommissioning scheme to allow for the removal of up to 45% of the capacity of the whitefish fleet 18 metres in length and over (This target includes the 10% taken out to date.

This should be achieved by providing:

- An incentive premium for a defined time period.
- A selective reduction in the qualifying age of vessels.
- Setting aside a proportion of the overall fund for restructuring to support crewmembers impacted by the decommissioning programme.

Scale of Decommissioning

While the approach adopted in the report, *Decommissioning Requirements for Ireland's Demersal and Shellfish Fleets* remains valid, the value of some of the critical parameters used in the economic analysis informing this report have changed appreciably. An updated analysis incorporating these adjustments, now indicates that whitefish stocks generally, and available quota in particular, would have to be some 45% greater to yield a viable return for the boats remaining in the demersal sector.

Rates of Decommissioning - Incentive Premium

Having considered all of the issues surrounding the rates of grant aid made available for decommissioning, the Group recommends that decommissioning premiums for vessels with a demonstrable track-record of targeting pressure stocks, should (within the context of an agreed programme) be increased by up to 50%.

Scope of Incentive Premium

Incentive premiums should not apply universally, but should instead be calculated to stimulate decommissioning in specific areas of the polyvalent fleet, e.g. Vessels over 65ft with active pelagic entitlement taking into account the catch history of the vessel including the species composition of the landings and the total quantity of fish landed.

Taxation

The burden of taxation has been raised throughout the review process as a major factor influencing an individual's financial appraisal of the attractiveness or otherwise of decommissioning. Whilst recognising that this is a complex area, the Group notes that in accordance with tax consultancy advice to BIM, a case can be made for the treatment of decommissioning monies as capital gains rather than income for tax purposes.

Time period

Incentive premiums should be made available for a specific time period, i.e. for up to six month from the time they are introduced. While those remaining in the fleet will proportionately benefit more at the end, rather than the beginning, of any decommissioning scheme (the last boat to exit will forego a higher opportunity and therefore will return, proportionally, more to those remaining than a vessel exiting the fleet at the start of a decommissioning programme). While this raises issues of whether this latter group may require additional incentives, the Group nonetheless recommends that any incentive introduced to promote decommissioning should only apply for a specific time period and be graduated such that those exiting the fleet earliest are adequately rewarded.

Vessel Qualifying Age

While accepting that older vessels can catch as much fish as newer vessels in some cases, there can be no doubt that the residual value of the former is less. Consequently the Group recommends that decommissioning grants continue to be abated for older vessels as is currently the case. Removing newer vessels from the fleet will adversely impact the age profile of the fleet, particularly in the areas of safety and hygiene standards as well as onboard working conditions. For that reason the Group recommends that the scheme's current entry age of 15 years be, generally, maintained. However, the age of entry to the scheme should be reduced to 10 years (but no lower) in specific cases where the vessels in question can demonstrate a significant track record of catching and landing key whitefish stocks (monkfish, hake, cod, and prawns).

Vessel Qualifying Size

While the Group recommends that the current entry size of 18 metres be retained for the whitefish decommissioning scheme, there remains a need to provide targeted decommissioning for vessels less than 18 metres in length. (This is addressed in Recommendation 4.2 opposite).

Crew

Under Priority Axis 4 of the EFF, scope exists to 'maintain and develop jobs in fisheries areas through support for diversification or the economic and social restructuring of areas facing socio-economic difficulties as a result of changes in the fisheries'. It is, therefore, recommended that a proportion of the overall fund for restructuring should be set aside to assist crews impacted by the decommissioning programme. Assistance under this fund should be directed towards area-based initiatives.

Recommendation 4.2 ***Further investigate the need for a targeted decommissioning scheme for vessels less than 18m in length.***

The Group notes that there are 114 vessels between 12 and 18 metres in length and a further 1,360 under 12 metres currently on the Fishing Boat Register. Whilst recognising that in the main these vessels target non-quota shellfish stocks (many of which are now fully exploited), it is clear that a number also target proportionately large volumes of key whitefish stocks. It must be borne in mind that these vessels are widely distributed (both within the main Fishery Harbour Centres and at other smaller ports), land the vast bulk of their catch into Irish ports and are responsible for considerable levels of onboard and onshore employment at a very local level. As such they are intrinsically linked to local fishing communities. Nor has any specific economic or social impact analyses been conducted to date in respect of these vessels as was the case in advance of the current whitefish decommissioning scheme for vessels of 18 metres in length and over.

Whilst recognising the need for a targeted decommissioning scheme for vessels less than 18 metres in length, the Group recommends that a comprehensive analysis be conducted, in advance, to determine the eligibility, urgency, scope and cost of any such scheme.

Recommendation 4.3 ***Pelagic RSW Fleet Restructuring.***

Due to the very high costs involved in decommissioning RSW vessels, the Group does not recommend this as a viable option for the pelagic segment. Instead, restructuring, brought about by means other than decommissioning is required. The Group believes that this restructuring should be largely industry-led and in this context the producer organisations have put forward a number of options relating to quota management, fleet policy, marketing, and third country agreements.

Whilst noting that the current systems of quota allocation with the pelagic segment for mackerel, horse-mackerel and herring are inherently individualised to each vessel owner and the desire by some owners in the pelagic sector to see a full system of Individual Transferable Quotas (ITQs) introduced, the Group has also noted the wider aversion to such a system throughout much of the industry which was clearly articulated at a number of the public consultations. Recognising that there are some positive aspects to an ITQ system, the Group is, nevertheless, strongly of the opinion that further individualisation of quota ownership is not in the best interests of the industry as a whole for the foreseeable future.

Therefore the Group recommends that pelagic restructuring should include the following elements:

– The management of pelagic quota uptake should be made as flexible as possible, thereby ensuring maximum returns to vessels and crews from available resources, whilst taking account of the vital need to protect the interests of processing plants in Ireland that depend on a supply of raw material from national public quota resources.

- The Group recognises that the greatest returns to Ireland's coastal communities arise where Ireland's quotas are landed and processed locally. In this regard the Group notes that the recent pelagic rebuilding programme has resulted in larger, faster, and more efficient vessels and a growing tendency to land much of our pelagic resources abroad in recent years. Any quota management system must be structured such that it maximises this local socio-economic objective going forward.

- The Group has been appraised by DCMNR that there are a number of serious legacy issues which arise from the significant, unreported illegal landings by Irish vessels in Scotland with consequences in terms of reductions in current and future quotas. In this regard, the Minister's policy in relation to the management of available quotas is to apply the 'offender pays principle' where illegal, undeclared landings must be repaid as determined by the European Commission. Any adjustment to quota management can only be considered in the context of ensuring the implementation of the Minister's policy in this regard.

- Olympic fishing (the race to fish) should be avoided whenever possible and quota and fleet management policy should be adjusted with this objective in mind; this is particularly the case for blue whiting where time-limited, periodic allocations should be introduced for the 2007 fishery.

- In the context of an overall strategy to restructure the pelagic segment, an industry-led Pelagic Quota Management structure should be constituted with a clearly defined and devolved role. This should be part of the same overall devolved management structure outlined for whitefish quotas set down in Core Theme 5.

- It is particularly important that any system established should provide for all vessels with pelagic interests (irrespective of size, segment or PO).

- As with whitefish, any new quota management system should provide for limited transferability of quota; however it should **not** amount to or lead to a system of ITQ and should not be characterised by individual permanent ownership or transferability of quota.

- Again, in the context of an overall strategy to restructure the pelagic segment (and in the context of a wider review of fleet policy), the existing days-at-sea restriction for pelagic vessels should be reviewed given that it may pose a barrier for vessels temporarily withdrawing from the fishery.

- Mechanisms for acquiring additional pelagic quota should be investigated.

- New and improved means of pelagic marketing, such as the proposed new auctioning system to attract increased landings of pelagic catches into home ports should be investigated and encouraged. Any such system however must demonstrably take account of the interests of not only vessel owners and their crews, but also processors/marketers and the wider coastal communities.

- Whilst recognising that third country opportunities are generally only important for the individual companies involved and from a national perspective do not deliver significant direct returns to Ireland's coastal communities, increasing the pelagic resource base by gaining access to sustainable overseas fisheries through third country and private agreements should continue to be actively pursued. BIM should provide support to DCMNR in continuing to improve the Irish fleet's position in this regard.

Recommendation 4.4 ***Undertake restructuring of the polyvalent pelagic fleet.***

A number of purpose built new and second-hand vessels have been added to the polyvalent pelagic fleet (without grant aid) in the past 6 years and while these have delivered a modern and safe fleet, this development has also led to significant new capacity without corresponding catching potential. In relation to polyvalent pelagic vessels the Group notes that the mackerel quota remains fixed at 7,000 tonnes per annum. On balance the Group does not see fit to recommend any adjustment to this allocation having regard to the already restricted quota allocations for the RSW fleet. Instead the Group recommends that restructuring of the polyvalent fleet should be accommodated in the overall Whitefish Fleet Decommissioning Scheme and that the additional value of active pelagic capacity should be reflected in the decommissioning grant rates made available to these vessels.

In relation to under 65 foot vessels, the Group recommends that the 1,500 tonnes set aside for these vessels be maintained as this can be a small but important element in the catch plans of these vessels. The Group notes that in the past two to three years new vessels have been introduced which are geared to catching large (for their size) quantities of pelagic stocks and that there are now four such vessels in the fleet and others may be planned. In this context the Group recommends that new management arrangements be introduced to ensure that the mackerel (and other pelagic quotas) are widely distributed amongst under 65 foot vessels. The Group also recommends that such management arrangements should be designed to discourage the introduction of additional 'pelagic focused' vessels into this fleet segment.

Recommendation 4.5 ***Review entry/exit regime for all fleet segments.***

Whilst recognising that fleet restructuring should, in the main, be undertaken through a combination of whitefish decommissioning and other industry-led initiatives, the possibility of modifying the existing entry-exit regime to require remaining vessel owners to withdraw additional capacity (beyond the current 100% or 1-for-1 requirement) for both new and existing vessels should be considered in the event that the restructuring approach outlined herein is not sufficiently delivered.

An initiative such as this may become necessary to prevent future over-capitalisation in the catching sector, thus dissipating some of the benefits of decommissioning.

Recommendation 4.6 ***Establish a Register of Commercial Sea Fishermen***

As a means of facilitating the organised development and support of fishing vessel crewmembers, an official Register of Commercial Sea Fishermen should be established and maintained by BIM.

The current ad-hoc approach to identifying bone fide commercial fishermen is no longer appropriate and BIM should devise a registration system for commercial fishermen derived from a database of those who have completed mandatory Basic Safety Training in accordance with the Fishing Vessel (Basic Safety Training) Regulations, 2001. Each registered fisherman should be issued with a book to record sea time, which must be verified by the skipper/owner at the time of discharge from the fishing vessel. Verified sea time on Irish registered fishing vessels should be the sole criterion for determining eligibility for any future social or economic compensation or benefits applying to registered fishermen.

Core Theme 5: Fisheries Management

A catching sector supporting and operating under a Fisheries Management Regime, comprising both a Quota Management System and a Fleet Management and Licensing policy, that is equitable and transparent, incorporates effective control and enforcement mechanisms, delivers biologically sustainable stocks, promotes economic viability and stability for vessel owners, and generates a greater focus on market needs.

The balanced development and sustainable management of inshore stocks based on an integrated Inshore Development Strategy, developed in partnership with the key stakeholders involved.

The Group takes the view that the problems currently besetting the fisheries sector generally and the whitefish sector in particular, clearly indicate that the current resource management strategy has not delivered on its principal objectives. The Group also recognise that, given the present over-capacity in the fleet, it is unlikely that any alternative quota management system can deliver on all these objectives, in the absence of major fleet restructuring on the scale envisaged in the recommendations set out in Core Theme 4.

While recognising that a new approach to national resource management should benefit the development and sustainability of the fishing industry, the introduction of individual transferable quotas (ITQs) as a system to manage whitefish quotas or any system that (deliberately or otherwise) promotes or delivers an ITQ system is strongly opposed by the sector generally. Against this backdrop and incorporating the views of the sector, the Group takes the view that a substantive review of current fleet management policy is required and that a quota management system based on a model with the characteristics of a Transferable Vessel Quota (TVQ) system may provide a new and more appropriate approach to national management of whitefish quotas in the future.

The introduction of such a system will depend, however, on a number of essential pre-requisites;

In the case of whitefish, the completion of a substantial decommissioning programme for the whitefish fleet by the end of 2007 is required in order to harmonise the capacity of the fleet with available resources;

In the case of pelagic species, the completion of industry led restructuring of the pelagic fleet by the end of 2007 is required in order to harmonise the capacity of the fleet with available resources (see Recommendation 4.3);

As the control and enforcement element of the proposed new quota management system will focus on fish landings rather than controls at sea, strengthened control measures will be required to allow the new Sea Fisheries Protection Authority to discharge its responsibilities. These will include, *inter alia*:

- A system of designated ports of landings for vessels over a certain size and an advance notification of intention to enter port;
- The successful introduction and implementation of a system to monitor and record the sale of all fisheries products during 2007;
- The establishment by Producer Organisations of a catch monitoring system for their members;
- The introduction of new national, mandatory, reporting requirements for vessels under 10 metre in length.

A further essential pre-requisite will be the establishment of a new legal entity to oversee the day-to-day management of quota.

It is against this backdrop that the following recommendations under the core theme of fisheries management are set out:

Recommendation 5.1 ***Implement a new, devolved, Fisheries Management Regime***

With a view to bringing about a commercially aware, stakeholder supported and regulatory compliant management framework for the whitefish, shellfish and pelagic sectors.

The proposed new Transferable Vessel Quota (TVQ) system would have the following characteristics:

- TVQ would be applicable on an equal basis to all vessels within the fleet, including inshore vessels and vessels not represented by Producer Organisations or other representative organisations;
- Quota allocation decisions would be made by an Industry Quota Management Committee appointed by the Minister and comprising Producer Organisations, representatives of the inshore sector, non-aligned fishermen and processors/marketers.

- Any management structure established for the purpose of quota management would be required to have a legal identity and an efficient and effective full-time staff responsible to a management committee for the day-to-day running of the system.
- The relevant POs would provide data on the uptake of TVQ to the Industry Quota Management Committee. DCMNR would contribute data from non-PO members;
- The principles of monthly and/or bimonthly arrangements would be prescribed in a Fishing Quota Notice, which would be adopted under Section 12 of the Sea Fisheries and Maritime Jurisdiction Act, 2006;
- Transfer of quotas between boats would be allowed, subject to such transfers being administered through the Industry Quota Management Committee;
- Transfer of quotas must be available to all vessels and rules relating to such transfers must be incorporated in the Fishing Quota Notice, issued by the Minister. Transfers cannot involve any financial exchange or other benefits in kind. Allocations to vessels would be awarded for a prescribed period of time, up to a maximum of 5 years;
- The system must be efficient and practical and not involve or result in, a bureaucracy that gives the appearance of effective management and implicit control, but has little practical impact.

Recommendation 5.2 ***Establish a legal entity to oversee quota management.***

The Group recommends that the Fish Producer Organisations set up a legal entity with its own Board on which they would be represented to administer the devolved quota management regime for whitefish under the direction of an Industry Quota Management Committee with appropriate representation from POs, non-PO members, processors and marketers. The day-to-day operational management of this legal entity should be carried out under the direct supervision of a full-time Chief Executive.

Recommendation 5.3 ***Update fisheries management objectives.***

The Minister should establish clear fisheries management objectives with a view to developing national management plans that 1) maximise the long-term return from fisheries resources to Ireland 2) protect the marine environment and 3) promote better and more transparent decision making. Additional objectives should be established covering economic, social, safety and governance issues.

Recommendation 5.4 ***Update fleet management policies.***

Fleet management policies and related licensing should be updated with a view to establishing efficient and transparent policies and procedures.

This is a complex task that will require a significant amount of consultation prior to bringing forward any new fleet management arrangements. To that end the Group recommend the immediate re-establishment of the Licensing Policy Review Group with a view to it bringing forward proposals and recommendation to the Minister within a period of six months.

The establishment of a new inshore fleet segment should be specifically investigated as part of the proposed licensing policy review recommended in this report. To that end an inshore sub-committee of the licensing policy review group should be established specifically to undertake this task.

As part of the overall review of fleet policy specific coastal areas should be designated with exclusive or priority access for inshore vessels.

Recommendation 5.5 ***Enhance institutional support for inshore fisheries***

- With a view to providing integrated fisheries management services to the inshore sector, enhanced institutional support for the **Shellfish Management Framework** should be provided. While recognising the human resource constraints in DCMNR, and the wider State sector, the Group nonetheless recommends that a new section, under the supervision of an Assistant Principal Officer, be established in DCMNR to oversee appropriate aspects of the inshore sector.
- The Minister should establish clear objectives for the inshore sector in view of its importance for vulnerable fishing dependent communities to assist them maintain a local fishing industry that is competitive and profitable. This might include community quota schemes where needed.
- DCMNR, BIM and the Marine Institute should enhance their support for the development of the inshore sector in particular to assist it take advantage of growth opportunities.
- The management of recreational/leisure fisheries should be explicitly included in the shellfish (and any additional inshore) management framework going forward.
- DCMNR should actively work with the European Commission to bring about new effort management arrangements for the scallop and crab fleets.
- Appropriate integration between the Shellfish Management Framework and any new devolved quota management structure should be established.
- Future management of inshore fisheries should include managed entry that takes account of gear types and limits, fishing season and other management issues on a species by species basis.
- Specific rules governing the supply and use of bait should be introduced as a matter of priority.
- Stock enhancing and sustainability schemes including lobster v-notching should be supported and strengthened.
- Sustainable fishing or other opportunities must also be found for registered fishing vessels displaced from the salmon drift net fishery.

Core Theme 6: Aquaculture Development

Significant **development and expansion of the aquaculture sector**, within the context of clearly defined national policies, output targets and an efficient licensing regime and supported by an Aquaculture Development Programme spearheaded by BIM.

Introduction

Since its establishment in Ireland the aquaculture sector has achieved some significant success. Assisted by the various programmes, over the past two decades the sector consisting of 25 finfish farming operations and 300 shellfish farming units has become an increasingly important source of fish and shellfish with an annual output of €100 million constituting 38% by value of total primary production. These farms supply a processing sector which has managed to capture and retain some of the most demanding retail and foodservice customers across a range of international markets.

However, despite this progress the aquaculture sector has not yet delivered on its full potential. There are a number of reasons for this, including:

- The emergence of significant competition from countries with low cost/large-scale aquaculture industries competing, sometimes unfairly, on traditional EU markets;
- Increased production costs due to disease outbreaks/stock health issues (particularly for salmon) and the temporary/prolonged closures of bays, due to biotoxins, impacting the rope mussel sector;
- Difficulty in attracting investment and loan finance for fixed and working capital requirements; and
- In some cases, supply chain failures including a failure to supply a consistent quality product from the grower to the processor and underdeveloped marketing/sales arrangements.

In addition to these difficulties/challenges, there is concern within the industry with respect to the burden of regulation on this sector, and in particular with the administration of the aquaculture licensing regime. A proportion of this frustration may be put down to the fact that DCMNR as the licensing authority has to take due account of the wider public concerns regarding the utilisation of marine resources. These difficulties were cited during the consultation process as a major obstacle preventing this sector from reaching its potential.

The Strategy Review Group believes that the aquaculture sector represents a significant development opportunity for the Irish seafood industry. However, for this potential to be realised, the current obstacles preventing the development of this sector must be urgently addressed. In particular, at official level there must be meaningful engagement with the sector, with a view to developing solutions to regulatory-related development issues. Such

solutions must take into account the commercial development of the sector, balancing that need with protection of the interests of other legitimate stakeholders in the coastal zone.

It is evident that in other comparable countries around the world, highly successful, commercial, profitable and sustainable aquaculture industries have developed. In these countries, the aquaculture industries have had to overcome many of the challenges currently faced in Ireland. Whilst it may not be possible for Ireland to reach anywhere near the scale of production achieved in some of the leading aquaculture production regions, there is no reason why aquaculture cannot substantially increase its contribution to the Irish seafood industry in terms of an increased supply of raw material.

Based on the consultation process, it is the view of the Strategy Review Group that many of the issues facing aquaculture can be addressed by the industry and its local/national regulators. It is against this backdrop that the following recommendations under the core theme of aquaculture development are set out.

Recommendation 6.1 ***A sustained, fact based, communications programme run by State Development Agencies with industry support, should be undertaken to engender greater acceptance of aquaculture as a sustainable and legitimate activity by other stakeholders in the coastal zone.***

The ultimate objective of such an initiative would be to assist with the creation of an economic and regulatory climate conducive to increased flows of equity and capital investment into the sustainable development of the Irish aquaculture sector. Such an approach would, over time, also serve to underpin the existing policy, encourage industry best practice and would sustain the necessary impetus to alleviate the various constraints that are currently holding the sector back. The aquaculture communications initiative will also serve to correctly 'map' the sector amongst the competing interests of other stakeholders as the process of Integrated Coastal Zone Management (ICZM) is developed in line with EU policy.

Recommendation 6.2 ***Review the current licensing and regulatory regime.***

A review of the existing procedures and processes used to administer and implement the current licensing and regulatory regime for the aquaculture sector (finfish and shellfish) should take place with a view to strengthening current systems and procedures and delivering an improved service to customers.

With a view to achieving a more commercial/business-like approach to the administration and implementation of the current licensing regime, the Strategy Review Group recommends that the following specific actions should be taken:

- Section 13 of the Fisheries Amendment Act, 1997, should be bought into force and strictly adhered to, so as to bring about speedier processing of licence applications within a commercially viable timeframe.

- In general, the duration of aquaculture licences should be extended to a minimum period of 20 years to provide greater security of tenure and so that licences can be used as collateral to raise equity and working capital. This should be done by adopting this policy for new licences being issued and by changing the licence duration as existing licences come up for renewal.

- The stocking conditions of all marine salmonid aquaculture licenses should be regularised such that limitations are placed on standing stock only, and that the standing stock limitation should be adjusted either upwards or downward in line with the outcome from the annual benthic monitoring survey. A common understanding of this and other reforms should be established between DCMNR and the Aquaculture Licence Appeals Board to ensure, insofar as possible, a consistency of approach. If administratively feasible, an approach to bringing about this change should be to explore the possibility of immediately adopting a common understanding of how the enforcement of the stocking terms and conditions of current licences are to be interpreted and also by explicitly adopting this approach, a replacement clause should be inserted into existing licences, as they are renewed.

- DCMNR should support and facilitate the acquisition of fallowing sites for the salmon farming sector to assist with more effective sealice and disease control. Provision of these sites should not necessarily involve an increase in the permitted output of the industry, but should facilitate improved spatial and temporal stock management and reduced incidence of disease. This initiative, which could make a very valuable contribution to the national effort to control sealice numbers, should involve the applicants and the agents of DCMNR entering into detailed consultation on the location of proposed fallowing sites and agreeing binding stock rotation and fish health management protocols prior to the submission of applications for aquaculture licensing. The properly completed application, whose 'pro-bono' credentials should be made known to all of the statutory consultees, should then be processed as fast as possible through the system, without any compromise to the rigour and transparency of the Fisheries Amendment Act, 1997, but yielding a speedy outcome in terms of an appropriate licensing recommendation to the Minister to either grant or refuse the application.

- The administration of the renewal of shellfish aquaculture licences should be overhauled so that such renewals can take place without undue delay.

- To meet the requirements of the EU Habitats Directive the Screening Protocol approach should be adopted to carry out 'Appropriate Assessments' of the impact of proposed aquaculture projects in or near Special Areas of Conservation (SACs).

- With respect to shellfish aquaculture licences, a coherent and legally feasible mechanism should be developed on a 'whole bay' basis, facilitated by the CLAMS[7] process, to allow for the orderly redeployment of floating structures, once a more appropriate layout has been determined in line with new knowledge emerging from the carrying capacity studies and the experience of established local producers.

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7 *Co-ordinated Local Aquaculture Management System.*

- New aquaculture licence applications should be subjected to a greater degree of scrutiny with regard to the business plans of the promoters and not just the possible environmental impact.
- The current arrangements for the provision of technical advice and the provision of inspection reports on aquaculture licensed sites to the Coastal Zone Administration Division of DCMNR should be reviewed and reformed with a view to having a standardised national approach.
- The approach and process used by Local Authorities to deal with the issue of effluent discharge licences from fresh water aquaculture operations should be harmonised on a national basis.
- The regulators should view aquaculture licence holders more as tenants with the right to protection for their business interests from their landlord (i.e. DCMNR) or from actions by other resource users which might be to the detriment of their businesses.

Recommendation 6.3 ***Implement an Aquaculture Industry Development Programme.***

BIM in partnership with ÚnaG in Gaeltacht areas should implement an Aquaculture Industry Development Programme, which will be fully integrated with the marketing, training and seafood processing programmes also set out in this review. The programme will be devised in full accordance with the EFF and will incorporate provisions taking onboard the new aquaculture related elements of the Regulation.

Although the new programme will continue to provide assistance for investment in increased capacity, where appropriate, it will also have a broader focus dealing with key areas such as improving competitiveness, reducing environmental impact, encouraging the farming of new species, applied R&D, the adoption of accredited quality assurance and environmental management systems and locally based actions to maximise the benefit of aquaculture to coastal and rural communities. There should be a cross-border initiative as a sub-component and the establishment of a Seed Capital Scheme, designed to accelerate the development of 'new species' aquaculture and the speedier adoption of new technologies, should also be fully explored. This integrated and holistic programme will be delivered locally in consultation with the CLAMS network and nationally via State Agencies and the Aquaculture Forum. In addition, the recommendations contained in the recently completed review of the rope mussel sector should be implemented. The review of the mussel seed resource which is being carried out in association with the Northern Ireland authorities will provide a blueprint for the management of this critical resource and when this section of the review is complete it will allow for a further review of other elements of the bottom grown mussel sector including, structure, marketing, infrastructure etc.

In terms of assisting the development of, and encouraging investment in, the aquaculture sector, the Strategy Review Group recommends a number of specific actions should be taken. These actions are set out under the following headings:

Aquaculture Industry Development Programme: Specific Recommendations

- Investment in aquaculture should be supported at the maximum permitted level of grant aid under the new EFF Regulation so as to assist with leveraging increased investment into the sector. In this regard it is recommended that there should be at least two calls for projects and two rounds of approvals per annum. In addition, it is recommended that the schedule of these calls and approvals be pre-set at the beginning of the period and rigidly adhered to.

- The secretariat for the EFF development programme should be provided and administered by the State Development Agencies with oversight from the DCMNR.

- It is considered important that there be a seamless transition from the current NDP Aquaculture Measure to the new 2007-2013 NDP Programme without a hiatus period as was experienced in the last round.

New programme elements recognising the changed emphasis of the EFF

Recognising the special provisions contained in the EFF, the Strategy Review Group recommends;

- The creation of a suite of measures to assist shellfish farmers in the event of prolonged biotoxin closures along with the establishment of an annual line of contingency funding for aquaculture operators to deal with natural disasters is envisaged. It is also recommended that there be a modest annual allocation of contingency funding so as to be able to carry out immediate applied research to deal with emerging disease or environmental issues.

- That a special provision be made for funding local collective actions by aquaculturalists for the common good through an extension of the current role and function of the CLAMS groupings.

Assistance in raising working capital

- The provision of a Seed Capital Scheme to assist promoters of new species and new technology to raise working capital in areas outside the Gaeltacht should be evaluated.

Marketing of farmed Irish seafood and specific R&D projects

- The suite of standards already developed and currently under development for Irish aquaculture products, which cover quality, organic and eco-label status should be integrated into the seafood marketing plans for the sector and their use leveraged to maximum advantage in terms of differentiating Irish products so as to achieve price premiums in the marketplace.

- The applied research effort needed to commercialise the production of fish species novel to Irish aquaculture should be prioritised and that such co-funded activities should continue to be assisted at the highest permissible rate of financial assistance under the EFF Regulation.

- There should be a greater degree of pro-activity on the part of the State services and Government protection for the Irish sector with regard to market access for the export trade. This is particularly the case in terms of naturally occurring biotoxins and the need to have an equally stringent monitoring regime across the EU as applies currently in Ireland, with regard to biotoxins such as Azospiracid.

- Priority action should be given to the creation of special 'A-class' areas as sub-plots within major shellfish growing areas, through the use of dedicated local sampling, so as to create appropriate re-laying facilities. This is to ensure continued market access for farmed Irish shellfish in the light of emerging hygiene regulations, set to come into force later in 2006.

- The pilot project underway to establish carrying capacities for shellfish farming should be prioritised and this programme should be extended to cover all the major shellfish aquaculture bays in the country as quickly as possible.

- Specific applied research into the development of commercially viable methodologies for the depuration of viruses and biotoxins from shellfish should be undertaken as a priority.

Environment and other issues.

- The benefits of the voluntary collaboration of the industry with the State in terms of their assistance with key environmental sampling and their participation in the CLAMS process and the ECOPACT initiative, should be leveraged by the establishment of an integrated communications programme led by State Development Agencies, with a view to generating increased public acceptance of the sector.

- The Aquaculture Forum should receive a renewed mandate from the Minister, re-energising its operation. It is believed that this mechanism has the potential to drive effective reform and to encourage constructive dialogue between the sector and the State regulatory and development services.

- Consideration should be given to the provision of financial support, consistent with EU rules to enable owners of traditional and older bottom mussel dredgers to meet Certificate of Compliance requirements.

Core Theme 7: Enhancing Competitiveness

Addressing certain critical factors along each stage of the industry value chain that are undermining **competitiveness and the ability to command a premium price in the marketplace**, thereby resulting in an industry that has significantly enhanced its performance on all fronts.

Introduction

In order to compete effectively and profitably in both the domestic and international marketplace, the Irish seafood industry will have to significantly enhance its competitiveness.

In this regard, it is apparent that at every stage in the seafood supply chain significant scope exists to greatly improve the industry's performance. With this in mind, the Strategy Review Group notes the need for considerable improvement in the following areas:

Ports and landing infrastructure

During the consultation processes it was maintained that the key Irish ports for landing seafood are not competing effectively, in terms of handling charges or operational efficiency, with competing alternative ports outside of Ireland. Given that it is vital to the industry's long-term development to attract as much landings of fish into Ireland as possible, both from domestic and foreign vessels, it is of paramount importance that Irish ports can compete with the best international alternatives. Essentially, the objective should be to provide the industry with access to ports that operate commercially competitive handling charges and allow for the rapid/efficient turn-around of vessels. Continuing capital investment will be required in key fishery harbours to facilitate landings by both Irish and foreign vessels and support the local processing and service industry.

Product distribution

One of the key factors which assisted the successful development of both the dairy and beef sectors in Ireland was that both these sectors managed to develop effective and efficient end-product distribution networks. In the case of the dairy industry, access to an extensive distribution network across mainland Europe and the US was established. In the beef sector, an extensive distribution capability across the UK was put in place. These distribution networks allowed both the dairy and beef industries gain direct access to retail and foodservice customers.

Currently the Irish seafood industry does not have access to an efficient and effective distribution network. Throughout large parts of the industry there is a significant reliance on intermediaries to fill this role – which are sometimes of questionable value to the industry. In this context, in order for the seafood industry to develop it will have to either mimic or piggyback on the strategies employed by the dairy and beef sectors and establish distribution solutions which will allow direct access to customers based in key markets. This may require investment in distribution facilities, both in Ireland and within reach of the key export markets in the UK and in mainland Europe. Access to such a distribution network should form part of the long-term vision for the industry and should be encouraged/supported. Support for the development of such a distribution network could be linked into the Step-Up Programme as described under Recommendation 3.1.

First-point-of-sale auction system for pelagic species

As stated earlier, it is of vital importance to the development of the Irish seafood industry that the maximum possible volume of fish is landed in Ireland. In this regard, it is believed by the industry that a first-point-of-sale auction system for pelagic species, along the lines of that operated in Norway, would play a major role in encouraging vessels to land in Ireland thereby providing Irish based fish processors with access to raw material. The Strategy

Review Group supports the pelagic sectors proposal to develop such a system. However, whilst the Review Group believes that some assistance/support could be provided at the start-up phase for such an initiative, once established, it is felt that the operations/future development of this initiative should be funded by the sector's own resources.

First-point-of-sale for whitefish species

A radical overhaul and development of the first-point-of-sale for the whitefish sector is required – particularly with respect to the role and operations of the co-ops. In this regard, it is apparent that as a group the co-ops dealing with whitefish are at a development stage akin to where some of the now successful Irish dairy co-ops were decades ago. Failure to embrace radical change will see the co-ops bypassed by the more progressive elements of the industry who will seek to develop direct/alternative routes to market. In fact, there is already evidence that this is occurring.

In this context, therefore, a radical overhaul will mean:

- Fewer but larger scale co-ops – potentially achieved through the amalgamation of existing co-ops;
- Within each co-op, a well functioning Board and professional management structure;
- The establishment of an independent pricing policy with payment based on well defined quality-related criteria and not on an average price approach, which is totally at odds with the market-led development of the industry;
- A management approach which would see the organisation's executive(s) determining the prices to be paid to suppliers for their fish based on market realities/quality related criteria and not based on the influence of individual fishermen;
- An efficient and effective operating structure which will ensure that fish is handled, graded, stored etc. in a manner required by the marketplace. The Strategy Review Group is of the view that substantial room for improvement exists in this area across the co-ops;
- A more professional approach to sales and marketing – with the long-term objective of achieving direct access to customers and reducing the reliance on intermediaries.

Essentially, the Strategy Review Group is of the view that a more conjoined and commercial market focus needs to be brought to the first-point-of-sale for whitefish.

Improving operational efficiency/reducing costs

In the context of static/declining quotas and faced with increasingly competitive markets with growing pressures from large-scale buyers, it is of vital importance that at every stage in the supply chain the industry is operating at maximum efficiency. This will require fishermen, growers and processors to examine how they operate their business – with a view to reducing/eliminating costs and improving performance. On an ongoing basis, there will be a need to keep abreast with technology developments in order to ensure that the

industry is operating at least in-line with competitors. In this context, for fishermen fuel and gear efficiency will be key considerations, for growers efficient/effective production and harvesting technology will be important whilst for processors automation technology will play an important role in future success.

Based on the consultation process, it is evident that significant scope for improvement exists in the area of cost control/operational efficiency. Whilst under this heading success in the long-term may result in less employment in the industry per unit of output, nevertheless this is a vital area for improvement in the light of increasing the industry's overall competitiveness.

Product Quality

The Strategy Review Group is firmly of the view that significant opportunity exists to improve the quality of Irish seafood at every stage of the supply chain and for all industry sectors and species types. It is of vital importance that the need for quality improvement is recognised and addressed, whether aboard the vessel or on the farm where it is grown and harvested; at ports where the product is landed; in the co-ops and other intermediaries where product is dispatched; in the factory where the fish is processed and in the transport/storage system used to deliver the product to the market.

It is of the utmost importance that all involved in the industry achieve excellence in quality and accept that this will not necessarily deliver a market premium – in most cases it will simply allow the product in question to enter the market, as is the case with all the large-scale retail outlets. In fact, the the converse is true i.e. a failure to achieve excellence in quality will result in a significant price discount and possible exclusion from key market channels.

With this in mind, every effort should be made to assist the industry improve quality standards/engage in accredited quality programmes. Particular attention should be paid to identifying how quality standards can be maintained onboard vessels – during the consultation process the difficulty associated with attracting and retaining skilled crews was identified as a major obstacle to improving quality standards. This is a major concern given that quality failures at the first point in the supply chain impacts the entire supply chain. Over time the industry should also consider the benefits of introducing a quality pricing grid – along the lines currently used in the beef industry – as a mechanism of encouraging improvements in this area.

Succession planning and attracting/retaining young entrants

Many of those engaged in the industry are in an older age bracket. This fact, coupled with the industry's failure to attract younger entrants (either as crewmembers onboard vessels or indeed in the aquaculture sector) is a major concern for the industry's future development. It is recognised that in an economy that enjoys full employment and where there are alternative options open to young people, attracting and retaining young entrants into this industry will be an ongoing challenge.

However, an effort must be made to address this challenge if the industry is to have a prosperous future. In this context, incentives to attract young entrants, either by way of entrance grants or tax concessions, are worth examining. The seafood industry might also look at how this issue is being tackled in the agricultural sector, where 'qualified[8]' young entrants are provided with an incentive grant (installation aid) as an encouragement to enter into the industry. In some sectors of the agricultural industry, notably the dairy sector, young entrants are given preferential access to production quotas – this concept is worth examining in the context of the seafood industry where access to quotas, and the cost associated with such access, acts a major obstacle to entry for new/young entrants.

State interaction with the industry

It is recognised that the State has a responsibility not only in supporting the development of the industry but also in protecting the public and environmental interest. However, in carrying out its duty every effort should be made to ensure that the State's interaction with the industry (either as a regulator or a development agency) does not unnecessarily infringe on the industry's competitiveness. In this context, significant concerns were raised during the consultation process with respect to DCMNR's slow response to critical development issues and the negative impact that this was having on the industry's ability to compete. The Group recognises that DCMNR has resource limitations which are addressed in Recommendation 10.2. Nevertheless, it is considered critical that action is taken to ensure that the interaction that DCMNR and all relevant State Development Agencies have with the industry is as efficient and businesslike as possible.

It is against the backdrop set out on the previous pages that the following recommendations under the core theme of enhancing competitiveness are set out:

Recommendation 7.1 ***Establish efficient landing and distribution infrastructure.***

To enhance the **competitiveness and attractiveness of landing fish in Irish ports**, the significant operational infrastructure and cost issues need to be addressed to bring them in line with best-in-class competing ports.

BIM should work with seafood companies to identify **efficient and effective distribution solutions** for both the domestic and international markets with a drive towards developing a greater degree of direct access to retail, foodservice and ingredient customers and reducing the industry's dependence on intermediaries.

8 *Qualified young entrants in the case of the agricultural sector are entrants who are under 35 years old and have undertaken defined training programmes.*

Recommendation 7.2 ***Implement more effective and co-ordinated arrangements for first-point-of-sale for seafood.***

The Strategy Review Group supports the pelagic sector's proposal to establish a **first point-of-sale** auction system – modelled on the Norwegian system. Such a system should be initially established by the relevant POs with EU/State support and thereafter financed and operated by the industry itself.

More co-ordinated whitefish marketing at first-point-of-sale based on adherence to certified quality and responsible fishing practices from the net to the customer/consumer, can ensure that both skipper/owners and crewmen secure a higher share of the buoyant market prices for whitefish on home and European markets. The Group recommends the appointment of a Whitefish Marketing Co-ordinator by BIM to spearhead the co-ordination/consolidation of the current fragmented marketing structure at first-point-of-sale, utilising the proposed programmes for marketing and restructuring of the processing sector.

Recommendation 7.3 ***Proactively support cost reduction and performance improvement.***

BIM & EI should develop a systematic approach to working with fishermen, fish farmers and processors to identify **sustainable performance improvement, cost-reduction initiatives and technology transfer opportunities**. Where possible, this process should be facilitated through the provision of benchmarks allowing fishermen/fish farmers and processors to compare their performance with the best-in-class operators.

Recommendation 7.4 ***Enhance onboard technologies.***

The development and adoption of enhanced onboard technologies to add value, utilise by-products and improve the shelf life of fish and shellfish landed that will enable them to be marketed at times of optimal price and demand. BIM should support this through the Fleet Restructuring and Marine Environment Protection Programmes outlined elsewhere in the Strategy.

Recommendation 7.5 ***Substantially enhance quality throughout the full supply chain.***

Throughout all stages of the supply chain, from catching/harvesting, onboard handling, landing at port, processing and distribution to the end market, significant support should be provided for increasing quality levels. In addition, support should be provided for the adoption and promotion of **Accredited Quality Programmes**. This development approach must be accompanied by measures to achieve price differentiation based on quality.

In this regard, the increasing difficulty within the catching sector to attract/retain skilled crew is noted and the potential negative impact that this can have on end-product quality.

Recommendation 7.6 ***Engage in succession planning and attract and retain new entrants.***

The industry must engage in long-term **succession planning** and provide incentives to attract and retain **new entrants** into the industry as applies in other sectors of the economy competing for school leavers or skilled immigrant labour. This should include developing structured career progression paths in all sectors of the seafood industry with promotional prospects and remuneration related to qualifications and experience, including the provision of pension plans. It is also noted that declining profitability within the industry impacts on the scope to reward employees and contributes significantly to this problem. An increased effort should be made to address this challenge.

The Group recognises that current profitability and lack of continuity in production in the seafood industry makes it difficult for employers to remunerate seafood industry personnel at a high level and offer significant retention inducements. However, the reality for many young people today is that there is a myriad of employment and education opportunities available to them once they have completed secondary school. It is also Government policy to retain as many as possible in secondary education to Leaving Certificate standard, by which stage they are well aware of opportunities at third level. If the seafood industry wishes to attract new entrants it will have to compete for their attention and set itself a long term goal of providing them with security of employment and working conditions equivalent to other industries. The alternative is to rely on immigrant labour, many of whom have proved themselves to be excellent workers, but some being overqualified for the tasks they are doing, will naturally move on to fulfil their career aspirations.

Recommendation 7.7 ***Introduce a tax incentive for commercial sea fishermen.***

The Group recognises that the extension of the Seafarers Tax Free Allowance already granted to Irish merchant seamen would be a very significant incentive for crew retention. Strict conditions should undoubtedly apply to a **Fishermen's Tax Free Allowance** and in negotiating this concession, consideration should be given to crewmembers being registered as commercial sea fishermen, with skippers/owners accountable for diligently recording sea service and complying with revenue regulations. The Register of Commercial Sea Fishermen (proposed under Recommendation 4.6) should be leveraged to assist in implementing this recommendation.

Recommendation 7.8 ***Introduce a tax life for qualifying fishing vessels.***

The possibility of a balancing charge arising on receipt of a decommissioning payment is a significant disincentive for fishermen to decommission. Where the decommissioning payment for the vessel exceeds the tax written down value it can result in taxable income for the boat owner and the share fishermen if they are entitled to capital allowances on the boat.

It is recommended that consideration be given to the introduction of a tax life for fishing vessels. This would make decommissioning a more attractive option for skipper/owners; similar to that for many property incentives and industrial buildings such amendments would result in no balancing charge arising where the boat has passed its tax life.

Recommendation 7.9 ***Publish and adhere to a grant-aid decisions timetable.***

To reduce industry uncertainty and facilitate orderly planning and implementation of programmes and projects, a timetable should be published setting the deadline dates for project applications and subsequent grant-aid decisions.

Core Theme 8: Marine Environment and Conservation

Adoption of an **environmentally conscious, responsible and compliant** approach to all industry activities and taking a leading role at national and EU level in conservation practice and advocacy, whilst proactively ensuring that other EU Members are equally compliant.

Introduction

At EU and at national policy level, at local level within coastal communities and indeed increasingly as a core driver of consumer choice, the environment has become a key consideration. In the case of the seafood industry, it is increasingly apparent that a failure to adhere to sound environmental practices will result in major developmental difficulties. Progressively, environmental considerations will dictate where the industry can operate, the level/intensity of its operation and the market channels into which the industry can sell.

Despite these very serious realities, because the industry is very much distracted by supply related issues, not enough attention is paid to developments in environmental policies and their potential impact on the industry. There is, therefore, an onus on industry regulators, Development Agencies and industry representative organisations to ensure that the industry is informed in good time of environmental-related policies/developments and is positioned to respond.

Developments in environmental policy, however, should not be regarded as simply an extra burden for the industry. Instead, the industry should set itself the objective of 'turning the environment into a positive'. In this context, a range of positive environmental attributes associated with Irish seafood should be identified and exploited as points of differentiation within key markets. Furthermore, there is a need for all industry stakeholders to be conscious of the impact of the industry on the environment on a local basis – and engage in a comprehensive fashion with interested parties in these areas.

Under this core development theme the Strategy Review Group has also made a range of recommendations related to the topic of conservation. During the consultation process this topic received considerable attention. For the most part, there was significant acceptance on the part of the industry of the role and importance of adopting conservation measures and support for a range of specific measures aimed at conserving fish stocks.

However, during the consultation process it was clearly pointed out to the Strategy Review Group that Ireland acting alone within the EU Community, in terms of supporting/adopting conservation measures, will have little or no impact on overall stock levels. Furthermore, during the consultation process the industry expressed deep frustration in relation to instances of alleged malpractice by the fleets of other Member States fishing in the waters around Ireland. There was also a deeply held view within the industry that the State was not acting forcefully enough to ensure that these matters were addressed either in terms of monitoring/policing the activity of foreign vessels fishing in Irish waters or in forcing action at an EU level.

The Strategy Review Group supports the need for conservation and understands that a strictly enforced EU-wide approach is needed in this regard. The Group also endorses the industry view that a level playing pitch must prevail across the EU with respect to regulatory compliance. In this context, the Strategy Review Group supports strict adherence to regulations and best conservation practices both within Ireland and across the EU.

In the absence of documented/validated evidence, however, the Strategy Review Group is not in a position to comment on the accusations of regulatory breaches or irresponsible conservation practices on the part of other Member States. However, the Strategy Review Group strongly recommends that both the industry and DCMNR work together to gather whatever evidence exists to support the industry's contention in this area. Assuming that the evidence is strong enough to support the industry's views, then this issue should be vigorously pursued at an EU level jointly by DCMNR and the industry.

It is against this backdrop that the following recommendations under the core theme of marine environment and conservation are set out:

Recommendation 8.1 ***Increase awareness and response to environmental policies.***

Given the significant developments in **environmental policy** in the context of international commitments under the Johannesburg Agreement on sustainability and the *Natura 2000 Framework,* within the CFP, the State sector must put in place structures that facilitate **efficient interpretation and rapid reaction** in a consolidated manner to such developments so that the industry is properly informed, in good time, of their obligations.

Recommendation 8.2 ***Promote local area management strategies and the Coastal Zone Management approach.***

The impact of fisheries/aquaculture on the environment should be of paramount consideration with respect to the future development of the industry. In this context, local area management strategies should be promoted for sensitive stocks (particularly inshore species) and the Coastal Zone Management approach should be further developed.

Recommendation 8.3 ***Promote the introduction of Environmental Management Systems.***

Develop Environmental Management Systems (EMS) for aquaculture and fishing operations and promote their uptake by the industry.

Capitalise on EMS by identifying and promoting Irish seafood produced in accordance with such systems.

Recommendation 8.4 ***Ireland to take a lead role on Regional Advisory Councils (RACs) and the DCMNR and the industry to improve performance on conservation.***

The fishing industry should take a lead role through the Regional Advisory Councils (RACs) to ensure that sensible conservation policies are developed and implemented across the EU that take account of the impact of fisheries on the environment and vice versa. The industry must be proactive in meeting its environmental obligations through the further development and adoption of environmentally friendly fishing gears and technical conservation measures such as the voluntary introduction of closed areas.

DCMNR should continue its support of the Regional Advisory Councils and work actively with its European partners and the European Commission to ensure their role is developed and enhanced in an organised and structured way. The appropriate involvement of BIM, the Marine Institute the Seafisheries Control Authority, and other appropriate State Agencies, should be actively encouraged in this context.

Recommendation 8.5 ***Develop management strategies that specifically aim to reduce discarding in fisheries.***

Adopt management strategies that convey a clear signal to change fishing practices to avoid large catches of small fish with the ultimate objective of moving to a full-scale discard ban system. This is in line with current EU recommendations for management of stocks at MSY by 2015 arising from the Johannesburg Declaration.

Recommendation 8.6 ***Promote the development and uptake of environmentally friendly and fuel-efficient fishing gear.***

Building on work carried out since 1990, Ireland should take a lead role in promoting fuel efficient fishing gear that is species and size selective, minimises the impact of fishing gear on sensitive habitats and protects non-target species.

Recommendation 8.7 ***The industry and DCMNR to take a joint proactive approach at EU level to ensure EU wide compliance is enforced.***

Within the context of achieving a fully compliant Irish catching sector and in circumstances where evidence exists that vessels of other Member States are not compliant, a joint proactive approach by the industry and DCMNR should be taken at an EU level to ensure that EU regulations on compliance and control are strictly enforced throughout the Community.

Core Theme 9: Education and Training

An increased investment in education and training by providing additional business management, supervisory, marketing, quality, conservation, environmental responsibility and sustainability skills modules and incorporating these in BIM's existing training programmes for the seafood industry and others directly interacting with it.

Introduction

Driven by a need to comply with regulatory requirements, in recent years there has been significant participation by the industry in a range of training programmes – primarily focused on competency, skills and safety-related issues. This engagement by the industry is to be commended and the future provision and uptake of such programmes by the industry, marine scientists, public officials and others interacting directly with it is encouraged.

However, real participation by the industry in non-regulatory driven and developmental education and training programmes is disappointingly low. In addition, it is not obvious that the vital contribution that education and training can make to the future development of this industry is fully appreciated. This is an issue that must be addressed.

In attempting to tackle this industry weakness, there is a need to ensure that appropriate education and training programmes are in place and their uptake is promoted. In this regard, future education and training provision should have a significant focus on developing the commercial/business management skills of all industry participants and enhancing the industry's business, sales and marketing expertise.

A wide range of management training programmes of this nature are already provided by both State and private education providers. However, the provision of these programmes within the seafood industry should be co-ordinated and promoted by BIM as a central body through the expansion of strategic training alliances with other State Agencies and educational institutions and upskilling training staff to take on new training roles, thus maximising returns on investment.

There is also an ongoing need to develop and provide specific training programmes of a technical nature focused on the needs of individual industry sectors. This is particularly evident in the case of the aquaculture and shore-based sectors where to date inadequate resources have been devoted to education and training.

The need for education and training should also be a key consideration in awarding grant aid for specific projects. Essentially there should be an onus on the grant provider to ensure that the recipient has the requisite skills/expertise/knowledge to leverage the best possible return from any funds provided by the State. In certain cases, this could require grant recipients to undertake specified training programmes as a grant qualifying criterion.

As a consequence of the significant restructuring activity that will take place in this industry in the coming years, particularly as a result of decommissioning, it is likely that a number of individuals will exit the industry. The Strategy Review Group consider it imperative that all those wishing to exit the industry, as a result of decommissioning or other industry developments, are given access to appropriate education and training programmes. In this context, it important that education and training programmes to support diversification are developed and promoted.

Education and training has a vital role to play in ensuring the long-term development of the industry. It is against this backdrop that the following recommendations under the core theme of education and training are set out:

Recommendation 9.1 ***Increase investment in education and training for the seafood industry and others directly interacting with it and improve industry participation in commercially focused training programmes.***

Supporting the significant industry developments envisaged above, will require increased investment in training to address profitability, efficiency, environmental responsibility and sustainability across all sectors of the seafood industry. Modules supporting these concepts should be firmly embedded in existing training programmes. Accordingly BIM should be the central co-ordinating body for the development and provision of nationally accredited training to all sectors of the industry in accordance with identified needs. Specialist expertise to provide new training programmes can be acquired through the expansion of BIM's strategic training alliances with other State Agencies and educational institutions and upskilling staff to take on new training roles, thus maximising returns on investment. Training should also be provided to support those intending to diversify or seek alternative employment outside the industry, in co-operation with other training providers such as FÁS.

Recommendation 9.2 ***Increase the focus on training and qualifications in the inshore and coastal sectors.***

BIM should focus more training resources in support of competence, safety, sustainability and profitability in the inshore and coastal sectors. In view of the significantly higher rate of accidents and machinery failure on inshore and coastal vessels affecting safety, profitability and crew retention, unqualified skippers and mechanics on these vessels should be required to hold formal Department of Transport Certificates of Proficiency or Competency as deemed appropriate.

Recommendation 9.3 ***Provide increased training to the aquaculture sector.***

BIM's aquaculture training provision needs to be significantly expanded to reflect its increasing contribution to sustainable Irish seafood production, through strategic training alliances with other State Agencies and educational institutions and by refocusing existing training resources as required.

Recommendation 9.4 ***Provide increased training to the shore-based sector and establish a Graduate Placement Programme.***

BIM should increase its training provision to the shore-based seafood processing sector in partnership with FÁS and a BIM/EI Graduate Placement Programme to include FETAC/HETAC accredited training should be established as a means of attracting more young graduates into this sector.

Recommendation 9.5 ***Make grant aid conditional on a training audit.***

Grant-aid should be conditional on a training audit and satisfactory completion of prescribed training programmes to rectify identified skills deficiencies.

Core Theme 10: Industry Relations

An industry whereby all the key stakeholders – fishermen, growers, processors, DCMNR, and the State Development Agencies – are **operating in-concert and in a mutually respectful manner.** This restructuring within a number of areas will require certain 'bridges to be built' which will be in the interest of the industry and the Irish economy.

Introduction

During the consultation process, and particularly at the various regional meetings held throughout the country, some very significant industry weaknesses were evident to the Strategy Review Group:

1. A poor working relationship exists between the industry and its policy-makers/ regulators i.e. the Government/Minister, DCMNR and the Naval Service.
2. The industry suffers badly from the lack of a single coherent voice.
3. The EU Common Fisheries Policy, which the State is required to implement is universally unpopular with the fishing industry.
4. The uncovering of significant illegal fishing activity in recent years and the necessary legislative and fisheries control reforms which have occurred in an effort to tackle this have strained relations between the State and the industry.

With respect to the industry's relationship with its regulators, some of the difficulty lies in the fact that DCMNR has historically been charged with two potentially conflicting roles i.e. the development of the industry on the one hand and the monitoring/control and policing of the industry on the other hand. It should also be noted that the Group commenced its work immediately after a deeply divisive rift had occurred between the industry and the State following the total overhaul of sea fisheries legislation in the Sea Fisheries and Maritime Jurisdiction Act, 2006. The Strategy Review Group's view is that a lack of resources is a key factor which has a major negative impact on how efficiently/effectively DCMNR can discharge its responsibilities. It is also noted that industry is, at a European level, heavily regulated which places a significant burden on DCMNR's management time. Whilst the industry would claim to understand this difficulty, nevertheless their criticism of the Government/Minister/DCMNR is severe.

This criticism may in part be explained by the major legislative reform and strengthened fisheries control regime applied by the Government/Minister/DCMNR in recent years. The Group is also aware that the Commission has issued a Reasoned Opinion against Ireland as part of a European Court Infringement proceeding it is taking against Ireland requiring it to significantly reform and strengthen fisheries control. These legislative and control initiatives are unpopular within the industry.

It is abundantly clear to the Review Group that the current poor relationship that exists between parts of the industry and the Government/Minister/DCMNR, must change if this industry is to make progress. The Group is of the view that the establishment of the Sea Fisheries Protection Authority on 1st January 2007, taking the policing role away from the Minister and the Department will greatly assist this process. In this context, the Strategy Review Group feels strongly that improved working relations must be put in place on the part of both industry and the State and that this must be followed by both parties taking the required steps to establish positive and constructive relationships.

During the consultation process, the task of identifying solutions to some of the critical problems facing the industry was made more difficult due to the absence of a single coherent voice for the industry. Indeed, even getting agreement on some of the critical problems facing the industry was difficult. That is not to suggest that those who do represent the industry's interest do not have a clear view of the issues and well formed positions as to potential solutions – the problem lies in the lack of clarity, cohesion and agreement between the various industry representative bodies in bringing these views together to form a solution/way forward.

Put simply, there is a real need for a single representative organisation to be established. As an interim step it is recommended that all existing fisheries representative organisations should consider setting up a federated structure which would act as an interim step, but should be followed quickly by the establishment of a single representative organisation. Operating under an agreed constitution and with equitable participation from all fishermen, such an organisation would be governed by a small Board to which the new organisation's Chief Executive would report. It is believed that the adoption of such a model could assist the industry to improve its image and better position the industry to negotiate/enter into discussions with policy makers, regulators and State Agencies.

In terms of industry relations, a further area that needs to be addressed is the co-ordination of development support/services provided to the industry. Currently this industry obtains services/support from a wide range of bodies including BIM, EI, ÚnaG, FÁS, the Marine Institute, Teagasc and third level research bodies. However, there is a lack of co-ordination in the planning, execution and follow up on the services provided. There is a real danger that such an approach can lead to wasteful duplication of effort among the State Agencies and/or certain critical issues falling between organisations and as a consequence not being comprehensively addressed.

Over the past five months a wide range of stakeholders have contributed significant time, commitment and effort into the review process and have helped to shape the findings and recommendations of this report. This includes the industry itself - fishermen, crewmembers, processors, marketers, fish/shellfish farmers and all who attended the regional meetings and/or who made written submissions, the Producer Organisations and other representative bodies, the State Development Agencies, the research institutions and DCMNR. Given this effort and real commitment and the seriousness of the issues facing the industry, it is of vital importance that the recommendations set out in this report are acted on with the requisite degree of urgency. The opportunity to put this industry on a sound commercial footing capable of acting in a self-reliant manner and confident to compete in the marketplace with the best in the world should be grasped wholeheartedly by all stakeholders.

It is against this backdrop that the following recommendations under the core theme of industry relations and image are set out:

Recommendation 10.1 ***Establish a single representative organisation for the fisheries sector.***

Whilst recognising the very different issues/dynamics prevailing in the various industry sub-sectors, there is a real need for the industry to speak with one clear/coherent voice.

At catching level it is recommended that all **existing representative organisations should set up a new single representative organisation.** The first phase of this process should involve the immediate establishment of **a federated structure** moving quickly to the setting up of a single organisation with its own Board and Chief Executive and made up of distinct sectoral/regional interests to speak with a strong clear and coherent voice on behalf of the catching sector vis-à-vis the Government, the EU other stakeholders and at various other fora where the interests of the sector have to be represented.

Strong and unified representation for each of the main sectors viz: catching, aquaculture and processing/marketing where differences between competing interests are settled internally would enable each sector to speak with one voice and with greater strength in representing the interests of a very disparate and fragmented industry.

Recommendation 10.2 ***Appropriately structure and resource DCMNR.***

Given the onerous regulatory regime surrounding the fisheries sector, serious commitment is required on the part of Government and senior officials in DCMNR to appropriately **structure and resource its seafood administration and regulatory responsibilities.** In this context the Strategy Review Group supports the current re-organisation whereby the new Sea Fishing Boat Licensing Authority has been set up and the new Sea Fisheries Protection Authority will be established with effect from 1st January 2007. The adoption of a more responsive customer facing approach will pay dividends in terms of building bridges with the industry in due course.

Recommendation 10.3 ***Co-ordinate the provision of all support by the State to the industry.***

The Group strongly recommends that a **more co-ordinated approach should be adopted by the various State Agencies** with research and development responsibilities for the seafood industry namely BIM, Enterprise Ireland, ÚnaG, Bord Bia, FÁS, the Marine Institute and Teagasc.

The co-ordination of State development and research programmes and initiatives should be spearheaded by DCMNR.

Recommendation 10.4 ***Ensure effective and prompt implementation of the Strategy Review Group's recommendations.***

A series of **Operational Programmes** should be prepared with the twin objective of giving effect to the recommendations in this Strategy and to accessing the maximum possible financial support from the new European Fisheries Fund and National Development Plan 2007-2013.

A Seafood Strategy **Implementation Group** should be formed by January 2007 to oversee the implementation of the recommendations set out in this report.

The Implementation Group should be chaired by the Minister for Communications, Marine and Natural Resources or in his absence by the Secretary General of DCMNR with representatives from each of the catching aquaculture and processing/marketing sectors as well the Department's Seafood Policy Divisions and relevant State Agencies.

SECTION 6

FUNDING, IMPACT AND IMPLEMENTATION OF STRATEGY

Section 6: Funding, Impact and Implementation of Strategy

In many respects the seafood industry in Ireland is at a watershed in its development. The Strategy Review Group has engaged in a series of regional consultations with the industry and has listened closely to the concerns and proposals of the industry. The Group has taken due account of the 72 submissions received and has met with all the key policy-makers and influencers in the industry. The strategies and proposals outlined in Section 5 will result in an industry that is more commercially focused and self-reliant with market forces driving its success.

6.1 Funding Requirements 2007 to 2013

The funding now being sought under the NDP 2007 – 2013 is outlined in the table below. In all a total of €334 million is being requested over the seven year duration of the programme. Of this total, €37.5 million will be provided through the EFF, as announced by the EU Commission on 4th October 2006, with the balance coming from the Exchequer. This State supported investment will in turn be used to leverage a further €263 million by way of private sector funding.

Table 6.1
Industry Funding Requirements (2007 – 2013)

Measure	Current	Capital	Total Public	Private Sector	Grand Total
Sea Fisheries	30	96*	126	46	172
Aquaculture	16	85	101	111	212
Training	18	4	22	1	23
Processing	-	30	30	70	100
Marketing	40	15	55	35	90
Total	104	230	334**	263	597

* Includes Fleet Decommissioning of €66 million.

** A further €40 million should be earmarked by EI/ÚnaG to support in-company R&D and NPD.

6.2 Strategy Implementation

Various national and EU planning requirements dictate the timescale and deadlines for the finalisation of the National Strategic Plan for the Seafood Industry and for the Operational Programmes to give effect to this Strategy. The key steps in this roadmap include:

- The National Strategic Plan or, at the minimum, the key priorities and funding requirements for the Strategy/Plan have to be submitted to DCMNR/DoF in October/ November 2006 for their appraisal/inclusion in the new overall NDP 2007/13 which is to be published by the Government in early 2007.

- In accordance with EU Regulations setting up the European Fisheries Fund, Ireland in common with other Member States is required to submit the National Strategic Plan for the seafood industry as soon as possible to the EU Commission.

- Following appropriate dialogue with the Commission, the Strategic Plan will form the basis for Operational Programmes which must then be prepared to give effect to the policies and proposals set out in the National Strategic Plan. On the assumption that this Plan can be submitted to the EU in December 2006, the Operational Programmes can then be submitted to the Commission as soon as possible thereafter.

- On the basis that Operational Programmes are submitted no later than March 2007, the Commission will then appraise these Programmes to ensure that they are in keeping with the Commission guidelines. A decision in this regard must take place within four months of the submission of the Operational Programmes i.e. July 2007.

On this basis, approval/spending under the EFF and NDP 2007 - 2013 for the seafood industry will not take place before September 2007 at the earliest. However, in the interim, support for the industry will be funded through the carryover of the current NDP and Financial Instrument for Fisheries Guidance. This funding will act to bridge the gap between the end of the current NDP and the start of the NDP 2007-2013.

In order to ensure that the strategy recommendations are implemented as envisaged and in a co-ordinated and cohesive manner, the Seafood Strategy Implementation Group should be established by January 2007 – as set out in Recommendation 10.4. A high level Milestone Plan is attached as Appendix 1 to this report. The Review Group strongly recommends that this Implementation Group moves quickly to put in place a more detailed integrated implementation plan which sets out in some detail what needs to be done, by whom and within what timescale.

6.3 Proposed Investment Programme and Projected Impact of Strategy Recommendations

The implementation of the proposed investment programme will result in a sizeable direct and indirect benefit to the seafood industry, the Irish economy and in particular to coastal/rural and island communities where this industry is located. As a result of this investment, by 2015 the Irish seafood industry will have:

- Evolved to become a sustainable, self-reliant and commercially aware industry, as opposed to production/policy related concerns, being the key industry focus;

- Secured a leading position across a range of target markets, both within Ireland and internationally, with Irish seafood clearly identified within the marketplace and recognised for a range of positive attributes;

- Undergone substantial restructuring to the point where the catching capacity of the national fleet is aligned with the available resource and where a competitive, profitable processing sector has been established;

- Established a leading role in terms of environmental performance and be recognised as a key advocate and practitioner of conservation measures and regulatory compliance at national and EU level;
- Secured its position as a key contributor to balanced economic growth ensuring its continued recognition as a vital indigenous industry and an essential part of the fabric of coastal/rural communities;
- Contributed significantly to ensure that Government's commitments in terms of the National Spatial Strategy are delivered on in coastal/rural areas.

The proposed restructuring and investment programme will have a considerable impact on output from both the sea fisheries and aquaculture sectors by 2015 as set out in Table 6.2. Fleet decommissioning improved fisheries management, better conservation practices including stock recovery measures and strict compliance with quotas and other regulations could collectively lead to higher catches of certain whitefish species. Supplies of pelagic species are expected to reach 237,000 tonnes by 2015. Increases are also projected over a range of demersal species with an estimated availability of 34,450 tones by 2015, including *nephrops*. The major impact in terms of output will arise from increased capacity in the aquaculture sector with farmed shellfish projected to reach 70,800 tonnes in 2015 while farmed finfish species are projected to reach 35,300 tonnes on completion of the investment programme. Cumulatively the impact is expected to result in a supply of fish in the region of 404,370 tonnes, which is an 17% increase on 2005 seafood supplies from aquaculture and fisheries.

Table 6.2
Current and Projected Supplies from Aquaculture and Fisheries

Species Categories	2005 Tonnes	2015* Tonnes
Demersal inc. *Nephrops*	32,331	34,450
Pelagic	226,783	237,000
Shellfish	26,823	26,820
Farmed Finfish	13,318	35,300
Farmed Shellfish	45,900	70,800
Actual and Projected Supply	**345,155**	**404,370**

Ex-farm and landed weight for 2005 – 2015

* Due to investment lead times the full benefits of the new NDP 2007-2013 in terms of increased output will not be fully realised until 2015.

In addition to producing a significant uplift in the value of output from the industry the proposed investment programme will target a range of 'value generating activities'. This will be achieved through a combination of a significant shift away from the bulk/commodity category to the prepared/fresh seafood category, through increased throughout, especially from aquaculture and also through increasing the unit value of trade within all output categories. The outcome of this strategy is summarised in Table 6.3

Table 6.3
Irish Sales of Seafood 2005 Actual and 2015 Projected

Product Category	Actual 2005 €,000	Projected 2015 €,000
Live and Fresh Seafood Products	158,407	202,620
Bulk Seafood Products	108,348	141,620
Prepared Seafood Products	398,211	529,300
Sub-Total Seafood Sales	664,966	873,540
Of which: Export Sales	354,052	494,540
Domestic Sales	310,914	379,000
Landings by Irish vessels at foreign ports	37,500	37,500
Grand Total Seafood Sales	**702,466**	**911,040**

As a result of this investment programme, industry revenues are projected to grow by some 30% to reach €911 million over this ten year period – this outcome is considered significant in the context of reducing quotas and the requirement for significant restructuring within the industry. Within this total, home market sales are projected to increase by 22% to €379 million with export sales increasing by 40% to €495 million.

The increased output in certain sectors, notably aquaculture will lead to increased economic activity, income and employment both directly within the industry itself and indirectly within the services sector. It is also important to point out that the benefits to be derived from this investment will continue to accrue to the State far beyond 2015. Essentially, this investment should be seen as the provision of critical assistance to an industry which is in transition, so as to put it on a sound, profitable and sustainable basis into the future. The investment should also be regarded as a strategic investment by the State in an industry which is indigenous, is based on a renewable and highly prized natural resource producing a healthy, nutritious and highly marketable food and which makes a vital contribution to the economic and cultural fabric of remote coastal and rural communities.

APPENDICES

Appendix I: High Level Implementation Roadmap

Implementation Roadmap 2007 to 2013

ID	Core Theme 1: Market Development	Start	Finish	Sponsor	Supporting Organisation
1	Invest further in market research and intelligence.	01/01/2007	31/12/2013	State/Industry	
2	BIM to focus marketing support in a targeted fashion on key export markets in addition to the domestic market	01/01/2007	31/12/2013	BIM/Industry	
3	Establish a 'Seafood Island' identify for Irish seafood	01/01/2007	31/12/2007	State	

ID	Core Theme 2: Market-led Innovation	Start	Finish	Sponsor	Supporting Organisation
1	Adopt a structured approach to providing services for commercially-focused R&D/NPD more effectively through BIM's Seafood Development Centre.	01/01/2007	31/12/2013	BIM (SDP)	EI, Teagasc, UnaG, 3rd Level Institutions
2	Adopt a twin-track approach to innovation in the pelagic sector	01/01/2007	31/12/2009	BIM	
3	Invest in identifying the potential usage of fish and marine biodiversity in functional foods	01/01/2007	31/12/2013	MI	EI, BIM, Teagasc

ID	Core Theme 3: Processing Sector Restructuring and Development	Start	Finish	Sponsor	Supporting Organisation
1	Prioritise support for business with good potential	01/01/2007	30/06/2007	EI, UnaG, BIM	FAS
2	Encourage investment in seafood processing from the wider food processing sector	01/01/2007	31/12/2008	EI, BIM	UnaG
3	Introduce measures to improve competitiveness	01/01/2007	31/12/2013	EI, BIM	UnaG
4	Coordinate State support to the processing sector	01/01/2007	30/06/2007	DCMNR	BIM, EI, UnaG

ID	Core Theme 4: Fleet Restructuring and Development	Start	Finish	2007				2008				2009				2010				2011				2012				2013				Sponsor	Supporting Organisation
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
1	Extend and develop the current Whitefish Fleet Decommissioning Programme and provide support for Crewmembers.	01/01/2007	31/12/2008																											DCMNR, BIM	
2	Further investigate the need for a targeted decommissioning scheme for vessels under 18m in length.	01/01/2007	30/03/2007																											DCMNR, BIM	
3	Pelagic RSW Fleet Restructuring	01/01/2007	31/12/2008																											Industry	
4	Undertake restructuring of the Polyvalent Pelagic fleet	01/01/2007	31/12/2008																											DCMNR, BIM	
5	Review entry-exit regime for all fleet segments.	01/01/2007	31/12/2007																											DCMNR	
6	Establish a Register of Commercial Sea Fishermen	01/01/2007	31/12/2007																											BIM	Representative Organisations + MSO, DoT

ID	Core Theme 5: Fisheries Management	Start	Finish	2007				2008				2009				2010				2011				2012				2013				Sponsor	Supporting Organisation
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
1	Implement a New and Devolved Fisheries Management Regime	01/07/2007	31/12/2008																											Producer Organisations	DCMNR
2	Establish an industry-based legal entity to oversee quota management	01/07/2007	31/12/2007																											Producer Organisations	DCMNR
3	Update Fisheries Management Objectives.	01/07/2007	31/12/2007																											DCMNR	
4	Update fleet management policies	01/01/2007	31/12/2007																											DCMNR	
5	Enhance institutional support for inshore fisheries	01/01/2007	31/12/2013																											DCMNR, BIM	MI

ID	Core Theme 6: Aquaculture Development	Start	Finish	2007				2008				2009				2010				2011				2012				2013				Sponsor	Supporting Organisation
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
1	A sustained, fact based, communications Programme, run by State Development Agencies with industry support, should be undertaken to engender greater acceptance of aquaculture, as a sustainable and legitimate activity by other stakeholders in the coastal zone	01/01/2007	31/12/2009																											BIM	BIM, DCMNR, IFA, MI, UnaG
2	Review the current Licensing and Regulatory Regime	01/01/2007	31/12/2007																											DCMNR	Aquaculture Forum
3	Implement an Aquaculture Industry Development Programme.	01/01/2007	31/12/2013																											BIM, UnaG	DCMNR

ID	Core Theme 7:Enhancing Competitiveness	Start	Finish	2007				2008				2009				2010				2011				2012				2013				Sponsor	Supporting Organisation
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
1	Establish efficient landing and distribution infrastructure	01/01/2007	31/12/2013																													DCMNR, BIM, Industry	
2	Implement more effective and co-ordinated arrangements for first-point-of-sale for seafood	01/01/2007	31/12/2008																													Producer Organisations, Co-Ops	BIM
3	Pro-actively support cost reduction and performance improvement	01/01/2007	31/12/2013																													Industry	EI, BIM
4	Enhance onboard technologies.	01/01/2007	31/12/2013																													Industry	BIM
5	Substantially enhance quality throughout the full supply chain	01/01/2007	31/12/2013																													BIM, Industry	
6	Engage in succession planning and attract and retain new entrants.	01/01/2007	31/12/2013																													Industry	BIM, EI
7	Introduce a tax incentive for commercial sea fishermen	01/01/2007	31/12/2007																													Department of Finance	DCMNR
8	Introduce a tax life for qualifying fishing vessels	01/01/2007	31/12/2007																													Department of Finance	DCMNR
9	Publish and adhere to a grant-aid decisions timetable	01/01/2007	31/12/2013																													DCMNR	BIM, EI, ÚnaG

ID	Core Theme 8: Marine Environment and Conservation	Start	Finish	2007				2008				2009				2010				2011				2012				2013				Sponsor	Supporting Organisation
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
1	Increase awareness and response to environmental policies	01/01/2007	31/12/2013																													MI, BIM	
2	Promote local area management strategies and the Coastal Zone Management approach.	01/01/2007	31/12/2013																													DCMNR, BIM, MI	
3	Promote the introduction of Environmental Management Systems	01/01/2007	31/12/2013																													BIM	
4	Ireland to take a lead role on Regional Advisory Councils and industry to improve performance on conservation	01/01/2007	31/12/2013																													DCMNR, BIM, Industry	RACs, MI, Producer Organisations
5	Develop management strategies that specifically aim to reduce discarding in fisheries	01/01/2007	31/12/2013																													Producer Organisations	BIM
6	Promote the development and uptake of environmentally friendly and fuel-efficient fishing gear	01/01/2007	31/12/2013																													BIM, Industry	
7	The industry and DCMNR to take a joint approach at EU level to ensure EU wide compliance is enforced	01/01/2007	31/12/2013																													DCMNR, Fishing Industry Representative Organisations	

ID	Core Theme 9: Education and Training	Start	Finish	2007				2008				2009				2010				2011				2012				2013				Sponsor	Supporting Organisation
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
1	Increase investment in education and training for the seafood industry and others directly interacting with it and improve industry participation in commercially focused training programmes	01/01/2007	31/12/2013																											BIM, Industry	FAS
2	Increase the focus on training and qualifications in the in-shore and coastal sectors	01/01/2007	31/12/2013																											BIM	IT
3	Provide increased training to the aquaculture sector	01/01/2007	31/12/2013																											BIM	ÚnaG, VECs, Teagasc, ITs
4	Provide increased training to the shore-based sector and establish a Graduate Placement Programme	01/01/2007	31/12/2007																											BIM	FÁS, EI
5	Make grant aid conditional on a training audit	01/01/2007	31/12/2013																											BIM	

ID	Core Theme 10: Industry Relation	Start	Finish	2007				2008				2009				2010				2011				2012				2013				Sponsor	Supporting Organisation
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
1	Establish a single representative organisation for the fisheries sector	01/01/2007	31/12/2007																											Industry Representative Organisations	
2	Appropriately structure and resource the DCMNR	01/01/2007	31/12/2007																											Department of Finance, DCMNR	
3	Coordinate the provision of all support by the State to the industry	01/01/2007	31/12/2013																											DCMNR	BIM, EI, ÚnaG, MI, Teagasc, FÁS, Bord Bia
4	Ensure effective and prompt implementation of the Strategy Review Group's recommendations	01/01/2007	30/06/2008																											DCMNR	BIM, EI, ÚnaG, MI, Teagasc, FÁS, Bord Bia

Appendix 2: List of Persons and Organisations That Made Submissions[9]

- AIB Marine and Fishing Sector Steering Group
- Aidan Bates
- Alan Bates
- All in a Shell Ltd
- Aquafresh Fish Ltd
- Bord Iascaigh Mhara
- Castletownbere Co-op Society Ltd
- Cavankee Fishing Co Ltd
- Celtic Sea Herring Management Advisory Committee
- Charles McDaid
- CIM Trawlers Ltd
- Clogherhead Co-op Society Ltd
- Comhair Iascaire Eireann Teo
- Connemara Seafood Ltd
- Crab Species Advisory Group
- Department of Communications, Marine and Natural Resources.
- David Bates
- Denis Carbery
- Des Faherty
- Dundalk Bay Cockle Local Advisory Committee
- Fast Fish Ltd
- Fingal Celtic Ltd
- Fintra Trawling Company Ltd
- Foyle Fishermen's Co-op Society Ltd
- Frank Doherty
- Galway & Aran Co-op Society Ltd
- Iasc Mara Teoranta
- IFA Aquaculture
- Ilen Seafood Ltd
- Irish Association of Seafood Companies
- Irish Fish Canners Ltd
- Irish Fish Processors and Exporters Association

9 *Some persons/organisations made more than one submission.*

- Irish Fish Producers Organisation
- Irish Fishermen's Organisation
- Irish Sea Whelk Local Advisory Committee
- Irish South & East Fish Producers Organisation
- Irish South & West Fish Producers Organisation
- Kerry Local Advisory Committee
- Kevin Boyle
- Killybegs Fishermen's Organisation
- Killybegs Fishing Enterprises Ltd
- Lobster Species Advisory Group
- Marine Harvest Ltd
- Mollusc Species Advisory Group
- MRI Carna, NUIG
- Mullglen Ltd
- New Millennium Aquaculture
- O'Cathain Iasc Teo
- O'Malley Fisheries Ltd
- Pat Fitzpatrick
- Shamrock Shellfish Ltd
- Sheehan's Fishing Co. Ltd
- Sherkin Island Marine Station
- Shrimp Species Advisory Group
- South East Scallop Local Advisory Committee
- South West Regional Fisheries Board
- Southeast Lobster & Crab Local Advisory Committee
- Southwest Local Advisory Committee
- Stephen McCahill
- The Marine Institute
- Tommy Conneely
- Union Hall - Fishermen's Co-op Society Ltd
- Wexford Mussels Ltd
- Woodstown Bay Shellfish Ltd

Appendix 3: Summary of Submissions and Regional Meetings by Theme

1: Fisheries Management

Comments/Views

The current system of allocation for whitefish quotas as between vessels 55ft in length (over and under) should no longer apply.

Quota should vary according to the size of the vessel
More flexibility of quota to allow fishermen to catch their quota in the most economical way.

The reorganisation of quota allocation is needed so that boats have more control, resulting in increased supplies of fish of the appropriate quality and with higher fat content.

More flexibility of quotas is required, such as a yearly allocation of quota and the ability to swap quotas between vessels.

A partnership agreement could be arranged between the Producer Organisations and co-ordinated by BIM, establishing a quota management system and implemented on a trial period for 6 months. BIM could then consult with industry for feedback on the new system.

Vessels should have a track record (minimum 5 years) in a fishery in order to participate in that fishery.

It should be possible to amalgamate allocations of species, GT's and KW's as practised by other Member States.

It should be possible for an individual to purchase quota from another country.

If two vessels are in partnership, one or other should be allowed to catch the allocation of both in order to maximise profit.

All vessels should be allowed to fish into their national baseline.

Vessels should not be categorised but should be allowed to diversify into other species e.g. deepwater vessels.

A system of quota management, like ITQs could be introduced but with safeguards to prevent quota being bought by overseas interests.

There should be flexibility in quota management in the species that can be caught by a whitefish trawler and the system should be changed to a 2 or 3 monthly system, or even yearly, quota system.

Any type of categorisation of vessels should be based on the past 10 years at least, not 1 or 2 years.

A review of quota management tools from other countries should be carried out.

A national strategy for species such as monkfish, and *nephrops*, is required.

If the system of "track records" is used as the basis of licensing in one fishery then it should apply to all fisheries.

The polyvalent mackerel allocation should be increased by 6,000 – 10,000MT. This could be done by:

- Establishing a system whereby the mackerel, horse mackerel, herring and blue whiting quotas are allocated by a committee comprised of BIM, Producer Organisations and Processors that would ensure all Irish quota is processed in Ireland
- Examining other criteria for allocation of quotas other than current ratio system
- Drawing up specific management schemes for each species quota.

More stock research is needed by the Marine Institute in co-operation with industry to produce, as necessary, joint management plans for various stocks, with a view to strengthening the country's negotiating position at EU level.

ITQs should be avoided – a public resource should not be privatised.

The traditional monthly share-out mechanism should be maintained.

The recently introduced monkfish arrangement should be discontinued.

A sizeable portion of the Celtic Sea herring quota should be transferred to the Summer fishery when fish is of larger size and higher fat content.

Irish seafood industry interests must be strongly represented in EU negotiations.

Any vessel which has an international fishing licence should not have a domestic pelagic quota allocated.

There should be a review of the horse mackerel quota distribution as 87.7% is to tank vessels and 11.3% to the polyvalent sector.

Redefine the ownership & management of fishing quotas to allow for more efficient use of those quotas when market and weather conditions allow fishermen to exploit the available fish to the greatest advantage.

Segment the fleet with each segment having clear entitlements to reduce the instances of cross segmentation.

Recommend the option of swapping and/or sharing of quotas between owners/vessels.

In order for the four ring-fenced vessels to survive in the industry, it is necessary that a quota, pertaining to all pelagic quota species, is also ring-fenced to the segment.

Polyvalent pelagic vessels under 50ft should not have to book into the Celtic sea herring fishery and should be allocated 8% of the quota, provided that there are provisions to manage their access and participation.

At present vessels under 65ft require no track record or "active tonnage" to join the Celtic sea herring fishery resulting in unlimited increase in effort, which must be addressed.

The timing of the opening of the fishery should ensure that the value of limited quota is maximised.

It is imperative that effort levels fixed for crab off the Southwest are prioritised and resolved, which should involve a joint effort between the industry, BIM, the MI and DCMNR to ensure a workable solution is reached.

A redistribution of the allocation of the quota ratio for pelagic vessels, whether they hold polyvalent or pelagic licenses, should apply as follows: 3.5 for vessels up to 65 ft; 5 for vessels 65.1-90ft; 7 for vessels 90.1-120ft and 10 for vessels over 120.1 feet.

Regarding the 7,000t pelagic quota allocated to the polyvalent sector:

Many polyvalent vessels were built and grant-aided to fish in the whitefish sector and so are not correctly equipped to catch pelagic species, unlike RSWs, which causes problems for the quality of fish exported or sold to the processing sector.

A number of vessels worked hard to establish Ireland's track record for pelagic quotas. There is not enough quota to divide up further so new vessels targeting this fishery should not be allowed into the polyvalent fleet.

The polyvalent fleet need a minimum of 12000 metric tonnes of Mackerel in addition to horse mackerel and herring which could be achieved by:

- Amalgamating quota in RSW pelagic sector on a 1.5:1 instead of 2:1, with the remainder going to the polyvalent fleet.
- At least 15% of future mackerel quota increases should be allocated to the polyvalent fleet.
- The herring quota of boats that are receiving blue whiting quota should be allocated to boats that land their catch in Ireland.
- In addition, a Marine Management Committee chaired by the Minister and comprising of processors, fish producers, officials and State agencies should manage all quotas.
- RSW Polyvalent and RSW Pelagic vessels of similar size should have the same weekly quota allocations in the North West Herring Fishery as they do in the Celtic Sea.

If the number of boats in the fleet is reduced and the weekly allocations of quota fixed at 80-100 metric tonnes/boat this will guarantee a regular supply of fresh fish for processing.

Management of quotas in the whitefish sector should be delegated to the four Producer Organisations. Under this plan the four POs would:

- Draw up precise marketing/catching plans for each of the 12 quota species, defining how much of each should be caught for the six two monthly periods for the various fleet size segments.
- Determine surplus quota following decommissioning and surplus in unrestricted quota species.
- Identify, initiate and manage swaps on an operational basis.
- Amend the vessel size categories for quota distribution and decide on % of quota to be allocated to each of the size categories.
- Establish fleet "metiers" for management purposes and decide on the optimal number of vessels per metier.

Regarding the RSW Pelagic Sector:

It is essential that RSW pelagic vessels have full flexibility to catch their allocation at the most appropriate time of year

Blue whiting should be allocated to vessels to avoid "Olympic" fishing

The North West Pelagic Management Advisory Committee should be reconstituted and given a defined management role.

RSW vessels should be allowed to amalgamate their vessel quota ratios into one vessel on a permanent or temporary basis.

The two year "use it or lose it" rule for capacity should have no time limit or at a minimum at least 10 years.

The days at sea restriction should be removed as it is no longer an EU requirement for the RSW vessels.

Means for acquiring additional quota such as swaps both at EU level and coastal state level and purchasing quota by vessel owners through their PO should be developed.

RSW vessel owners are committed to establishing a pelagic marketing company similar to the Norwegian model.

DCMNR should have a dedicated Third Country Division with analogous divisions in BIM on developmental aspects and in the Marine Institute on science. BIM should be charged with examining various incentives under EFF and possible domestic funding to assist the sector.

Regarding the Polyvalent Pelagic Sector:

Fleet Policy for vessels over 65ft:

- It is important that polyvalent pelagic vessels over 65ft currently participating or entitled to participate, avail of decommissioning.
- A proposal to decommission the pelagic element of a licence will need to be urgently pursued at EU level. It is important that any such "buy back" should not impact negatively on any whitefish fishery.
- The option of third country opportunities should also be pursued for some of the larger vessels in this category.

Fleet Policy for vessels under 65ft:

- The 1500 tonne allocation is sufficient for a limited number of vessels but cannot sustain an endless influx. This is an issue which needs to be tackled by DCMNR.

Quota distribution:

- Targeted swapping and purchasing of additional quota for cash (only through the POs for the benefit of PO members) should be fully explored by the POs in conjunction with the DCMNR.

– Vessels should be allowed to amalgamate their vessel quotas into one vessel on a temporary basis.

– The possibility of permanent amalgamation should be further evaluated in the context of a new proposed quota management system.

– The two year use it or lose it rule should be abolished.

Entitlements and quota management for vessels over 65ft:

– A new management system should be implemented with the POs playing a central role.

Entitlements and quota management for vessels under 65ft:

– A management system should be implemented with a committee responsible for under 65ft pelagic fisheries.

Additional quotas should be acquired through:

- Quota Swaps
- Quota purchase
- Changes to management areas
- Swapping effort for quotas
- Quota bonus for Technical Conservation Measures and Closures of Juvenile Areas
- Amended flexibility regulation
- Changes in conversion factors.

The Group should consider ITQ's, which are considered the best form of management in countries such as Denmark, Holland and Sweden and FQA's (Fish Quota Allocations) as used in the UK, when formulating a strategy for the industry.

In addition to the submissions, the following views/comments were expressed at the Regional Meetings:

The current quota management system is in need of reform. Local quota management built on the principles of common sense and economic understanding and incorporating a degree of flexibility regarding the transfer and amalgamation of quota was the majority view.

Short term commitment on a manageable basis was preferred to any form of segmentation within the polyvalent fleet

A management framework for quota and non-quota species in the inshore sector was advocated, in order to avoid the displacement of effort from one fishery to another. Such a framework must be capable of avoiding regulatory complications of current non-quota fisheries, should they become the subject of future quota management.

An effort cap in non-quota fisheries was considered important in protecting these fisheries and those that depend on them, from the effects of displacement from other fisheries.

Individual Transferable Quotas (ITQ) were generally considered to be an inappropriate form of quota management. A mechanism whereby quota was distributed nationally, with an individual cap on holdings (i.e. a maximum percentage allocation) was preferred.

2: Decommissioning

Comments/Views

Note: The section on "Socio-economics" also contains comments relating to decommissioning

Money which was previously available for the building of new vessels under EFF should be re-directed to support the necessary socio-economic compensation for fleet adjustment.

There should be a redundancy package available for crewmen of decommissioned vessels.

Decommissioning funds should be available to any fishermen wishing to leave the industry, regardless of the vessel's age

The size & age profile of vessels eligible for decommissioning needs to be reduced – size reduced to 12m and age reduced to 5 years

Compensation should be increased to €7,000-€10,000 per tonne. The scheme could be on a sliding scale of money in relation to size/age of boats involved. Alternatively, boats lose 1.5% of the value of tonnage for every year the boat is over 15 years. This could be the basis for valuing the boat, rather than tonnage.

A tax break should be put in place for decommissioning payments, maybe allowing money to be invested in a pension fund.

Fishermen should be retrained & funding available if they wish to stay in the industry, other than catching.

A scheme should be put in place for the crewmen, to compensate them and/or retrain them.

Decommissioning payments should be tax-free.

Market forces will bring the fishing fleet into equilibrium. There is no guarantee that the provision of aid will improve matters, it may even further distort the situation.

A good decommissioning scheme is required to remove over-capacity in the pelagic sector of the polyvalent fleet.

A tailored scheme must be introduced to remove a large amount of capacity in the polyvalent pelagic sector along the following lines: Historical Catches 0-50t should receive €2000 p/t; 50-149t ➔ €3000 p/t; 150t+ ➔ €3500 p/t.

There is a need to adjust the fleet somewhere in the order of 30-50%.

One option is to have the Government agree to the possibility of merging two, or in some cases, more quotas to one vessel and then selling the surplus vessel outside of the country.

Another possibility is to use the American West Coast example. They identified their fleet overcapacity, put a value per ton on it in agreement with vessel owners, then allowed them to sell the surplus vessels outside the country. The Government then put up 50% of the cash and guaranteed a long-term bank loan for the balance. The loan was repaid over a 10-year period from a % levy on the grossing of each vessel.

A targeted decommissioning package for the polyvalent sector, totalling €88 million should be introduced, removing approximately 90 vessels.

The eligible vessel size needs to be reduced to 12m and the age to 5 years.

The rate of decommissioning per GT should be determined by the amount of quota historically caught by each vessel.

In addition to the submissions, the following views/comments were expressed at the Regional Meetings:

Two conflicting views were expressed on fleet size and viability. The minority viewpoint voiced was that market forces should be allowed to dictate the downsizing of the industry. In contradiction, there was a majority view that the fleet size was currently too large for the available resource and that capacity should be reduced through the judicious implementation of a sensible and practical decommissioning scheme.

It was agreed that the current decommissioning scheme should be restructured. It should be voluntary and should allow for the dignified exit of targeted, non-viable boats, independent of age. In addition, it should be structured to provide support for all those affected and offer an incentive, for those displaced, to stay in their local communities.

Although a decommissioning rate of €6,000 per tonne was considered appropriate, mechanisms to maximise the net payment, whilst satisfying national and EU legislation, were considered necessary areas of investigation.

Also mentioned for consideration was the subject of temporary decommissioning or tie-ups, which could also be used as a means of reducing tonnage in the short term

Decommissioning of pelagic vessels is not an immediate requirement but may be required in 12 to 18 months time.

3: Inshore Fisheries

Comments/Views

A number of submissions were made to the Strategy Review Group from Local Advisory Committees (LACs) and Species Advisory Groups (SAGs), Management Advisory Committees (MACs) and the Producer Organisations. While the submissions are too detailed to include in this summary report, the Review Group has examined them in full.

Economic efficiency has to be seen as a wider concept than merely the apparent efficiency of the individual vessel – smaller vessels provide a substantial volume of high-value landings & generate locally important economic activity over a widely dispersed area. They have an important contribution to make and should be central to future policy

A specific Inshore Division should be established in DCMNR.

Unlicensed vessels should be actively pursued and prohibited from fishing.

The operational requirements and interaction of inshore fisheries with other larger-scale commercial fisheries should be reviewed with a view to the designation of certain coastal areas with exclusive or priority access by inshore vessels on an area by area and/or seasonal basis and alternatives to existing baselines should be considered for the purpose of inshore fisheries protection/management.

Detailed consideration should be given to distinguishing between small scale commercial, traditional leisure and tourist leisure sea fishing with a view to adopting tourist leisure licensing on a micro-scale as a source of revenue generation for local inshore management and conservation enhancement.

Support and incentives for the provision and use of safety equipment and safety standards should be maximised urgently.

BIM/DCMNR should ensure that specific adequate funding must be made available for inshore fisheries under the upcoming NDP and EFF 2007-2013.

VAT arrangements for inshore vessels should be revised to allow for vessels and inputs to be VAT free and the ability to reclaim VAT on fuel.

In addition to the submissions, the following views/comments were expressed at the Regional Meetings:

The inshore sector seems to have fallen outside of DCMNR's attention – there is a need for a fresh impetus to engage at central departmental level with the Species Advisory Groups.

DCMNR must engage with and properly resource the Shellfish Management Framework.

The licensing system needs to be overhauled and made more 'user friendly' and possibly devolved to BIM.

Enforcement of existing regulations is required, a few public prosecutions would stop much of the illegal practice, however it must be proportionate to the offence.

Area access arrangements should be examined with respect to precluding large boats from some areas close inshore.

International issues with crab and scallop, particularly days at sea restrictions should be progressed through the RAC.

The inshore sector needs better representation.

4: Marketing & Processing

Comments/Views

The MI and BIM must come forward with an adequately resourced R&D strategy, which includes a rapid response capability for emergency investigation into environmental, technological or husbandry related challenges, a plan to work continuously with industry to improve competitiveness, and provide solutions and networks to develop niche markets for Irish products.

An auction system as recommended in Padraig White's Report on the North-West Pelagic Industry (2000) should be introduced to encourage more landings into Ireland.

Funding needs to continue to BIM to put schemes in place that help to add value, be it through product development or handling.

Increased funding and support for marketing and market development related activities is required to give a competitive advantage in the marketplace and maximise the value of every kilo of fish landed.

BIM should support the networking of co-ops allowing a "first-point-of-sale" of all local catches.

Assistance for the development of food safety and operating standards in processing/retailing should be provided.

Support for a "cluster" approach to food safety management, whereby micro and small businesses can share one full time Food Safety Manager between companies on a regional basis.

Collaboration between BIM/EI/FÁS offering a management training programme for micro and small businesses.

On completion of FÁS pilot of FETAC Seafood Processing Certificate, assistance should be provided to companies to certify their workforce to national standards.

Innovation & product development needs to be prioritised with strengthened links between BIM & EI in supporting key growth companies.

NPD and value enhancement should be increased to 40% over the present level of 25% & should apply to all suitable projects from main product category sectors.

The new Marketing & Processing Measure should be focussed on assisting proposals that involve inter-firm co-operation in marketing agreements and/or projects involving consolidation of production facilities to increase overall efficiency of processing output and maintain/gain worldwide markets for seafood products.

Scope is provided in EU doc 1999C (9/10/99) EU Guidelines on State Aid for Rescuing and Restructuring Firms in Difficulty, for getting a national programme of aid underway to achieve structural adjustment in the processing sector.

Adopt a centralised marketing approach through BIM.

Re Celtic Sea Herring- Clause 9.7.1 of Annex (EC) No 27/2005 states that fish being transported more than 100km from the port of landing must go through a weigh bridge system rather than the factory flow scales. This discriminates against certain factories.

Steps should be taken to ensure that the temperature of all fish conforms to the requirements of EU legislation, to ensure freshness of fish for processing. Fish with high histamine levels are not acceptable for premium markets.

There should be a fisheries officer appointed to every plant to inspect everything going in and out. If fresh fish from a vessel was exported directly, approval should be sought and given by the Senior Fishery Officer in the division. Failure to record or report by vessel or processor should be met with serious penalties.

Irish vessels land in Norway partly because of higher prices for quality fish. We need to invoke the licence condition of our vessels i.e. the economic link which requires the licence holder to make a realistic contribution to the Irish economy by way of landings and purchases.

A programme should be drawn up to ensure a substantial amount of quota is landed in Ireland. The Fishery Officer would evaluate the quality at factory level.

A rationalisation scheme, similar to the one for the sugar industry, is needed to deal with excess processing capacity.

A suitably qualified individual should be engaged by the Federation of Irish Fishermen (see "Industry Representation") to work on innovative market development for the industry.

Future R&D programmes should take cognisance of the need to retain any expertise once established to help build a knowledge-based economy. At present, the relatively short nature of funding programmes presents difficulties for Research Institutes, as continuity cannot be guaranteed.

Irish seafood processing must be informed by a strong research input leading to a new range of value added products that expand their range beyond the traditional products of the past, which should focus on new seafood products that take advantage of the trend and demand for food to promote healthy eating; increase use of smart packaging and labelling technologies reinforced by strong branding; use of new species; waste minimisation and use of products for added value purposes.

Research expertise in State Agencies and the third level institutions must be co-ordinated to deliver specific industry needs. Traditional seafood processing skills must be reinforced, bringing new competencies in areas of relevant research such as manufacturing and industrial engineering to improve fish handling and processing.

A range of ailments and diseases including cancers, obesity, diabetes and immunity development should be targeted using marine functional foods.

Research in this area must create strong linkages between the marine sector and the pharma-chem, food and health sectors.

In addition to the submissions, the following views/comments were expressed at the Regional Meetings:

Rather than consolidation, we should support the smaller fish shops, delicatessens etc and support smaller processors that provide different flavours/diversification of products and support local communities.

There was a strong agreement on the need for restructuring within the industry, which should be driven by State support. It was suggested that BIM and EI would need to work closely in developing a plan for the industry, which would provide incentives for rationalisation/consolidation.

It was also suggested that a benchmark study be undertaken by EI and BIM in the first instance to examine the current structure of the sector and act as a baseline from which targets could be established for a possible restructuring programme.

Regarding access to raw material for pelagic processors, the necessity of allocating more time and resources through the Marine Institute was recommended in addition to the establishment of a specialist unit within DCMNR to ensure that highest level of expertise is available for TAC negotiations at EU level.

Regarding access to raw material by whitefish processors, the current belief is that the domestic market has been ignored by the whitefish catching sector and that this needs to change. The concept of a virtual auction, operating on a national basis, dealing with the first-point-of-sale for all whitefish species, was raised at a number of the workshops. The benefit of such an auction would allow for open access to raw material on a transparent and equitable basis. It was believed that BIM should act as the key driver in establishing such an auction, which would mirror the proposed model under a new strategy for the French fishing industry.

The continual need for product innovation was viewed as critical for processors selling directly to the retail and foodservice sectors and it was believed that this was an important area requiring further support from both EI and BIM.

There was considerable discussion on the need to improve quality across the sector. The need for certification was identified as a way of differentiating processors, who are fully compliant with legislative requirements and offer a quality product. This certification could be based on an existing accredited standard (e.g. BRC, ISO) and would operate on a voluntary basis but would act as an important marketing tool for those involved.

Given the market focus on sustainability and quality assurance, the opportunity to market Irish seafood-based on the "green clean" buyer perception was identified as a means of raising the awareness and the perception of the quality of Irish seafood. It was noted however, that a focused approach would be required aligned with the necessity of differentiating quality producers in this respect.

The lack of marketing personnel within the sector was raised as a general weakness with the need for support for developing skills and professionalism in line with management capability.

5: Conservation

Comments/Views

The drift net salmon fishery, in districts where there is surplus, should continue inside the baselines while the data necessary for further refinement is gathered.

A minimum mesh size of 100mm or even more in all Irish waters is needed.

A total ban on gill nets is needed.

One boat, one net – instead of twin rigging.

A minimum of 3 observers should be placed onboard all factory ships.

There needs to be stakeholder input to all aspects of the management of our resource.

Work has been carried out on a project for the use of hexagon mesh in the codends to release more discards, with promising results and this should be included in the strategy.

Work on composting, to produce a by-product from a waste product should be further developed.

Discards are indefensible and need to be reviewed.

Apply maximum pressure at EU level to put monitors on board European factory ship fleet.

More research on stocks needs to be carried out by the MI.

Independent observers should be placed by the EU on freezer trawlers to monitor their high grading & discarding operations.

All gear types should be available for use and vessel operators left to decide which is the most appropriate.

More research by MI to ascertain the stock situation.

Encourage stock reproduction through retention/creation of closed areas and creation of artificial reefs.

Re. Celtic Sea Herring, a qualified scientist should be available for real-time surveys and scientific sampling throughout the year, which should be conducted onboard commercial fishing vessels (more cost effective).

Additionally, spawning fish have low market value and should be avoided from fish stocks point of view.

Key research programmes should be established and focussed on; the conservation and restoration of habitats to meet international obligations in relation to the conservation of fish stocks and the maintenance of biodiversity targets; the development of a new suite of fisheries management frameworks that incorporate ecosystem and socio-economic considerations; provision of robust scientific advice on all stocks exploited by the Irish fleet and improved stock assessment methodology for offshore, migratory and inshore fisheries; a better understanding of the fisheries resource base; scientific advice that underpins improved Coastal Zone Management and maintenance of the Biologically Sensitive Area off the south west coast; an integrated knowledge product that provides a broader range of advisory options for fisheries and ocean management.

In addition to the submissions, the following views/comments were expressed at the Regional Meetings:

It will not be possible to prove that foreign vessels are over-fishing without the backing of the Government.

Technical Conservation Measures (TCMs) are critical and need to be tackled through the RACs. The RACs should re-investigate the restoration of the tuna industry.

Mesh size was broadly discussed and it was felt that measures to increase mesh size should be introduced across the board, on an EU-wide basis and within an agreed timeframe, to help with the conservation of stocks and to reduce discarding. A minimum mesh size of 90mm was discussed and broadly accepted, provided it does not reduce the number of days at sea. An agreed twine thickness should also be implemented.

With regard to control and enforcement of conservation measures, it was felt that control should be based on prioritisation and proportionality i.e. a fishery officer should not spend the same amount of time onboard a vessel that catches 7000 tonnes as onboard a vessel that catches 7 tonnes. Discarding and high grading were noted as areas that need further control, along with the management of other non-commercial species and in particular, seals.

Although some industry-instigated closed areas exist (NW cod and SE herring), protection of spawning areas for pelagic stocks should be implemented and adhered to, unequivocally, by all vessels.

6: State's Administrative/Regulatory Role

Comments/Views

The Department does not have the necessary resources to solve aquaculture licensing problems.

Greater involvement is needed with aquaculture/processing stakeholders with regard to licensing, bio-toxins, regulation etc.

DCMNR should work more closely with State Development Agencies when making decisions on the management of the industry, as they have first hand experience on the ground.

There is a need for the Department to have better dialogue with the fishing industry.

The Department must stop issuing licences for fisheries that are already over-capacity, for example licences for under 65ft vessels to fish mackerel.

There is a need to publish a plan to improve State efficiency and customer service to the aquaculture sector particularly in delivering services such as licensing, grant-aid and monitoring, employing staff with current training in areas relevant to their positions, ensuring continuing delivery of service during decentralisation and having a clear complaints/appeals procedure for customers.

There is a need to assess the overlap and duplication of the roles of the local authorities and the Dept of Agriculture, and to delegate certain functions to only one of these, specifically with regard to waste and animal bi-product regulations.

A Seafood Forum should be established to develop positive relationships within the sector and between the DCMNR and the seafood industry.

Through frequent changes of personnel in the Department, knowledge is lost. Either devolve additional responsibilities to the Semi-State Agencies or create a separate in-house strategic planning unit to generate and channel inputs from all stakeholders to ensure their consideration in the formulation of laws and regulations.

A Marine Advisory Committee chaired by the Minister and comprising of stakeholders, officials and State Agencies should implement future seafood and fishing policy.

Separation of the Sea Fisheries Control function from DCMNR might be an occasion for enhanced developmental approach by the Department.

The Department of the Marine should either be a separate entity or else be included with the Department of Agriculture, similar to most other European countries.

The role of the fishery officer must change to a more customer-friendly position – rather than focus on bailiff like skills, concentrate on his/her fish quality skills.

A positive relationship between the industry representative organisation, the industry and DCMNR which respects and is understanding of the roles, responsibilities bona-fides and limitations on each is essential going forward.

Resources and structures should be made available to enable this to take place and a clear path and policy implementation process should be developed in relation to the above at DCMNR level. A formal consultative mechanism with the Minister should form part of this on an ongoing basis.

Other areas covered in this submission are licensing and registration, customer service, administrative sanctions, quota management, fleet policy, additional resources, Sea Fisheries Protection Authority and inshore fisheries.

Both BIM and the MI should establish adequately resourced third country divisions.

DCMNR, BIM and the MI should put in place a formal mechanism to ascertain and incorporate the views of the industry on the priorities that the industry consider should be included in the service level agreements each organisation has with DCMNR.

Regional offices of BIM, the MI and DCMNR in major fishery harbour centres should be strengthened to provide a one-stop shop service.

BIM's marketing division should re-focus its activities to give the necessary support, technical, financial and other, to enable the establishment of a pelagic marketing company to come to fruition. The Division should be renamed in recognition that its function is marketing support rather than involvement in sales itself.

BIM's fisheries development division should establish a quota management section to deal with the non-sector under the new quota management proposal.

BIM's fisheries development division should develop user-friendly guides covering the myriad of fisheries regulations in conjunction with DCMNR and the Sea Fisheries Protection Authority.

BIM's fisheries development division should develop a social and economic section to provide detailed data and analysis on TAC reductions, national development plans, species recovery plans and data for Irish input into EU institutions.

BIM should develop a detailed screening process to recruit suitably qualified foreign crew in their country of origin.

A new dynamic recruitment strategy and PR strategy should be developed in BIM to entice new entrants into the industry at all levels having acquired the necessary technical and professional qualifications.

BIM should establish an industry forum to seek their ideas and view on industry developmental programmes both from short-term and long-term perspective.

The Fisheries Science Services Division of the Marine Institute should establish a formal structure to brief the industry before and after ICES (International Council for the Exploration of the Seas) stock assessment groups of relevance and ACFM (Advisory Committee on Fishery Management) meetings.

The number of days devoted by both the Celtic Voyager and the Celtic Explorer to sea fisheries research and surveys in the Irish EEZ should be increased to fill the large number of gaps in knowledge that now exists in a range of commercially important species for Ireland. A detailed work plan to fully address this key issue should be established in conjunction with DCMNR and the industry.

The MI should allocate additional resources both human and financial to improving fisheries databases, assessments including mathematical modelling, and developing real models of relevance to the Irish fisheries situation on the effects of applying maximum sustainable yield (MSY) and the ecosystem approach.

The MI's Fisheries Science Services Division is at the forefront of involving the stakeholders in the ICES process. A similar initiative should be undertaken by the Division to involve the Irish fishing industry in the scientific surveys and assessments. It should also devise a mechanism to incorporate into the stock assessments the huge amount of information that can be generated by fishermen during fishing trips.

The MI should establish an industry forum to seek their ideas and views in advance of deciding on annual work programmes and priorities on fisheries research and surveys. MI should, in conjunction with industry organizations arrange its resources to target key Irish priorities being pursued by the Pelagic and North Western Waters Regional Advisory Councils (RACs).

The MI needs to get a credible message out to the fishing industry that with the acquisition of the state of art research vessel and an excellent new facility in Oranmore, it can now deliver a first class fisheries research and assessment service.

The Marine Institute Act should be reviewed with the view of giving the stakeholders greater involvement in the setting of priorities for the Institute.

The MI's Fisheries Science Services Division should organise on an on-going basis regional workshops for the fishing industry to explain how fisheries data is used in the stock assessments, the importance of reliable data, how fishing effort is derived and what parameters and assumptions drive the assessments.

The MI should be more actively involved in the cod recovery programmes.

The Minister of the Marine should have a scientific advisor who could be a facilitator between industry and the administrative side of the Department on issues such as research, conservation, quotas and licensing.

DCMNR, BIM, the MI and industry leaders and the Scientific Advisor (see above point) should meet three times a year, under an independent Chairman, to discuss issues and work together to resolve them.

DCMNR should use, more frequently, the expertise of BIM, which has people on the ground that can be of great assistance.

The MI must play a major role but must first gain the respect of the industry.

A proactive and inclusive approach to defining policy in key areas such as new species development should be adopted.

In addition to the submissions, the following view was expressed at the Regional Meetings:

There was considerable criticism of the Department and calls for it to adopt a more positive attitude towards the industry with improved customer service.

7: Compliance

Comments/Views

To foster a culture of compliance the stated policy should be clear and just at all times.

There should be a level playing field in the control and monitoring of fisheries activities throughout the EU.

It should be mandatory for each Member State to inform other Member States in real time of the individual quota allocations of vessels fishing in each other's waters.

Self-regulation should be avoided.

The Department must give commitment to industry to control our waters in close conjunction with the EU. Dumping at sea must be controlled.

In addition to the submissions, the following view was expressed at the Regional Meetings:

The industry is aware that the problems it is facing will not change overnight. Equally, the Government needs to be aware that compliance will not be reached overnight – it is a gradual process.

8: Aquaculture

Comments/Views

There is a need for regularisation of licences in harbours.

The delay in processing licensing applications results in commercial losses and allows competitors abroad to take advantage of new species and gain market share.

Implement the 1997 Act – ensure that applications for licences are decided upon in a four month time frame.

Issue licences for land-based aquaculture based on standing stock/biomass figures.

Implement a review with industry of the aquaculture licensing system in the context of the 1997 Fisheries Act.

MI and BIM must come forward with an adequately resourced R&D strategy which includes a rapid response capability for emergency investigation into environmental, technological or husbandry related challenges, a plan to work continuously with industry to improve competitiveness, and provide solutions and networks to develop niche markets for Irish products.

Use available grants wisely to consolidate the industry's position, modernise and upgrade the existing sector.

Structure and monitor licences to provide a competitive arena for Irish farmers (a level playing ground with other EU producing countries) and link this to sound environmental management and protection.

Establish a wide-ranging and holistic approach to the control of sea-lice instead of encouraging more chemical treatments of which there are too few in the first place – and which are now already showing signs of resistance.

Regarding the Bottom Mussel industry:

– There should be transparency in allocations and production.

- A limit should be put on the number of dredgers in the sector – old boats which do not meet Certificate Of Compliance standards should be decommissioned.
- Only full time operators with proven track record should be allowed seed allocations & only one boat per allocation.
- Seed should never again be exported.
- Wexford operators should have a cordoned off area for themselves, as in the North.
- An inquiry needs to be carried out as to how the industry has been managed since 2003.
- Compensation should be paid to traditional operators who have been unfairly treated in this regard.

DCMNR should adhere to minimum customer service levels for processing of aquaculture and foreshore licence applications.

Project promoters should have some clarity as to when they can expect a decision on applications and once a decision has been taken it should be formally implemented without delay.

DCMNR should reconvene the New Species Development Working Group and review or amend if necessary, and implement the recommendations contained in the original report. The Group should continue to work on the development of new species in aquaculture.

The Government should take back ownership & management of the Irish seed (bottom mussel) source for exclusive use by mussel farmers based in RoI.

Foreign owners/companies must not be given access to the Irish Sea mussel seed resource within the jurisdiction of Ireland.

Key research programmes should be set up and focussed on; protocols and systems to monitor and manage aquaculture sites, including a State approved incentive based monitoring and regulatory system; established inshore/near shore sustainable production systems that operate in line with good coastal zone management practice; an enforceable health code and effective vaccines for the main disease and parasite threats; technologies necessary to establish operations offshore; commercial cod hatchery and nursery facilities; technologies to farm other species.

New research teams in State Agencies, third level institutions and industry should be established to address research gaps in marine spatial planning, offshore aquaculture technologies and new species development. Established research teams must be strengthened in areas such as environmental management and monitoring, forecasting , fish health and production techniques and technologies. A partnership approach by research institutions, development agencies and industry will be required to leverage additional funds from sources such as SFI, HEA and the EU.

The industry, researchers and State Agencies should evolve a framework for science based, rational management of seed supply in the mussel sector. The industry, supported by key agencies, must continue to build its reputation for a high standard of food safety.

Greater utilisation of expertise in the third level sector, the creation of new research teams and provision of additional support for institutional based research activity will enable research programme delivery. Increased levels of collaboration between industry and research providers, including technology transfer initiatives should take place. New research activity must be supported by a combination of research grants, development agency funds and industry contributions.

Regarding seaweed from aquaculture production, key research programmes should be established and include; the mapping of the resource and harvesting sites; best practice methods and regulatory guidelines for mechanical harvesting of seaweed; enabling technologies for a range of farmed seaweed products; a range of seaweed compounds and downstream products including inputs to biotechnology projects; increased industry awareness of research results and product potential.

In addition to the submissions, the following views/comments were expressed at the Regional Meetings:

There was general agreement that aquaculture needs to achieve a greater degree of acceptance and that it has not yet reached its full potential.

The stocking conditions of all salmonid aquaculture licences should be regularised such that limitations are placed on standing stock only.

The operation of the shellfish aquaculture licences should be overhauled so that renewals take place smoothly and quickly. The screening protocol approach should be adopted immediately with regard to the issue of "Appropriate Assessments" in SAC designated areas.

New aquaculture licence applications should be subjected to a greater degree of scrutiny with regard to the business plans of the promoters and not just the possible environmental impact.

The current arrangements for the provision of technical advice and inspection of aquaculture licensed sites must be reviewed and reformed.

Concern was expressed that the process of decentralisation would make the current poor situation even worse, due to loss of corporate memory and expertise. A special programme to upgrade and maintain an adequate level of customer service in the administration and regulation of aquaculture needed to be brought into place.

It was noted that there was a high degree of inconsistency in the way in which local authorities deal with the question of effluent discharge licences and that this area of regulation needs to be harmonised on a national basis.

There was a call for the regulator to view aquaculture licence holders as tenants with the right to protection for their business interests from their landlord (i.e. the DCMNR) from actions by other resource users, which might be to the detriment of their businesses. Specifically the issue of trawlers illegally operating too close to inshore salmon cages was raised.

The following developments in the context of marketing were called for:

There should be support for innovation in the creation of new forms of Irish aquaculture products; in particular, MAP for bottom mussels and the provision of a new bulk mussel bag were instanced.

There should be a greater degree of pro-activity on the part of the State services and Government in terms of protecting the Irish sector with regard to market access in export trade. This was particularly noted in terms of bio-toxins and the need to have an equally stringent regime within the EU as applies currently in Ireland, particularly with regard to Azospiracid.

There was an urgent call for the creation of special A areas as sub-plots within the major shellfish growing areas, through the use of dedicated local sampling, so as to create appropriate re-laying facilities. This was to ensure continued market access for farmed Irish shellfish in the light of the emerging hygiene regulations, set to come into force later in 2006.

The following issues were raised in the context of investment:

The administration of the new EFF aquaculture development scheme should be improved based on the experiences of the 2000-2006 Measure.

There should be at least two calls for projects and two rounds of approvals per annum. The schedule of these calls and approvals should be pre-set at the beginning of the period and rigidly adhered to. The administration of the programme should be handled by the development agencies rather than DCMNR.

There should be a seamless transition from the NDP Aquaculture Measure to the 2007-2013 Programme without an hiatus period as experienced in the last round.

Special provision should be made in the EFF suite of Measures for compensation to mussel farmers for prolonged bio-toxin closures, a contingency fund to deal with natural disasters, a contingency fund to do immediate practical applied research to deal with emerging disease or environmental issues and that a special provision be made for funding collective actions by aquaculturists through an extension of the current role and function of the CLAMS groupings.

A seed capital scheme should be established to assist new species and new technology promoters to raise working capital in areas outwith the Gaeltacht.

Some specialist form of support should be provided to assist the traditional bottom mussel operators in coming to terms with the costs of COC appliance.

The following issues were raised in the context of the environment:

The current effort being put in by the industry in terms of assisting the state with sampling and participating in the CLAMS process, should be more formally recognised and communicated. In particular, the role of the shellfish industry whereby it acts as an environmental watchdog for water quality should be highlighted and used as a means of gaining acceptance for the sector.

The Aquaculture Forum should get a renewed mandate from the Minister re-energising its operation. It was felt this mechanism had the potential to drive reform and dialogue, if it was given back its teeth and taken seriously by all of the stakeholders.

9: Funding

Comments/Views

The allocation of funds for aquaculture projects should take place on an annual basis with a budget allocated to a floating fund and calls for proposals should be made every 3 months.

There is a need for more funding in the next NDP for land-based Recirculation Aquaculture Systems (RAS).

The Government should start up a Venture Capital fund for the inland aquaculture industry for new start-up operations and young expanding operations, as well as considering interest free/low interest start-up loans.

The next NDP should include a fund for well focussed/planned R&D in companies with proven track records, continuous support for aquaculture processing/marketing and adequate funding for BIM's marketing programmes.

Capital investment in infrastructure is needed

Short-term funding is needed through BIM led initiatives on quality, added value, marketing, promotion, cost saving etc., while the new strategy/policy is being implemented.

Measures should be included in the next NDP to support synergies and partnerships between compatible business operations.

Support should be continued for initiatives between BIM/EI & Grimsby Institute focussing on value adding, innovation and new product development.

Financial support for the R&D of effective waste management options for fish offal should be initiated in conjunction with DCMNR and key stakeholders.

Further financial support for BIM's marketing division.

The next EFF package needs to be administered in an easier user-friendly process and, in particular, the distribution mechanism should be such as to provide a level of predictability and certainty for aquaculture companies.

DCMNR should publish in advance a clear timetable for grant calls i.e. the specific dates on which applications will be accepted e.g. every 6 months.

A clear commitment from DCMNR that grant applications will be processed within a reasonable timeframe e.g. announcement of successful applicants not later than 8 weeks after grant application deadline.

Public expenditure should be targeted at productive investments that will enhance fish stocks and general infrastructure over the long term.

The following funding schemes should be implemented:

- Funding for V notching to be continued;
- Early retirement scheme for fishermen to be initiated;
- Assistance with temporary/permanent closure of fishing areas and reduced fishing activity;
- Modernisation/vessel renewal for small boats (<12 metres);
- Funding programmes should be divided proportionally between the different fishing sectors according to numbers of fishermen employed in each sector (i.e. offshore vs. inshore), as it is perceived that the larger boat sector currently receives a much larger share of available funding.

The amount of funding allocated should reflect the number of individuals employed in the sector. There should also be assistance with temporary/permanent closures of fishing areas and reduction of effort for conservation purposes.

In addition to the submissions, the following view was expressed at the Regional Meetings:

There needs to be a better balance between capital and marketing funding in the next NDP.

10: Socio-economics

Comments/Views

Crew members should be compensated for loss of livelihood following decommissioning.

Crew members fishing onboard a decommissioned vessel as of 30/6/2005 should be included in compensation package under EFF.

Crew members who have worked for at least 5 years should be offered a grant to diversify out of fisheries as per EU Regulation 2792/1999 Art 12 and should be offered re-training as early as possible in the process.

Money which was previously available for the building of new vessels under EFF should be re-directed to support socio-economic compensation for fleet adjustment.

Early retirement for crewmembers over the age of 55 should be available.

Crew members should be allowed to earn the first €15,514 tax free, the equivalent to the average wage and this should be inflation indexed.

New legislation needs to be enacted giving all crewmembers onboard Irish fishing vessels "employee" status.

Vessel owners paying class A contributions should be eligible for a refund of employers PRSI contributions. In the interim, the present class "P" system needs to increase the number of days a crew can claim unemployment from 78 to 165 days, while the contribution would remain the same as at present at 4%.

A tax allowance system for crew equivalent to that for merchant seafarers to attract young people into the industry should be implemented.

There should be a redundancy package available for crewmen of decommissioned vessels.

Crew can only be considered self-employed if attractive tax credits and entitlements are put into place.

Accountancy assistance from within the sector should be available to help young crews manage their affairs.

All sides need to work together to improve the image of the industry to the public, which would also help to attract young people into the industry.

The industry needs to speak as a united voice, with a national view. There are too many Producer Organisations at present.

A solution to attracting young people into industry would be in the form of the Seafarers Tax Allowance. There should also be more focus on training and skills involved in the industry.

If vessels were downsized (20 tank boats) and the quota spread out over for example 80 smaller vessels with crews of approx 8 per vessel, then employment would increase from approx 240 to 640 crew. Then the local economy would benefit because all the fish would be landed into Ireland, and operating expenses (food, fuel, netting, maintenance etc.) would also be spent in the local economy.

The issues surrounding the taxation and social welfare payments being made by fishermen needs to be addressed to ensure that the highest calibre of fisherman remains in the business.

Provision should be made for early retirement, as in the agriculture sector. Efforts should also be made to inform fishermen of their financial entitlements.

A programme of support for emerging entrepreneurs in the marine sector should be established which may include programmes for financial, research and marketing supports.

With regard to taxation:

The Seafarers Allowance should apply to fishermen.

Tax provisions should be amended so that expenditure on acquiring tonnage for the purposes of sea fishing qualifies for capital allowance.

The €500,000 cap on consideration received for qualifying assets for retirement relief could be removed in respect of decommissioning payments, to encourage fishermen to decommission their boats.

An incentive in line with the recent incentive for SSIA holders may encourage fishermen to invest their decommissioning payments in a pension.

Increasing allowable tax deductions in line with the deductions available to specified sportspersons, reflecting the shorter working life than average workers, might encourage fishermen to invest in pensions.

Provisions should be introduced to allow fishermen to shelter any tax arising on decommissioning payments through the use of pension contributions.

With regard to social welfare:

All share fishermen should be entitled to receive unemployment benefit for the maximum period of time and those who paid Class P PRSI should not be penalised.

When employees over 55 receive a lump sum termination payment over €19,046 they may be disqualified from receiving unemployment benefit for a period of up to 9 weeks, this should be reconsidered in the case of decommissioning.

A package of incentive schemes should be considered to allow and encourage individuals to retrain or seek further education.

11: Profitability

Comments/Views

Vessel owners who have their vessels surveyed annually by a classification society should not have to incur further expense by a DCMNR requirement in this regard.

Departmental survey costs are very expensive and result in downtime for boats. Do these surveys need to be so frequent and so costly to the skipper/owner?

Diesel should be subsidised or other allowances for rising fuel costs made as in other EU countries.

There is a need to develop more selective, less intrusive forms of passive or energy efficient fishing.

The industry could be made more competitive through cost reduction strategies, technology transfers, world-class manufacturing, joint ventures etc for which government support would be required.

In addition to the submissions, the following view was expressed at the Regional Meetings:

There should be an investigation into port costs and the costs relating to developing the ports.

12: Industry Representation

Comments/Views

A Federation of Irish Fishermen (FIF) should be established with membership consisting of the KFO, IFPO, IS&WFPO and IS&EFPO.

A Board, consisting of the CEO and Chairman of each participating organisation, should manage the FIF.

The posts of Chairman and Secretary would be on a six month rotating basis and both could be from the same organisation.

A Business Development Manager should be employed by the proposed FIF.

Headquarters, finance, auditing and rules of procedure would be agreed at the first Board meeting.

Appendix 4: The Seafood Supply Chain – Profile and Challenges

The supply chain for Irish seafood is complex in nature and is heavily reliant on intermediary channels of distribution. Varying significantly across each seafood category, it is evident that there are significant weaknesses in the current routes to market and the price achieved for product. Generating higher returns to the sector will depend on how these current supply chain practices can be improved or strengthened in the future.

Introduction

Understanding the complexity of the supply chain for Irish seafood is critical to addressing the key challenges faced by the industry. Equally, improving the current supply chain management practices is believed central to generating the maximum value per tonne of fish landed/farmed or processed in Ireland.

With dependency on commodity channels of distribution currently a predominant trend across the sector, the industry needs to review current practices and seek alternatives where feasible to ensure that the highest returns can be achieved at market level.

This section aims to describe the current supply chain practices, illustrating the routes to market and channels of distribution across the three categories – bulk seafood, fresh/live seafood and prepared seafood. While concentrating on the key species/products within each category, the supply chain is similar for all seafood sales and in doing so, the issues and challenges that are currently threatening the profitability and hence, viability of the sector for the future, will become more evident.

Bulk Seafood Category

Sales of bulk seafood are export focused and amounted to just over €108 million in 2005, accounting for almost 31% of total seafood exports from Ireland. However, in volume terms, this category accounted for 116,117 tonnes or 58% of all seafood exported (ie. 198,623 tonnes). Given the sizable proportion of volume within this category, it is important to fully understand the supply chain and channels of distribution, which are entirely commodity focused.

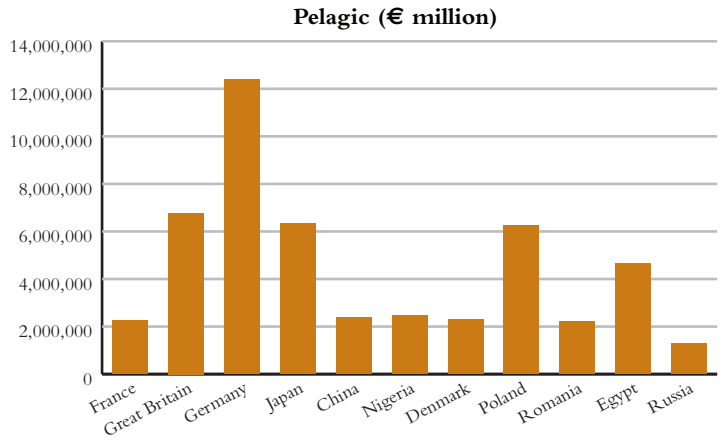
Exports of pelagic fish account for the majority of bulk seafood production in Ireland, with exports amounting to over 110,000 tonnes in 2005. Appendix table 4.1 below illustrates that the three main species, mackerel, herring and horse mackerel, account for 75% of this volume and 72% of the total value of pelagic exports.

Appendix table 4.1
Breakdown of Pelagic Exports in 2005

Species	Volume ('000 tonnes)	Value (€million)	Unit Value (€/tonne)	Value % Total exports
Mackerel	35	43	1230	39
Herring	21	19	905	18
Horse Mackerel	28	16	570	15
Total	**84**	**78**	**N/a**	**72**

Pelagic fish is exported to a wide range of markets including the Far East, Africa and throughout Eastern Europe. Appendix figure 4.1 below illustrates the key export markets, demonstrating that the export profile varies from the fresh/live to the prepared seafood categories with less focus on the core European markets and a higher reliance on third countries. This is also illustrative of the commodity nature of pelagic exports.

Appendix figure 4.1
Pelagic – Key Export Market Profile By Value - 2005



The supply chain is dominated almost entirely by sales of raw material to manufacturers for production of mainly finished retail products in the EU, Japan and Eastern Europe. For the remainder, for example in Africa, Romania and Bulgaria, the whole frozen product is simply stored, then thawed and sold as fresh fish in local open markets.

Mackerel

The supply chain for mackerel is dependent on the size and quality of fish landed, with Ireland being very much a small player in a volume driven market dominated by Norway, UK, Denmark and Holland. Changes in the fishing patterns in recent years have seen the percentage of 600gms plus jumbo size reduce from 25% throughout the 1980's and 1990's to now 10-15% in early September/October but down to 5% by spring.

Grading at the pier is the first most important point in the supply chain as the grade decides entirely the price and export destination for the fish. Appendix table 4.2 shows the main grades by market and the level of processing undertaken for each, which are all produced in frozen format.

Appendix table 4.2
Mackerel – Grade, Formats & Market Profile

% of Total Catch	Grade Size	Formats	Market Profile
5-10%	Jumbo 600gm+	Whole round (20kg) Hand fillets (150g+)	Japan, Russia Germany
30-40%	400-600gm	Whole round Gutted BBQ Hand Fillet (100/150g)	Germany, Poland, Japan, China, Russia Germany, Austria, Czech Republic Germany
25%	300-500gm	Whole round Headed and gutted	Poland France
40%	200-400gm	Whole round Butterfly fillets (20kg) Headed and gutted	Romania, Egypt, Bulgaria Germany, Poland France

Exports from Ireland are further processed by buying manufacturers to produce a range of finished products for each market including hand fillet packs, whole smoked packs, hot smoke packs, barbeque packs and canned products for sale at retail level.

In moving forward within the pelagic sector, the question could be asked as to whether more valuable markets could be secured for the larger sized mackerel (400gm+) given that it accounts for 30-40% of the total catch. In addition, the issue of whether such added-value retail and catering products could be produced in Ireland needs to be investigated, particularly in light of the fallback in prices this autumn due to the resurgence of the Pacific adult mackerel fishery in Japan. This would need very significant levels of research to be undertaken to determine the level of market opportunity and the feasibility of such development in light of growing competition from low cost producers.

Aside from the cost competitiveness issues to be considered, the low price achieved for offal in Ireland, which could account for up to 50% of the purchase volume in a value-added production process, is a factor likely to impact given that the equivalent €65 paid in Ireland is €100 in Scotland and €160 per tonne in Denmark. These issues are equally relevant to herring.

Herring

Size and fat content are relevant to price and product format for herring but are not as critical as for mackerel. There are two predominant sizes of herring – 5/8 per kg and 7/10 per kg, which determine the main product formats produced. Prices and markets have been notably flat for some years where consumption has remained static in Germany and Poland

and the consumer has been very price sensitive. Ireland is also faced with stiff competition from Norway and Iceland, key suppliers to the Eastern European markets with 2-3, 3-4, 4-5 per kg Atlanto-Scandian herring.

Appendix table 4.3 illustrates the breakdown of size grades, product formats and markets for Irish herring.

Appendix table 4.3
Herring – Grades, Formats & Market Profile

% of Total Catch	Grade Size	Formats	Market Profile
75%	Medium 5-8 per kg	Fresh frozen flaps (20kg) Delis headed &gutted fresh frozen (20kg) Frozen whole (20kg) Marinates 100kg barrel	Germany, Poland Germany Egypt, Nigeria, Baltics, Russia Poland, Germany
25%	Small 7-10 per kg	Frozen flaps Delis headed & gutted fresh/ frozen (20kg) Frozen whole (20kg) Marinates 100kg barrel	Germany, Poland Germany Africa, Russia, Ukraine Poland, Germany

Similar to mackerel, exports of herring are normally further processed for canning products, smoked products or for speciality deli products such as salads or produced in jars as in the case of the German market. The lower value whole frozen formats are sold on the open market in Africa as fresh product or used for smoking in Eastern Europe.

Aside from herring and mackerel, horse mackerel is the other main commodity bulk export but is only graded in Ireland for sale either to Japan or Africa depending on the size and fat content. All fish is frozen in 20kg format with Japan taking only fish in 140-240gms size range and the remainder going to mainly Egypt and Nigeria. Sizes in recent years have been too small for the Japanese market with exports dropping from 15,000 to 5,000 tonnes to Japan in the last ten years. The balance of the catch is regarded as a low value fish and would not offer opportunities for further processing in Ireland.

In conclusion, the bulk seafood category can be summarised as follows:

- Bulk seafood accounts for 58% of total available national supply and is dominated by the pelagic sector, namely, mackerel, herring and horse mackerel.
- The category is entirely export focused in commodity channels of distribution and with the geographical profile of markets differing from the fresh/live and prepared seafood categories and with a dependence on third countries including Africa and the Far East.

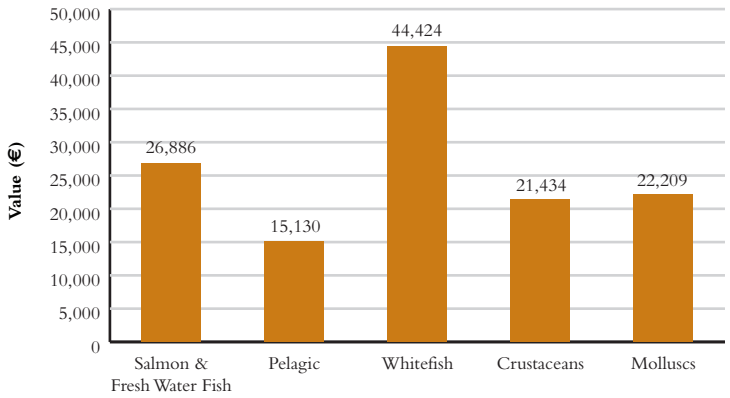
- Volume, size and fat content are the key price drivers and determinant of export destination for the pelagic sector.
- Sales are entirely through intermediary channels, predominantly large manufacturers of finished products for sale at retail level.
- The level of processing undertaken in Ireland and the range of product formats produced is dictated by the requirements of these manufacturers in addition to competitor activity.
- The pelagic sector is therefore highly dependent on available supply, market prices and the fluctuation of competition as is evident currently in the market downturn for mackerel.
- Critical issues to be examined include the possibility of securing niche markets for the larger sized mackerel, which accounts for 35-40% of the total catch in addition to investigating the potential for higher added-value production in herring and particularly mackerel for sale directly at retail or foodservice level.

Fresh/Live Seafood Category

Sales of fresh and live seafood at export level amounted to €130 million in 2005, accounting for almost 37% of total seafood exports. In volume terms however, the category only accounted for just over 27% of all seafood exported at 54,881 tonnes, demonstrating the higher value of the species/products within this category in comparison to bulk seafood exports. In addition, a further €28 million was sold on the domestic market, comprised of mainly whole and filleted fresh fish.

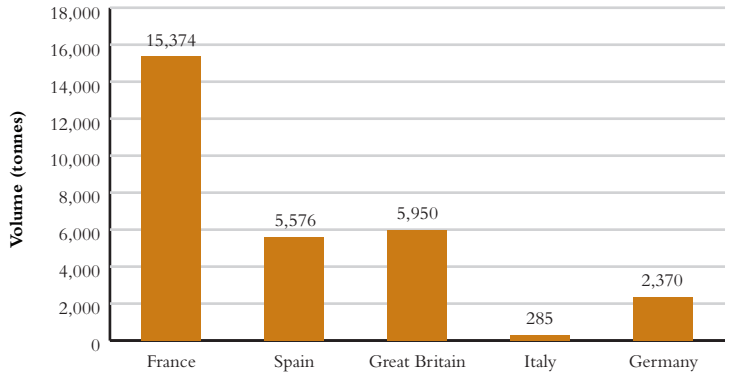
Appendix figure 4.2 details the breakdown of this category into product groups and shows that farmed salmon, whitefish, crab, prawns/shrimp and mussels account for the main output within the category.

Appendix figure 4.2
Fresh/Live Category Breakdown by Product Group 2005



In examining the market profile for this category, sales are predominantly to core EU markets with France, Spain, the UK and Germany accounting for the majority of exports. This is demonstrated clearly in Appendix figure 4.3 below.

Appendix figure 4.3
Breakdown By Volume of Key Export Markets for Fresh/Live Seafood 2005



In understanding the supply chain, the channels of distribution and market profile within this category, it is important to differentiate between fresh and live seafood.

Fresh Seafood

Sales of whitefish valued at €44.4 million and farmed salmon valued at €27 million account for 55% of total sales within the fresh/live seafood category. Exports of whitefish are concentrated in the Spanish market, which accounts for almost €24 million of all whitefish exported. Sales to Spain can be divided into two main areas for whitefish depending on the level of handling that occurs before sale with a similar pattern across all export markets.

Firstly, an estimated 50% of exports are sold directly in boxes/bins from the boats and do not undergo any handling, grading or packing before reaching the market. The fish is normally sold at auction or by an intermediary, normally an agent, who sells on a commission basis on behalf of the co-op or vessel. In recent months, there have been problems relating to the lack of required documentation for transport of fish in this format, particularly in France, where fish is en route for the Spanish market. Controls are being enforced more rigorously to comply with EU regulations (2847/1993), which require fish to be accompanied by sales notes or proof of sale if the fish has been sold or landing declarations, take-over declarations and specific transport documents in the case of unsold fish.

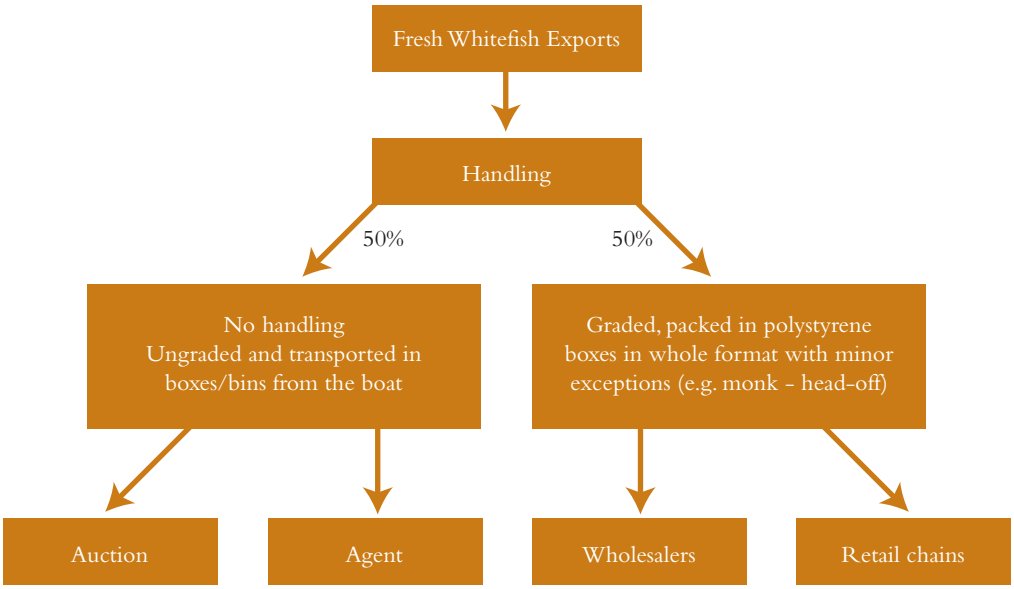
Due to the fact that the sale is within the control of the auction, wholesale buyer or agent, there is little influence over the price by the co-op or vessel who essentially is a price-taker in this situation. The price achieved is subject to market fluctuations with Irish whitefish commanding a lower price than the average national price for whitefish in the Spanish market.

A further 50% of whitefish output is sent graded and packed in polystyrene boxes and sold mainly to wholesalers or in a small number of cases directly to retail chains. Most species are packed in whole format, with the exception of monk sold in headed format and are further processed by the wholesaler in the market. This is also true in the case of the domestic market, where there are a substantial number of small wholesalers and distributors engaged in whitefish sales.

As the share of the retail sector grows in Europe, particularly in the Spanish market, the demand for filleted fish, tails and smaller formats is growing with potential for Irish co-ops to review their current dependence on wholesalers to target the end customer directly. Logistics is an important consideration in this respect and it is necessary to look at the potential for consolidating efforts within the co-op sector to make this a more feasible route to market.

The supply chain for whitefish exports is illustrated clearly in Appendix figure 4.4.

Appendix figure 4.4
Supply Chain for Whitefish Exports



The supply chain for farmed salmon is very different to whitefish with France and Germany accounting for 73% of total exports. While there are a percentage of exports directly to retail and catering level, the majority of product is targeted directly at the wholesale sector to large smoking operations, who recognise and value the quality of Irish farmed salmon. Recent years however, have seen a substantial decline in output available to the market, which will make it difficult for Irish salmon to recover lost share in the future. However, strategies to differentiate the product from that of competitors are working with organic status, Label Rouge accreditation and the Quality Seafood mark all assisting in retaining Ireland's identity as a premium supplier in the market.

The other significant fresh species sold is prawns and shrimp, which accounted for over €5.5 million in exports in 2005 within the fresh seafood category. Mainly sold at wholesale level, the sales are small in comparison to the sales of frozen formats, which tend to dominate the market, particularly in Spain. Also, the market for fresh product in recent years, particularly in France, is seeing a decline in the demand for fresh product over cooked fresh prawns, which are sold on the wetfish counter at retail level. Equally, the demand for live product continues to grow but is highly competitive particularly from Scottish companies and has not been captured to date by Irish companies due to logistical issues.

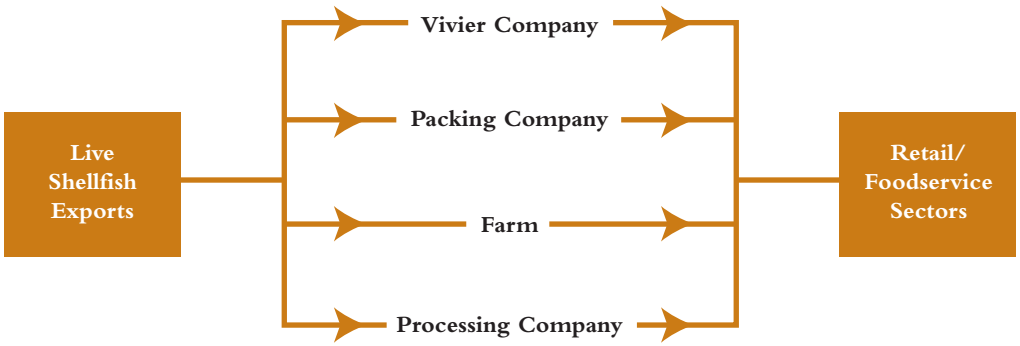
Live Seafood

Exports of live seafood include mainly crab, lobsters, oysters and mussels. Over 3,640 tonnes of crab were exported live in 2005 to France by vivier trucks. The main buyers are mainly vivier companies located in Brittany who hold the crab for up to seven days before packing and delivering to the retail and wholesale markets. Given the concentrated nature of the vivier buyers in France, the Irish crab sector lacks a consolidated structure and is therefore, vulnerable in price negotiations, particularly during peak times of the year when landings are in excess of market demand.

In the case of mussel exports, approximately 80% of bottom mussels are sold in bulk format with France accounting for over 50% of the total exports. The main customers are packing companies, who re-immerse and purify before packing the mussels in 15kg jute bags or 1.4-2kg MAP trays for the retail and foodservice sectors. In contrast, 80% of rope mussel production is sold to Irish processing operations specialising in the production of value-added mussel products. The difficulty in the current supply chain practices at export level is again the vulnerability and reliance on the intermediaries and also the fact that the product loses its identity and Irish origin as it moves through the supply chain. Dutch packing companies for example, have in recent years increased their purchases of Irish bottom mussels to supply the Belgian and French markets, with the product packed and labelled as 'Atlantic North East'.

The same situation is true in the case of oysters, which are again mainly exported to France with the key buyers being mainly oyster farms/wholesalers, wishing to complement their own production or packing companies requiring additional raw material. While there is clearly a necessity for intermediaries in the required depuration of raw material, there is also a huge dependence on this channel of distribution with little or no focus placed on packing and selling direct to the end market. The supply chain for live seafood exports is summarised in Appendix figure 4.5.

Appendix figure 4.5
Supply Chain for Live Shellfish Exports



In conclusion, the fresh/live seafood category can be summarised as follows:

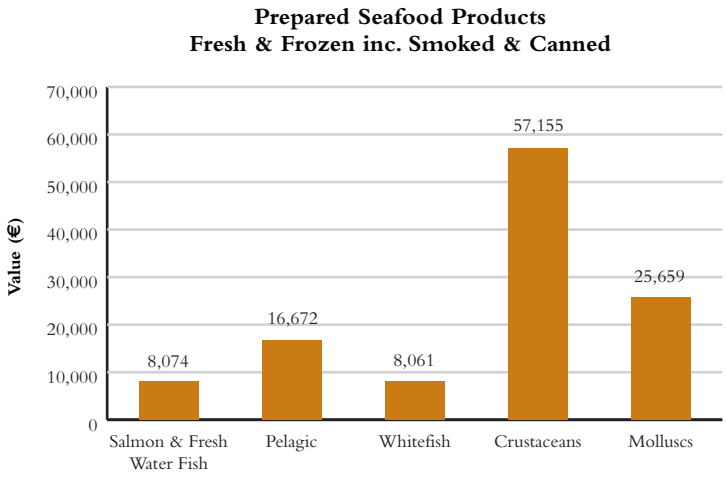
- Fresh and live seafood accounts for 37% of the total value of seafood exports at €130 million but only 27% of total volumes exported in contrast to the bulk seafood category.
- The main product groups within the category include fresh whitefish, salmon and prawns/shrimp in addition to live crab, lobsters, mussels and oysters, which all have unique channels of distribution despite being concentrated in core EU markets, particularly France and Spain.
- The key issue for whitefish, the largest product group within the category, valued at over €44 million is the fact that 50% of exports are sent in an ungraded format with no handling prior to sale at auction or by the agent. The fish is only sold when it reaches the market, which causes difficulties in the transparency of the sales process and limits the control and influence over the price achieved.
- Equally, whitefish, which is graded and packed, is mainly sold in whole format with the local wholesaler at market level further processing the fish for sale at retail or foodservice level. Opportunities to grade, pack and process the fish prior to sale need to be investigated to support the achievement of the highest possible returns to fishermen.
- Sales of live seafood are dominated by crab, lobsters, mussels and oysters, which are mainly sold through intermediaries with heavy reliance on the French market. The product is normally packed and distributed by the intermediary and in this process, the identity and Irish origin is usually lost.
- While intermediaries are recognised as playing an important role in the shellfish business, the potential to sell direct to the end market and establish recognition and identity for Irish shellfish needs to be explored.

Prepared Seafood Category

Prepared seafood includes all fresh and frozen value-added seafood in addition to smoked and canned products. Sales of prepared seafood in 2005 amounted to €116 million at export level. A further €283 million was sold within the domestic market, which has grown in importance for Irish processors as a market for the development and launch of new products. However, a significant proportion of these domestic sales can be attributed to frozen and canned products, which are heavily reliant on imports and also sold through large wholesale food distributors rather than directly by the seafood sector.

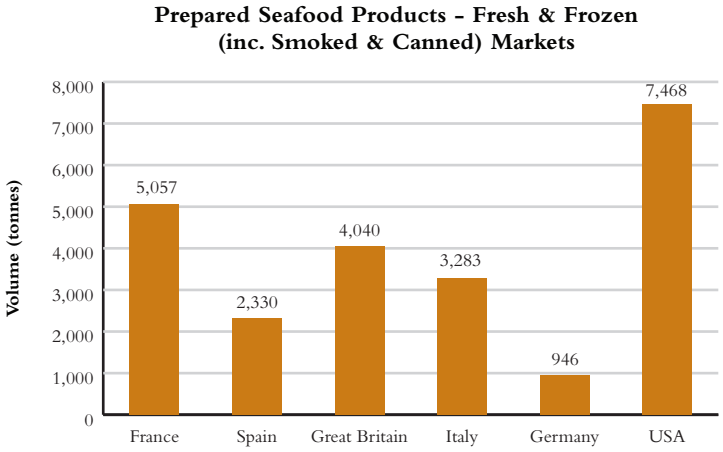
At export level, the volume of prepared seafood accounted for only 14% of all seafood exported (27,625 tonnes) which illustrates the higher unit value achieved for all fish sold within this category - €4,180 average per tonne in comparison to €933 for bulk exports and €2,370 for fresh/live exports. Appendix figure 4.6 below shows the breakdown of prepared seafood exports into product groups and shows that shellfish accounts for almost €83 million or 72% of the seafood within this category.

Appendix figure 4.6
Breakdown By Value of Prepared Seafood Products 2005



In reviewing the market profile for prepared seafood, exports are again mainly concentrated in the core European markets with the noteworthy exception of sales to the US, which accounts for over €7.5 million in exports. As Appendix figure 4.7 illustrates, France, UK and Italy are currently the key EU export destinations.

Appendix figure 4.7
Prepared Seafood Key Market Profile 2005



The supply chain for prepared seafood is more integrated than that for bulk or fresh/live seafood with less dependence on intermediaries. Aside from small sales within the fresh seafood category, prepared seafood is the only category with a substantial proportion of sales direct to the end market to major retail and foodservice groups.

Appendix table 4.4 below illustrates the main products being produced within each product group currently.

Appendix table 4.4
Prepared Seafood – Formats & Key Market Profile

Product Group	Product Formats - Chilled & Frozen	Market Profile
Salmon & Freshwater Fish	Pre-packed Fillets/Darnes Smoked	France, UK, Ireland France, Italy, Germany, UK
Pelagic	Prepared/Preserved Smoked Whole/Headed/Pieces – Dried/Salted/Brine	France, Japan, Denmark Germany, UK, Ireland Germany, UK
Whitefish	Packed	UK
Crustaceans	Packed Prepared/Preserved	Spain, Italy, UK, France Spain, Italy, UK, France
Molluscs	Prepared/Preserved	France, UK, Italy, US, Netherlands

Given the importance of shellfish within the category, it is important to understand the breakdown of products and species for both crustaceans and molluscs.

Shellfish Products

Total exports of crustaceans, consisting mainly of crab, shrimp and Dublin Bay prawns amounted to €57.1 million in 2005.

Appendix table 4.5
Breakdown of Crustacean Exports 2005

Crustaceans	Value (€m) 2005
Crab	12,560
Dublin Bay Prawns	24,029
Shrimp	16,750
Other Crustaceans	3,816
Total Crustacean Exports	**57,155**

Crab is traditionally produced in pasteurised and frozen whole formats but more recently, prepared frozen products have been developed to target the growth in demand within the prepared/dressed crab segment. Sales are either direct to retail and foodservice groups or through a distributor/wholesaler and are mainly concentrated in France and Spain. Recent years have seen a growth in imitation chilled product, particularly with the need for further innovation to develop new product concepts.

In the case of prawns/shrimp, product is produced according to market requirements. For the Spanish and Italian markets, product can be exported whole frozen, packed in polystyrene boxes (1.5kg) for the foodservice sector or in 1kg trays (800gm net weight) for sale at retail level. Prawn tails are normally packed in 1kg bags (60/80kg) while small prawns are graded by Spanish processors (60/70kg) to produce "paella" type products. More recently, sales of frozen-onboard prawns have commenced to Spain with trials of cooked live frozen onboard prawns currently being explored. While Irish prawns/shrimp have a strong presence in both Spain and Italy, the identity of the product as Irish is weak as distributors repack the product with their own label when delivering to the retail sector.

Sales of molluscs are predominantly focused on mussel products, which account for almost €18 million or 68% of total exports. Mussels are produced in chilled and frozen formats in a range of sauces in addition to developments more recently of ready meals with mussels as a key ingredient. Exports are concentrated in four key markets as illustrated below.

Appendix table 4.6
Breakdown of Prepared Mussels Products By Market 2005

Market	Value (€m)
France	4.8
UK	3.5
Italy	2
US	7.4

The US has developed as an important market for mussels, developed by the leading mussel processing company in Ireland. Competition in Europe is intense with pressure from growing imported product from Chile with distinct price advantages. Product is mainly targeted at the foodservice sector to a small number of major groups with little presence at retail level. The identity of the product is lost within the foodservice sector and has been identified as a major weakness in the supply chain with efforts commenced in 2006 to enhance awareness of Irish product through the Quality Seafood Programme, particularly in the French market.

At retail level where product is branded, the identity is strengthened as is the case of other products including smoked salmon and crab. The image and quality associated with these products is enhanced through the visual imagery on the packs but it is evident across all retail products currently on sale, that a significant level of improvement is required in the overall presentation, labelling, branding and promotion of these products. In addition, the issue of growth in private label products at retail level poses issues for Irish processors in strengthening their own position in the long-term without a visual presence at shelf level.

In conclusion, the prepared seafood category can be summarised as follows:

- Prepared seafood accounts for almost 33% of total seafood exports at €116 million in 2005. In comparison to both bulk and fresh/live seafood categories, prepared seafood only accounts for 14% of the total volume exported illustrating the higher unit value achieved.
- The domestic market accounts for a further €283 million in prepared seafood and has become a priority market for the development and launch of new products. However, a significant percentage of sales are focused on frozen and canned products and are sold through wholesale food distributors rather than directly by the seafood sector.
- Shellfish accounts for €83 million or 72% of all prepared seafood exports and is largely comprised of crab, prawn/shrimp and mussel products which will require further innovation and development of new product concepts to compete effectively in the future.
- The supply chain is more integrated for sales of prepared seafood but there are still a number of weaknesses particularly in relation to the identity and image of products at market level.
- Across all product groups, the identity and origin of the product is not evident for product supplied to wholesale, distributor and foodservice groups.
- Products on sale at retail level require significant improvement in presentation, packaging, labelling, branding and promotion in order to remain competitive for the future, particularly in light of the growth of private label.