



Australian Government

THE FISHERIES  
**RESEARCH**  
AND DEVELOPMENT  
CORPORATION



**Annual Operational Plan**

2007-08

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**Australian Government**

**Fisheries Research and  
Development Corporation**

# Annual Operational Plan

**2007–08**

## About the FRDC

The FRDC is one of a number of rural research and development corporations. The FRDC is co-funded by its stakeholders, the Australian Government and the fishing industry.

The Corporation invests strategically across all of Australia in research and development (R&D) activities that benefit all three sectors of the fishing industry — commercial (wild catch and aquaculture), recreational and indigenous. The FRDC's vision is for Australia's fishing industry to be both sustainably managed and profitable.

The FRDC aims to work with partners to disseminate R&D results and assist with its adoption and, when appropriate, commercialisation.

Strategic directions are set with key stakeholders and then partner organisations are directly engaged from all over Australia to undertake its R&D activities.

This innovative approach to investment provides the FRDC a great deal of flexibility, while at the same time enabling us to work as a virtual organisation many times its size.

The seafood industry is Australia's fifth most valuable food-based primary industry with a landed value of more than \$2 billion a year. In addition more than 3.4 million Australians recreationally fish each year spending an additional \$1.8 billion a year. For indigenous communities the fishing industry not only provides avenues for income but also plays a significant role in their culture and subsistence.

Fish are a valuable, community-owned, renewable resource. They are, however, limited and vulnerable. Therefore, it is important they are managed using the best information available.

The Corporation and its partners are striving to ensure that fisheries ecosystems are used in a sustainable way so that future generations benefit.

Not only does FRDC's R&D aim to ensure the sustainability of Australia's natural resources. It also aims to raise awareness of key fisheries-related issues such as industry development, the social and economic impacts on fishing communities, and the health benefits of seafood.

The business environment in which the FRDC operates is characterised by:

- the need for effective stewardship to ensure best use of Australia's resources;
- a high emphasis on natural resource management;
- specific priorities of the three sectors of the seafood industry;
- geographic diversity — Australia's waters extend from the tropics to the Antarctic, and include both marine and freshwater;
- a broad range of products, including 800+ commercial species, 1000+ recreational species and 100+ farmed species, with a further 100+ protected species.

### The five strategic challenges

Planning, managing and reporting of R&D program activities articulates to the objects of the PIERD Act 1989. This results in three programs which are further described under five strategic challenges specified in the R&D plan — the factors that, during the next 20 years, will be the most important for the economic, environmental and social resources of the three main sectors of the fishing industry and for the Australian community. Focusing directly on these strategic challenges (below) ensures that the Corporation addresses the most important factors in the business environment and focuses R&D on outcomes rather than on inputs.

1. Natural resources sustainability
2. Resource access and resource allocation
3. Responses to demand; profitability
4. People development

## 5. Community and consumer support.

# The year ahead

## The business environment

Global and national competition for consumer consumption of seafood continues to increase. The Australian commercial industry's capacity to compete has been affected by increased costs associated with inputs (eg fuel, fish meal etc), strong Australian dollar and rising regulatory costs; both financial and loss of access to resource. Response by the commercial industry has been varied, and reflects both their industry organisational structures and their investment in R&D.

For commonwealth fisheries, the Australian Government's \$220 million *Securing our Future Fishing Initiative* will result in significant improvements in profitability for operators in those fisheries that participated in the buy back program. This should lead to improved conditions for adopting R&D that has an industry development focus for commonwealth fisheries.

Both abalone and rock lobster fisheries are implementing a range of industry led developments to increase profit. In both these fisheries, this has involved considerable R&D investment in alternative supply chain models. Both wild catch and aquaculture prawn industries are working within their sectors to identify supply chain costs or opportunities to better position their product. The tuna industry has both profited from increased prices for southern bluefin tuna and finding alternative tuna species (eg albacore) that can sustain fishing. The R&D investment by the SBT industry in residue values has provided a significant point of difference for key markets like Japan in comparison to their competition from northern hemisphere caught bluefins. Alliances developed in the maxima pearling industry are being established to better utilise capital and individual company strengths. Production costs for maxima pearls will decrease as will variability in product quality as a result of increased R&D expenditure.

Inshore marine scale fisheries will require an ongoing investment to respond to allocation within the sector and between other uses eg marine parks, tourism. Habitat loss in juvenile recruitment areas needs to be better understood, and knowledge provided to improve natural resource management in these critical areas.

Aquaculture industries are profiting from their R&D investment and industry consolidation. The top 7 aquaculture industries; SBT, maxima pearls, edible oysters, prawns, Atlantic salmon, barramundi and mussels; have strategies in place to increase their profitability and take advantage of the increased demand for seafood.

The new Seafood CRC, in which FRDC has an indicative investment of \$9.3M over 7 years that will be matched by industry, is targeting significant improvements in supply chain value, increased production and improved profitability for the participants. This includes the developing yellowtail kingfish industry and developments in inland saline aquaculture as a new platform for aquaculture production. Importantly the investment reflects the consumer as a stakeholder in the fishing industry.

The major cloud on the horizon for aquaculture industries is the instability in world fishmeal prices and maintaining bio-security.

The industry figures released this year for seafood production value in 2005-06 increased from \$2.089 million to \$2.138 million, an increase of 2%. It is difficult to predict the commercial value for 06-07 and 08-09 as it is very dependent on how industry will adapt to the high exchange rates and fuel prices. FRDC is expecting that the commercial value will increase above the 2005-06 value for 2006-07, and remain near this level for 07-08. Forward estimates after that is difficult to predict given the economic dependence of the industry on currency fluctuations.

The commercial sector has increased its partnership with FRDC and the Australian Government by increasing its support for the voluntary contributions to FRDC. This is testament to the positive benefits that are accruing to industry from their R&D investment.

Recfish Australia is providing strong leadership in developing a more professional approach to developing this sector. The emphasis on capacity building in the recreational sector should address a key constraint in this sectors ability to develop and optimise its usage. The Australian Government Recreational Community Grants program has provided the catalyst to develop both capacity and on-ground infrastructure to improve fishing experience. The industry has revamped its approach to R&D planning and with FRDC's assistance is targeting key opportunities for R&D. The new model is predicated on ensuring users or R&D take the lead in R&D investment and managing project activities. This has been shown to significantly increase adoption of R&D outputs leading to positive outcomes for industry. This model also increases the buy on from the recreational sector to contribute to R&D.

Establishing a framework for investing in indigenous R&D is an on-going process. The lack of a national approach has resulted in an individual project approach to R&D investment. The principles developed for indigenous fishing have provided a focus for R&D investment. FRDC is investing in R&D that identifies the scope of customary fishing. Through developing indigenous fishing expertise on the Fisheries Research Advisory Boards, a greater emphasis on indigenous fishing issues should result in increasing R&D investment.

The Agriculture and Food Policy Reference Group in *Creating Our Future: Agriculture and food policy for the next generation* (the Corish Report) identified the need for greater collaboration between the RDCs. The CEOs of the RDCs have identified six areas as having priority for co-investment:

- 1) climate change and variability (Land and Water Australia lead agent);
- 2) people and capacity building (Cooperative Venture for Capacity Building – RIRDC)
- 3) water management (Land and Water Australia)
- 4) trade
- 5) energy
- 6) biosecurity and food safety

The first three are already covered by collaborative arrangements. In a recent meeting between the RDCs, consensus was reached to develop terms of reference for consultants to explore the areas of trade and energy with a view to developing an R&D prospectus for each of them. Bio-security will also be processed, but at a slower pace, and after another round of consultation.

The Australian Seafood Industry Council (ASIC) went into voluntary administration in June 2006. The demise of ASIC has had significant repercussions for FRDC as it was one of two representative bodies, the other being Recfish Australia, and was the joint member in the Seafood Services Australia (SSA). FRDC has put in place alternative processes to seek national commercial seafood industry view on R&D investment. At the core of this process is recognition of existing fishery sector representative bodies. This approach provides poor national advice. Attempts are underway to develop a new national representative body. FRDC has informed industry that it is willing to provide assistance, but will not take a leadership role in this process. SSA has developed a strategy for increasing its membership.

## **Government Coordination and Collaboration**

The FRDC will work with the Minister and the Department of Agriculture Fisheries and Forestry (the department) to implement the recommendations from the Uhrig Review undertaken in 2006, by responding to the government's statement of expectation as delivered by the Parliamentary Secretary to the Minister for Agriculture, Fisheries and Forestry, the Hon. Sussan Ley on 1 March 2007.

## **Key Result Areas for 2007-08**

In 2007-08 it is important that FRDC's capacity to deliver is not spread too thinly resulting in under achievement. The emphasis will be to deliver on the initiatives developed by the board in 2006-07 and implement improved outcome delivery to beneficiaries. This will require FRDC to listen and partner stakeholders to ensure adoption from this investment.

To ensure the FRDC meets stakeholder needs and improves the speed of output delivery the FRDC is changing the way it invests in applications. This will include a move away from 100% of funds going through a contestable annual round, to a mixture of funding mechanisms that is more flexible and better tailored to the beneficiary needs and planned outcomes.

A key area of focus for FRDC in 2007-08 will be the implementation of the recommendations that arose from a review of its current investment in people development. As part of this undertaking the FRDC will extend its investment in this area, including working collaboratively with the other Research and Development Corporations (RDCs). To facilitate the implementation the FRDC has employed a new people development projects manager. Further, this AOP has proposed increasing the investment in Program 3 – People Development from 5% to 10%.

This AOP allocates additional funds for a major upgrade of FRDC's database systems. Currently, FRDC has two systems; an internal system, FishBase, utilising an access/SQL system and a WEB based portal called FishNet. The upgrade will develop a common platform for both systems. The new system will provide FRDC's partners greater access to FRDC's systems, move the transaction cost of program management closer to the applicant and avoid duplication, improve reporting and allow FRDC greater flexibility for managing other funding sources. In addition the new platform will allow for greater efficiency. It will also provide the opportunity to access data in ways that will allow for greater analysis of benefit cost and reporting against key performance indicators the outcome.

In the last year FRDC has signed an agreement to deliver program management services through its database systems for the Australian Fisheries Management Authority. FRDC is currently negotiating with Australian Pork Limited and the Pig CRC to provide similar services. The new developments will expand FRDC's capacity to deliver these systems, including for the new Seafood CRC. Concentrating Australia's fishing industry R&D investment through one system will deliver significant efficiency gains and better target industry outcomes.

A key component of the new IT upgrade will be functionality to improve performance reporting. FRDC has adopted a new whole of investment framework for performance reporting. This articulates to the developments being collaboratively invested in by the other RDCs.

Early in 2008 the FRDC will undertake its bi-annual stakeholder workshop. The 2008 workshop, in addition to addressing the key area of research prioritisation, will look at the key performance indicators for each of the five strategic challenges and make recommendations to the FRDC on refining or changing them to better align both government and industry needs. The recommendations will be used to ensure the FRDC's key planning document, the Research and Development Plan 2005-2010 delivers outcomes that will make a difference. Any update will be sent to the Parliamentary Secretary to the Minister for Agriculture, Fisheries and Forestry for approval.

# Annual Operational Plan 2007-08 budget

	\$	\$
<b>REVENUE</b>		
Australian Government 0.5% AGVP	10,689,850	
Australian Government matching of industry contributions	5,344,925	
<b>Total revenues from the Australian Government</b>		<b>16,034,775</b>
<b>Contributions revenue</b>		
Fisheries managed by:		
Australian Government	1,491,267	
ACT	0	
NSW	490,599	
NT	197,000	
QLD	640,000	
SA	1,647,536	
Tas	796,000	
Vic	250,000	
WA	1,651,160	
<b>Sub-total</b>	<b>7,163,562</b>	
Aquafin CRC	2,500,000	
Seafood CRC	4,000,000	
Other project income	750,000	
<b>Total contributions revenue</b>		<b>14,413,562</b>
Interest		250,000
Sales of goods and services		40,000
Other income		5,000
<b>TOTAL REVENUE</b>		<b>30,743,337</b>
<b>EXPENDITURE</b>		
<b>Projects expenditure</b>		
Natural resources sustainability	13,200,000	
Industry development	11,550,000	
People development	2,750,000	
<b>Total programs</b>		<b>27,500,000</b>
<b>Communications</b>		
Other goods and services expense		615,000
<b>Programs support</b>		
Employees		1,440,000
Suppliers		730,000
Depreciation and amortisation		451,000
Net write down of assets		0
Other expenses		0
<b>Total Programs support</b>		<b>2,621,000</b>
<b>TOTAL EXPENDITURE</b>		<b>30,736,000</b>



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# PART A: INTRODUCTION

## Requirement for an annual operational plan

Section 25 of the *Primary Industries and Energy Research and Development Act 1989* ("PIERD Act"), under which the Fisheries Research and Development Corporation (FRDC) is established, requires that an annual operational plan (AOP) be prepared for each financial year.

This AOP gives effect to the FRDC's R&D Plan (*Investing for Tomorrow's Fish: the FRDC's Research and Development Plan 2005 to 2010*) for the financial year 2007–08, under which all activities for the year will be funded. It is based on the FRDC's capacity to fund new and continuing projects to the value of \$26 million. The AOP takes into account the Australian Government's and other stakeholders' R&D priorities.

## Structure of this plan

Pages in  
this AOP

In accordance with sub-section 25 (2) of the PIERD Act, this plan:

- |   |       |
|---|-------|
| • specifies the broad groupings of R&D activities that the FRDC proposes to fund, wholly or partly, during 2007–08;                   | 19-27 |
| • describes how and to what extent funding those activities will give effect to the R&D plan in force during that financial year; and | 19-27 |
| • in particular, pursues the strategies outlined in the R&D plan and helps to achieve the planned outcome described in the R&D plan.  | 19-27 |

The plan also provides an estimate of:

- |  |   |
|--|---|
| • the total amounts likely to be spent by the FRDC in respect of each broad grouping of R&D activities the Corporation proposes to fund during the financial year; | 6 |
| • the total of all other amounts likely to be spent during the financial year; and   | 6 |
| • the total of all income other than that paid to the FRDC by the Australian Government.   | 6 |

*Note: The above points are an edited version of sub-section 25 (2) of the PIERD Act.*

Since figures presented in the body of this plan have been rounded, totals may not always agree.

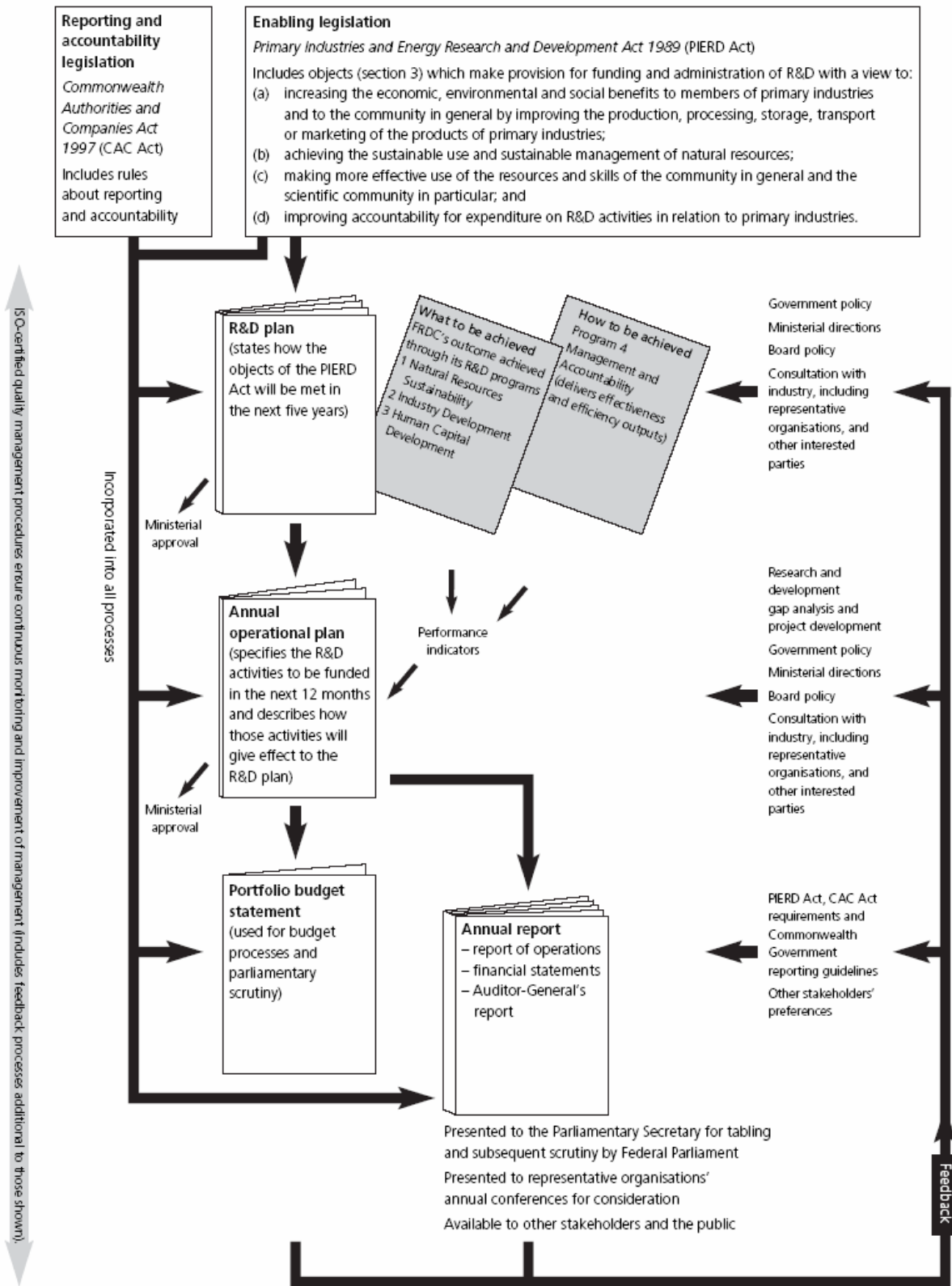
## Planning, operating and reporting framework

The key processes in the FRDC's planning, operating and reporting framework are outlined in figure 1, overleaf.

This annual operational plan is consistent with the outcome, outputs and performance measures specified in the 2007–08 portfolio budget statements.

The FRDC will report on its achievement of the outcome specified in this AOP in its 2007–08 annual report, taking account of all reporting requirements existing at the time.

Figure 1: Key processes in the FRDC’s planning, operating and reporting framework



## **PART B: STRATEGIC ELEMENTS INVOLVED IN ACHIEVING AN OUTCOME AND OUTPUTS DURING 2006–07**

## The three visions of the Fisheries Research and Development Corporation

### For the industry

The commercial sector is internationally competitive and profitable over the long term. The commercial, recreational and indigenous sectors use aquatic resources in a sustainable way; are characterised by a learning culture; and are forward-looking, innovative, professional and socially resilient.

### For the community

Consumers and the community are supportive of the fishing industry and the natural resources on which the industry depends.

### For fisheries research

Fisheries and aquaculture research is innovative and responsive to the needs of the Australian community, the fishing industry, and the aquatic ecosystems on which they depend.

## The Corporation’s mission

The FRDC’s mission is to maximise economic, environmental and social benefits for its stakeholders through effective investment and partnership in research and development.

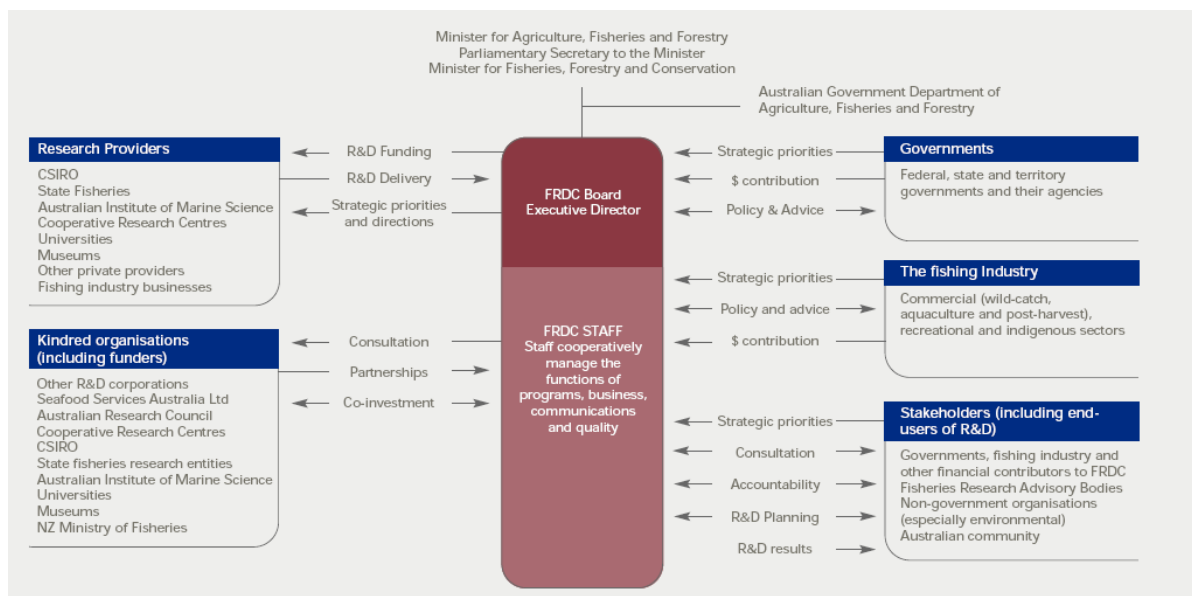
## The planned outcome for the corporation

The natural resources on which the fishing industry (commercial, indigenous and recreational sectors) depends are used sustainably and for the benefit of all stakeholders.

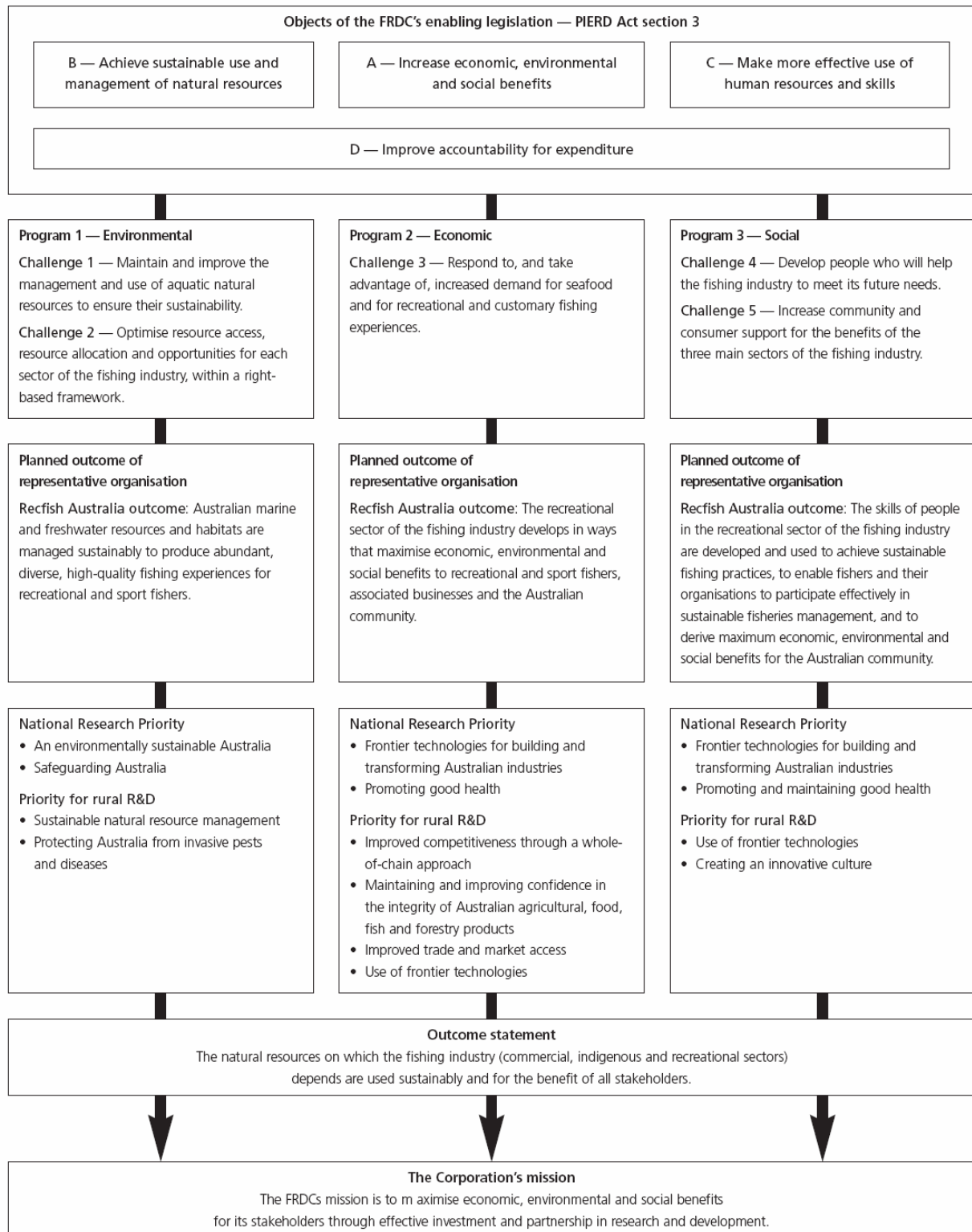
## Stakeholders

Stakeholders in the FRDC are the fishing industry; the federal, state and territory governments; and the people of Australia.

Figure 2: FRDC Stakeholders



**Figure 3: The FRDC’s framework for integrating legislative, government and industry priorities**



## Integration of the planned outcome with legislative, government and industry priorities

The FRDC's objects, deriving from section 3 of the PIERD Act, are incorporated in the FRDC's visions, mission and planned outcomes. As reflected in figure 3 on page 13 the FRDC's three R&D programs mirror the industry development, natural resources sustainability and people development themes of sub-sections 3(a), (b) and (c) of the Act. This alignment has brought simplicity and robustness to the Corporation's R&D planning, implementation and reporting, and that of many of its kindred organisations. It has also facilitated a triple-bottom-line, ecologically sustainable development approach throughout the Corporation's funded activities.

## Australian Government research priorities

In December 2002, the Prime Minister introduced the Australian Government's four National Research Priorities. The rural R&D Priorities complement the National Research Priorities and are a part of a whole-of-government effort to identify and implement broad priorities for science and innovation that will build scale and focus activity in priority areas.

The FRDC is addressing all Government research priorities within the framework of existing R&D programs. The priorities align well to the Corporation's four legislated objects (section 3 of the PIERD Act) as shown in figure 3. In addition as part of the 2006-07 funding round the FRDC implemented changes to its research application process that will allow for easier and more transparent reporting against government research priorities in 2007-08.

The FRDC board assesses its performance against the National and Rural Research Priorities and the priorities developed by industry, the Australian Fisheries Management Forum and the Fisheries Research Advisory Bodies.

## Consultation with representative organisations

Under section 15(2) of the PIERD Act and the Guidelines on Funding of Consultation Costs by Primary Industries and Energy Portfolio Statutory Authorities, the FRDC may meet travel and other expenses incurred in connection with consultation between the Corporation and its representative organisations. The FRDC estimates that it will spend \$10,000 in 2007-08.

The FRDC's planned outcome and programs have been consistent with the planned outcomes of the FRDC's representative organisation — the Australian Recreational and Sport Fishing Industry Confederation Incorporated (trading as Recfish Australia). The relationships between these various elements are shown in figure 3.

## Consultation with levy paying organisations – Australian Prawn Farmers Association

The FRDC administers a research and development levy on behalf of the Australian Prawn Farmers Association (APFA). The FRDC's investments in prawn farming research and development is driven by the APFA's R&D Plan. The FRDC and the APFA enjoy a very close and collaborative working relationship. The table below outlines the financial record of the relationship:

Year	2007-08	2006-07	2005-06	2004-05	2003-04	2002-03
<b>Actual APFA contribution</b>	\$130,000	\$130,000	\$144,884	\$225,249	\$215,341	\$116,013
<b>FRDC expenditure on aquaculture prawn projects</b>	\$324,000	\$214,331	\$837,872	\$227,901	\$653,869	\$584,757

The APFA has been consulted in the development of this R&D Plan. FRDC is investing with APFA in three strategic areas:



- domestication and selective breeding for *Penaeus Monodon*
- development of a marketing plan and promotion levy
- assessing the potential of bacterial flocs to improve pond productivity

## A planned outcome — the focus for R&D programs

In keeping with the Australian Government's budget framework, the FRDC's planning, operating and reporting framework is centred on delivering outputs that help to achieve clearly stated planned outcome. The relationships between the FRDC's inputs, outputs and outcome are shown in figure 4.

One of the advantages of the outcome–outputs system is that the FRDC's efforts are focused not on the goods and services produced by the Corporation and its R&D partners but on actual impacts of those goods and services in the economic, environmental and social contexts in which the Corporation operates. In essence, the FRDC's planned outcome is based upon things that will make a real difference to Australia's fisheries resources and fishing industry. In turn, a good outcome can only be achieved through good R&D outputs.

The management processes for encouraging the transformation of R&D outputs into outcomes are focused by Program 4, Management and Accountability. The FRDC's concentration on high-priority activities and containment of total program support costs has been aided by state-of-the-art information technology and continual improvement of management processes within a quality management system certified to standard AS/NZS ISO 9001:2000.

## Achievement of the FRDC outcome through R&D outputs

The FRDC's business environment is different from those of other rural R&D corporations and R&D investors. For example there is, uniquely, a very high component of public good in most fisheries R&D. And there is another distinction: although the processes by which R&D outputs are taken up and applied to achieve natural resources outcomes are more diffuse than in most other agricultural industries and fields, in fisheries R&D they are even more diffuse.

The links between an outcome and the R&D inputs and outputs that achieve them are far from direct and linear: they are many and complex. In general, outcomes result when outputs are implemented by the fishing industry, fisheries managers and other end-users of R&D.

The FRDC's focus on delivering on the planned outcome and the high degree of FRDC influence over outputs from R&D projects, the Corporation's investment in R&D is not, of itself, sufficient to ensure that the outcome is achieved. The Corporation is increasing the demands on end-users to commit themselves to using R&D outputs. Quicker, more efficient adoption and commercialisation of R&D outputs has been enabled by new communication technologies and greater involvement of stakeholders throughout the innovation chain, commencing at the planning stage. End-users are frequently taking up appropriate R&D findings while a project is in progress, rather than after the final report is produced.

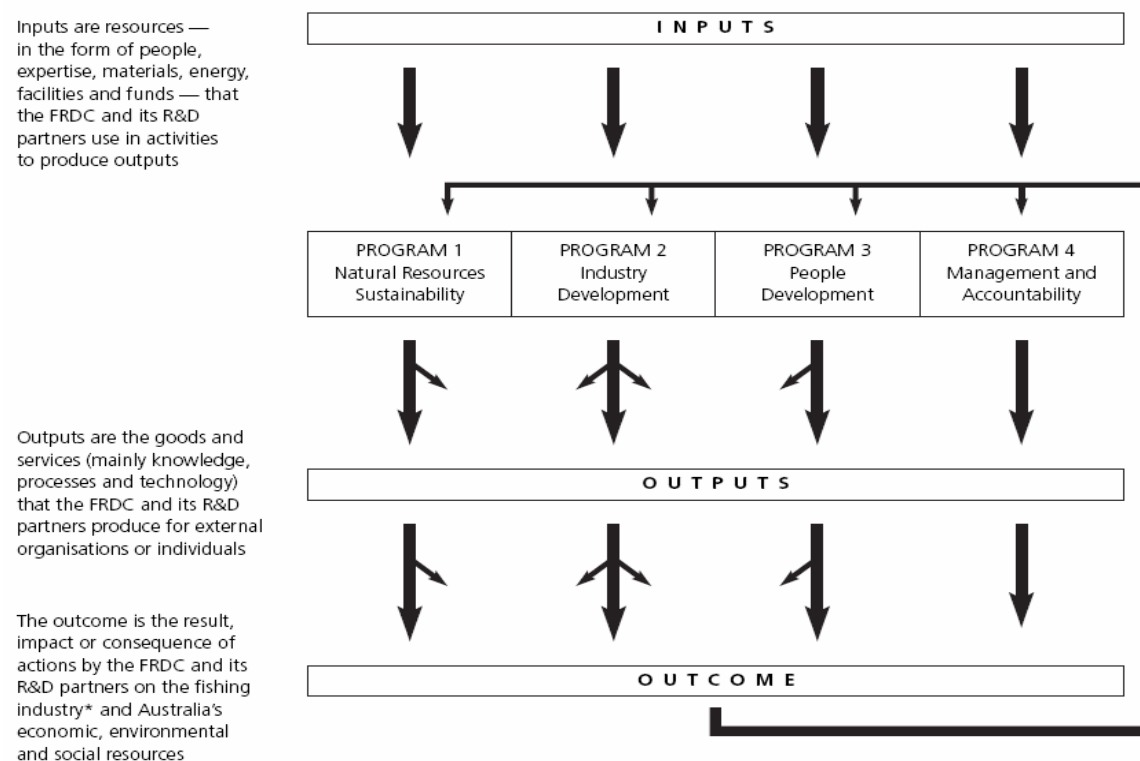
The FRDC is also improving the effectiveness and efficiency of adoption by its investment in its people development program. People are critical to successful adoption, and the FRDC continues to invest in people in the fishing industry with the aim of maximising the achievement of their potential and their positive impact on the industry.

## Identification and measurement of the FRDC outcome

FRDC recognises the importance of reporting on the efficiency with which its research investments are delivered, as well as on their effectiveness. We have a range of industry stakeholders who contribute to R&D and who take a close interest in the efficiency of our performance. We will work with the Department and the other RDCs to develop an approach to measuring efficiency that will be incorporated into our performance measurement framework.

The FRDC's achievements against the planned outcome, together with expenditure targets, are forecast in this annual operational plan and reported in annual reports.

**Figure 4: The FRDC's four programs: inputs, outputs and outcome**



\* The fishing industry comprises commercial, recreational and Indigenous sectors.

## External planning and review of R&D activities

To ensure a balanced portfolio and to comply with directions from the Australian Government and the seafood industry, the Corporation determines the balance between projects funded within the R&D programs. Accordingly, each year as part of preparing the AOP and funding round processes, the Corporation reviews its strategic assessment of the business environment. The review may highlight actual or potential changes to the business environment that prompt the FRDC to adjust the balance — or to address gaps — in the R&D portfolio.

As a result of the FRDC's current strategic assessment of the business environment, the Corporation's funding targets for its R&D programs this year are:

- Program 1 (Natural Resources Sustainability): 48%
- Program 2 (Industry Development): 42%
- Program 3 (People Development): 10%

The People Development target of 10% reflects a doubling from the previous Annual Operational Plan and is indicative of the FRDC's commitment to creating a step change in this area.

Performance indicators for the FRDC planned outcome and outputs for 2007–08 are contained in the following pages. The FRDC's effectiveness in encouraging the transformation of R&D outputs into an outcome is a significant component of Program 4, Management and Accountability.

## Maximising R&D investment through effective management

Historical evidence strongly indicates that there will be slippage in the range of 20% to 30%. However, the quantum of slippage cannot be known in advance, nor can the affected projects be predicted. The FRDC recognises that despite the best intentions, the timeframes for some projects will extend beyond initial estimates for reasons that are often beyond the control of the research provider. This project slippage, which affects the Corporation's cash flow, will continue to be taken into account and the resulting cash flows benefits the board in setting annual R&D expenditure.

The board annually sets a budgetary limit that assumes slippage knowing that:

- historical precedent supports the slippage assumption;
- the cash flows can be managed if the assumed slippage rate proves too high; and
- if the FRDC's funding were to be materially reduced and the unfunded liability could not be covered by ordinary measures, the FRDC contract allows for termination due to insufficient funds without the use of individual compensation. If the FRDC were to terminate a project agreement, it would only be liable to compensate the research provider for reasonable costs in respect of unavoidable loss incurred by the research provider and directly attributable to the termination.

When approving the budget component of the annual operational plan each March, the board contracts to fund projects in future years in advance of receipt of the income needed to fund them. It manages this risk by having the project agreement allow for termination due to insufficient funds or change of Government policy.

## Achieving the FRDC planned outcome

## Program 1 – Natural resources sustainability

### *Australian Government priorities addressed in program 1*

National research priority	FRDC code *	Priority for rural R&D	FRDC code *
An environmentally sustainable Australia	NRP-1	Sustainable natural resource management	RRDP-1
Safeguarding Australia	NRP-2	Protecting Australia from invasive diseases and pests	RRDP-2

\* The Corporation has devised these codes to refer to, and report on, the various Australian Government priorities.

### **Challenge 1: Natural resources sustainability – the challenge is to maintain and improve the management and use of aquatic natural resources to ensure their sustainability.**

#### ***Significant drivers facing industry***

- Fish stocks considered overfished will need to be recovered by implementing appropriate management measures.
- All sectors will be expected to contribute increasingly to the costs of management and research.
- Ecosystem-based fisheries management will require greater understanding of the impacts of commercial, recreational and indigenous fishing.
- Environmental certification will be routinely required for all sectors.
- Policy and strategies will need to address illegal, unregulated and unreported fishing and trading.
- The fishing industry will need to respond to pressure initiated by animal welfare groups.

#### ***Priorities for 2007-08***

- Measure and mitigate the interactions of fishing and non-fishing activities on the aquatic environment and fish stocks.
- Meet the regulatory requirements of natural resource and environmental legislation such as the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) and improve fisheries environmental management performance.
- Develop spatially explicit management models for fish stocks.
- Develop and implement industry-based environmental management systems.
- Improve the environmental performance of catch-and-release practices.

#### ***Expected outputs for 2007-08***

- Investment in research that assists in the development of formal socio-economic assessments for incorporation into fisheries resource allocation processes.
- Investment in R&D on spatial management.
- Investment in R&D that will assist in fisheries becoming self-managed or co-managed.

***Key performance indicators***

- Self-managed or co-managed fisheries governance structures and processes are developed and a minimum of five fisheries brought under self-management.
- 30 per cent reduction in species that are overfished or of an unknown status.
- Increased utilisation of fisheries R&D outputs by fisheries management agencies as evidenced by beneficiary responses for completed projects with management relevance and quantified through monitoring and evaluation frameworks

**Challenge 2: Resource access and resource allocation – the challenge is to optimise resource access, resource allocation and opportunities for each sector of the fishing industry, within a rights-based framework.*****Significant drivers facing industry***

- Allocation of access to fisheries resources between sectors will move away from methods based on historic catch to ones that seek to maximise economic and social returns to both the community and the industry.
- Spatial management, including the declaration of marine protected areas, will be used increasingly to protect biodiversity in ecosystems and preserve representative habitats.
- Demand for better fishing experiences by the recreational sector, and in particular the tourism component, will require greater emphasis on the maintenance and optimum utilisation of fish stocks.
- Demands for resource access to meet environmental and social needs will be increasingly competitive.

***Priorities for 2007-08***

- Develop processes to integrate fisheries management into coastal management.
- Determine the types of environmental, social and economic costs and benefits that arise from different closure systems, and their effectiveness in achieving multiple natural resource management objectives.
- Develop processes to inform and define inter-sector resource allocation.
- Develop methods for adjustment to address re-allocation between the three sectors.
- Develop a better research-based process for defining marine protected areas.

***Expected outputs for 2007-08***

- Investment in R&D that will lead to a reduction in species that are over fished or of an unknown status.
- Increased communication and extension of R&D results with fisheries management agencies.

***Key performance indicators***

- Development of formal socio-economic assessments for incorporation into fisheries resource allocation processes.
- Evidence of improved use of spatial management as a tool for fisheries management.

**Program 1 – Examples of projects to be completed in 2007-08**

Project Id	Project Title	Cost
2004/002	Spatial management of reef fisheries and ecosystems: understanding the importance of movement	\$384,083
2004/019	Towards optimising the spatial scale of abalone fishery management	\$555,407
2004/078	Development and evaluation of community based monitoring programs for coastal ecosystems and fisheries habitats	\$261,442
2005/036	A preliminary study of the dynamics of recreational fishing in the western rock lobster fishery for use in integrated fisheries management	\$33,993
2005/072	Water use across a catchment and effects on estuarine health and productivity	\$374,776
2006/068	Fisheries shared management initiative	\$75,000
2003/019	National Strategy for the Survival of Released Line Caught Fish: investigating survival of fish released in Australia's tropical and subtropical line fisheries	\$679,998
2003/042	Development of a robust suite of stock status indicators for the Southern and Western and the Eastern Tuna and Billfish fisheries	\$402,291
2003/047	Evaluation of methods of obtaining annual catch estimates for individual Victorian bay and inlet recreational fisheries	\$380,064
2004/004	Assessment of the implications of target fishing on black jewfish ( <i>Protonibea diacanthus</i> ) aggregations in the Northern Territory	\$268,056
2004/006	ESD Reporting and Assessment Subprogram: strategic planning, project management and adoption	\$239,419
2004/030	Development of an individual transferable catch quota model for the Coral Reef Fin Fish Fishery of the Great Barrier Reef	\$480,656
2006/073	Social and Economic Working Group	\$30,000

**Program 1 – Examples of projects to be funded in 2007-08**

Project Id	Project Title	Cost
2007/003	Flow and Fisheries: Theme - River flow impacts on estuarine prawns in the Gulf of Carpentaria	\$ 399,925
2007/006	Aquatic Animal Health Subprogram: development of molecular diagnostic procedures for the detection and identification of herpes-like virus of abalone ( <i>Haliotis</i> spp.)	\$ 244,422
2007/016	Development of national guidelines to improve the application of risk-based methods in the scope, implementation and interpretation of stock assessments for data-poor species	\$ 211,017
2007/017	Integrated evaluation of management strategies for tropical multi-species long-line fisheries	\$ 258,009
2007/025	Competition to collaboration: exploring co-management models for the Spencer Gulf prawn fishery	\$ 211,200
2007/032	Defining the stock structure of northern Australia's threadfin salmon species	\$ 368,733
2007/033	Development of a DNA based aging technique for use in fisheries assessments	\$ 414,414
2007/040	Selectivity and bycatch reduction of tiger flathead and eastern school whiting nets in the Danish seine fishery	\$ 271,472
2007/041	Mitigating seal interactions in the SRLF and gillnet sector SESSF in South Australia	\$ 305,821
2007/048	Towards evaluating the socio-economic impacts of changes to Queensland's inshore fishery management	\$ 194,353
2007/052	Improving economic efficiency through detailed review of input controls in the western rocklobster fishery	\$271,200
2007/053	Regional impact assessment for the Moreton Bay Marine Park	\$129,371

## Program 2 – Industry Development

### *Australian Government priorities addressed in program 2*

National research priority	FRDC code	Priority for rural R&D	FRDC code
Promoting and maintaining good health	NRP-3	Improving competitiveness through a whole-of-chain approach	RRDP-3
		Maintaining and improving confidence in the integrity of Australian agricultural, food, fish and forestry products	RRDP-4
		Improved trade and market access	RRDP-5
Frontier technologies for building and transforming Australian industries	NRP-4	Use of frontier technologies	RRDP-6

**Challenge 3: Response to demand; profitability – the challenge is to respond to, and take advantage of, increased demand for seafood and for recreational and customary fishing experiences; and to enhance the profitability of the fishing industry.**

#### *Significant drivers facing industry*

- Supply chain efficiency will need to improve and, for example, eliminate unnecessary handling.
- Traceability will need to be improved through the use of new technologies.
- The fishing industry will need to reduce production costs, such as fuel, through gear, engine and vessel configuration changes.
- Increasingly, aquaculture investment will be based on the demand for seafood, driven by consumer preferences.
- Industry will need to develop and expand on its seafood promotion capabilities to deal with the competition that seafood is facing from other foods on domestic and international market.
- Seafood producers will need to make themselves better informed about ever-changing consumer preferences.
- Industry will need to respond to consumers' concerns about food safety and labelling and their growing interest in all the characteristics of the products they buy.

#### *Priorities for 2007-08*

- Increase the profitability of businesses supporting the three sectors of the fishing industry.
- Develop capacity to produce more fish for consumption or for fishing experiences.
- Develop systems to increase market intelligence.
- Ensure that seafood is safe and of high quality.
- Develop innovative processes for value-adding through product development.
- Develop efficient, market-based supply chains that add value to product.
- Improve fishing practices to increase survival of released fish.



**Expected outputs for 2007-08**

- Invest in market research that provides intelligence on international market places.
- Invest in R&D activities that boost feeding efficiency.
- Integrate into R&D research application cycle the need for industry participation in breeding programs.
- Invest in R&D projects that will underpin or be part of a third party assessment standard.
- Invest in R&D projects that will lead to the establishment of entities that utilise fish waste.

**Key performance indicators**

- At least two companies accessing new markets for domestically produced seafood.
- Establishment of a third-party audited food quality standard for vessels and processors.
- 5 per cent increase in finfish production through improved feeds and feeding practices.
- Establishment of a commercial operation specialising in the utilisation of fish processing waste.
- At least two entities utilising improved stock from selective breeding programs.

**Program 2 – Examples of projects to be completed in 2007-08**

Project	Project Title	Total Cost
2001/248	Aquafin CRC - SBT Aquaculture Subprogram: maximising the control of quality in farmed SBT	\$1,019,381
2001/249	Aquafin CRC - SBT Aquaculture Subprogram: development and commercial evaluation of manufactured diets	\$910,6910
2002/233	Seafood Services Australia Ltd: adding value throughout the seafood supply chain	\$3,860,000
2003/242	Rock Lobster Post Harvest Subprogram: value-adding the southern rock lobster fishery -optimising flesh quality of under-valued large lobsters for the sashimi market	\$287,538
2004/206	Aquafin CRC - SBT Aquaculture Subprogram: management of food safety hazards in farmed Southern Bluefin Tuna to exploit market opportunities	\$753,180
2004/209	Aquafin CRC - SBT Aquaculture Subprogram: application of the use of dietary supplements for improving flesh quality attributes of farmed SBT	\$904,880
2004/218	Aquafin CRC - Atlantic Salmon Aquaculture Subprogram: molecular assessment of resistance to AGD in Atlantic salmon	\$106,048
2004/241	Coordination of inland saline aquaculture R&D in Australia	\$617,047
2005/205	Practical, feasible and low cost genetic selection of <i>P. monodon</i> for increased profitability	\$199,999
2005/209	Industry management and commercialisation plan for the Sydney rock oyster breeding program	\$268,367
2006/216	Development of supply chain, distribution and communication tools to support entry of Australian southern rocklobster into the super-premium-fine-dining sector in the USA	\$560,622
2006/236	Seafood industry market awareness project	\$50,000
2006/401	Seafood industry export information package - direct extension to overseas customers of Australian seafood	\$40,200

**Program 2 – Examples of projects to be funded in 2007-08**

<b>Project Id</b>	<b>Project Title</b>	<b>Cost</b>
2007/200	SESSF Industry Development Subprogram: alternative fuels for fishing vessels	\$ 137,300
2007/216	Develop the non-maxima pearl industry at the Abrolhos Islands (Pinctada Imbricata/fucata)	\$ 444,564
2007/221	Evaluating the Southern Bluefin Tuna gonad cell line as a platform for testing the effectiveness of antioxidants in preserving flesh quality	\$ 353,279
2007/224	Increasing the profitability of Penaeus monodon farms via the use of low water exchange, microbial floc production systems at Australian Prawn Farms and at CSIRO	\$ 225,000
2007/225	Metazoan parasite survey of selected macro-inshore fish of southeastern Australia, including species of commercial importance	\$ 135,752
2007/226	Aquatic Animal Health Subprogram: rapid strain identification of the bacterial fish pathogen streptococcus iniae and development of an effective polyvalent vaccine for Australian barramundi	\$ 321,676
2007/227	Recfishing research: national strategy for recreational fisheries research, development and extension	\$ 298,300
2007/228	Rock Lobster Enhancement and Aquaculture Subprogram: research and outcome management to facilitate coordinated development of rock lobster aquaculture and enhancement systems in Australia	\$ 180,000
2007/230	Aquaculture Nutrition Subprogram: technical review, project management and development services	\$ 75,292
2007/229	Aquafin CRC - Atlantic Salmon Aquaculture Subprogram: facilitation and administration	\$ 75,292

## Program 3 – People development

### *Australian Government priorities addressed in program 3*

National research priority	FRDC code	Priority for rural R&D	FRDC code
Frontier technologies for building and transforming Australian industries	NRP-4	Use of frontier technologies	RRDP-6
Promoting and maintaining good health	NRP-3	Creating an innovative culture	RRDP-7

### **Challenge 4: People development – the challenge is to develop people who will help the fishing industry to meet its future needs.**

#### ***Significant drivers facing industry***

- There is a shortage of industry leaders in all sectors of the fishing industry.
- There is a shortage of opportunities for people in industry to develop skills that are going to directly improve their effectiveness.
- Labour shortages resulting from increased competition from other sectors
- Industry needs to invest in staff retention strategies as there is a high turnover of fisheries management staff, which leads to less informed staff being called upon to make decisions on complex issues.
- The fishing industry will need to learn from other industries that have embraced a knowledge and innovation culture, and seek to profit from new opportunities to grow their businesses.

#### ***Priorities for 2007-08***

- Provide knowledge and processes that help to develop a market-based culture in the industry.
- Develop mechanisms to deliver better adoption of R&D results by industry.
- Enhance industry leadership, for all sectors, through appropriate training.
- Enhance opportunities for information and technology transfer within and between sectors.
- Promote an environment for adoption of business best practice.
- Develop industry champions to bridge the knowledge gap.
- Foster an environment that encourages innovation and R&D adoption.

#### ***Expected outputs for 2007-08***

- Investing in the Australian Rural Leadership Program.
- Investing in research that assist postgraduate students complete their courses.
- Invest in the “Advance in Seafood” Leadership Development Program.

#### ***Key performance indicators***

- Two seafood people to complete the Australian Rural Leadership Program annually.
- Minimum of five postgraduate students complete courses.

- Minimum of ten fishing industry participants attend the “Advance in Seafood” Leadership Development Program.

### **Challenge 5: Community and consumer support – increase community and consumer support for the benefits of the three sectors of the fishing industry.**

#### ***Significant drivers facing industry***

- The community is having a greater say in the use and management of all natural resources. Industry needs to engage with community representatives so that a good understanding of viewpoints can develop.
- The community is very concerned with environmental issues and how natural resources are being accessed and utilised.
- Consumer education is important in developing new markets and expanding existing markets.
- Consumers are becoming more aware of the role that seafood can play in their health.
- The community perception of the fishing industry is poor, despite the large investment in research which has led to significant changes in how the industry operates.
- Government and communities recognise aquaculture as a sustainable way of producing fish.

#### ***Priorities for 2007-08***

- Develop relationships with community groups can assist the fishing industry.
- Increase consumers understanding of the health benefits of eating seafood.
- Address animal welfare and bio-security issues.
- Educate the community about fisheries and aquaculture management and its contribution to Australia.
- Communicate the benefits of government and industry investment in R&D.

#### ***Expected outputs for 2007-08***

- Investment in extension activities that communicate the health benefits of seafood.
- Invest in R&D that provides a solid understanding of the environmental impacts of Aquaculture ventures.

#### ***Key performance indicators***

- 10 per cent increased consumption of seafood by Australians.
- Aquaculture ventures are able to access new sites.

**Program 3 – Examples of projects to be completed in 2007-08**

<b>Project Id</b>	<b>Project Title</b>	<b>Cost</b>
2005/306	2005 Australian Society for Fish Biology Workshop & 2005 International Barramundi Workshop	\$40,000
2006/308	Investigating options to improve bycatch reduction in tropical prawn trawl fisheries - a workshop for fishers	\$61,721
2005/322	Establishing a recreational fishing working group to develop a national implementation plan R, D and E.	\$77,056
2004/300	Advance-In-Seafood Leadership Program	\$106,800

**Program 3 – Examples of projects to be funded in 2007-08**

<b>Project Id</b>	<b>Project Title</b>	<b>Cost</b>
2007/300	2007 Australian Society for Fish Biology Workshop: Spatial management tools for fisheries: How effective are they?	\$ 20,000
2007/301	Australasia Aquaculture 2008	\$ 60,000
2007/302	5th National Rocklobster Congress - growing the future	\$ 20,000
2007/304	Empowering stakeholders to initiate and advance R&D projects in the seafood industry	\$136,000
2007/307	Further Development of an Employment Web Page for the Western Rocklobster Industry	\$ 27,550
2007/308	Seafood Directions 2007	\$ 30,000

## Program 4: Management and Accountability

The challenge for this program is to continually improve the activities through which it:

- plans, invests in and manages fisheries R&D throughout Australia; and
- facilitates the dissemination, adoption and commercialisation of R&D results.

The FRDC's ISO-certified quality management system encompasses all these activities. As a quality organisation the FRDC recognises the importance of reporting on the efficiency with which its research investments delivered, as well as on their effectiveness. FRDC will work with the Department and the other RDCs to develop an approach to measuring efficiency that will be incorporated into our performance measurement framework.

Most Program 4 outputs do not lead directly to the FRDC outcome but enhance the inputs of Programs 1–3 (the three R&D programs), as shown in figure 3: on page 13.

### Management and accountability indicators

Since management and accountability contributes to the planned outcome of the FRDC R&D programs, they are crucial to the FRDC's effectiveness and efficiency. The indicators are detailed below.

### Business Strategy and Planning

The FRDC aims to have a clearly defined and implemented business plan and strategy aligned to government and industry needs which are understood and supported by stakeholders. It does this through maintaining a high level of support for the five-year plan *Investing for Tomorrow's Fish* and ensuring on-going development builds on, and drives innovation in the fishing industry.

Evidence that the FRDC is succeeding in its goal include:

- approval of the annual operational plan and annual report by the Parliamentary Secretary and the acceptance of these documents by the FRDC's representative organisations.
- evidence of FRAB influence on research providers — minimum 80% of applications submitted through FRABs.
- planning and reporting documents (annual report, annual operational plan and portfolio budget statements) published and submitted in accordance with legislative time frames.
- the views and priorities of stakeholders influence research providers in the development of R&D applications.

### Information Management Systems

The FRDC aims to provide business systems that meet the requirements both of the organisation and its stakeholders.

Evidence that the FRDC is succeeding in its goal include:

- the FRDC website is viewed as a source of fishing industry information.
- stakeholder satisfaction with information management systems; especially Fishbase and its web interface Fishnet (project management system).

### Quality System

The FRDC aims to be recognised as a quality-driven organisation, through quality leadership, continuous improvement and appropriate accreditation.

Evidence that the FRDC is succeeding in its goal include:

- maintenance of its ISO9001:2000 accreditation.

## **Corporate Communications**

The FRDC aims to inform all stakeholders of the corporation's goals, strategies and achievements; and provide them access to information that will help them.

Evidence that the FRDC is succeeding in its goal include:

- adoption of the results of research and development
- positive feedback from market research on stakeholders
- reporting requirements are met on time and within budget.
- publications are of a high standard and are developed and delivered in a professional manner.

## **Risk Management**

The FRDC aims to ensure its risks are identified, assessed and appropriately managed.

Evidence that the FRDC is succeeding in its goal include:

- good business performance with a minimum of failures
- an operational risk management framework

## **Finance and Administration**

The FRDC aims to have best practice accounting and investment functions, managed in accordance with board and statutory requirements.

Evidence that the FRDC is succeeding in its goal include:

- contributions from fishers and aquaculturists above that which will be matched by the Australian Government [minimum of 85% of the contributions paid by industry to the FRDC that can be matched by the Australian Government]
- FRDC expenditure on R&D programs maximised [the proportion of expenditure on R&D programs, and programs support — respectively minimum 90% (including communications) and maximum 10%]

## **Human Resources Management**

The FRDC aims to have best practice in human resources management clearly focused on delivering FRDC's business objectives.

Evidence that the FRDC is succeeding in its goal include:

- happy, competent and well-trained staff contributing to the achievement of the corporation's objectives.
- retention of staff

## **Corporate Governance**

The FRDC aims to have a best practice system of governance.

Evidence that the FRDC is succeeding in its goal include:

- an ethical business culture
- meeting statutory requirements; for example, in relation to annual operational plans, annual reports and investment plans.

## The Governance framework

Element	Scope
Enabling legislation	The PIERD Act which sets out the legislative framework and rules for the establishment and operation of the FRDC.
Governance legislation	<i>The Commonwealth Authorities and Companies Act 1997</i> (CAC Act), which specifies requirements for good governance and accountability.
Priorities of key stakeholders	Australian Government National Research Priorities, and priorities for rural R&D. R&D priorities of representative organisations: Recfish Australia.
Annual report	Requirement of various legislation. Reports to the Australian Parliament and FRDC stakeholders on R&D activities during the financial year, and on measures to ensure good governance.
Quality management system	Systematic, ISO-certified processes CAS/NZS ISO 9001:201 designed to meet or exceed the expectations of stakeholders and other people and organisations with whom the FRDC does business. Incorporates management of FRDC policies.
R&D planning and priority-setting	The FRDC works with nation-wide Fisheries Research Advisory Bodies (FRABs) to undertake planning for R&D in consultation with governments, industry, other stakeholders and research providers. Priorities for R&D at state, regional or fishery level are significantly determined by the FRABs, managed subprograms and other priority-setting structures, with the Corporation determining the balance between projects funded within the R&D programs.
Board governance	Key functions include overseeing corporate governance (including strategic planning and reporting requirements) and investment decisions. Enhanced by the Board's spread of skills and experience, independent selection of most directors, code of conduct and ongoing development in directorship.
Performance monitoring	Includes monitoring and measuring of performance to continually improve the FRDC's effectiveness and efficiency.
Reporting to stakeholders	Includes consultation with, and formal reporting to one representative organisation; reporting of R&D investment activities via R&D News; and participation in conferences, workshops and other activities.



## Resources for 2007-08

### Summary of agency contributions to outcomes

The products and services delivered by the FRDC (outputs, products and services) that contribute to achievement of its outcomes are summarised in Table 1.

**Table 1: Contribution to outcome**

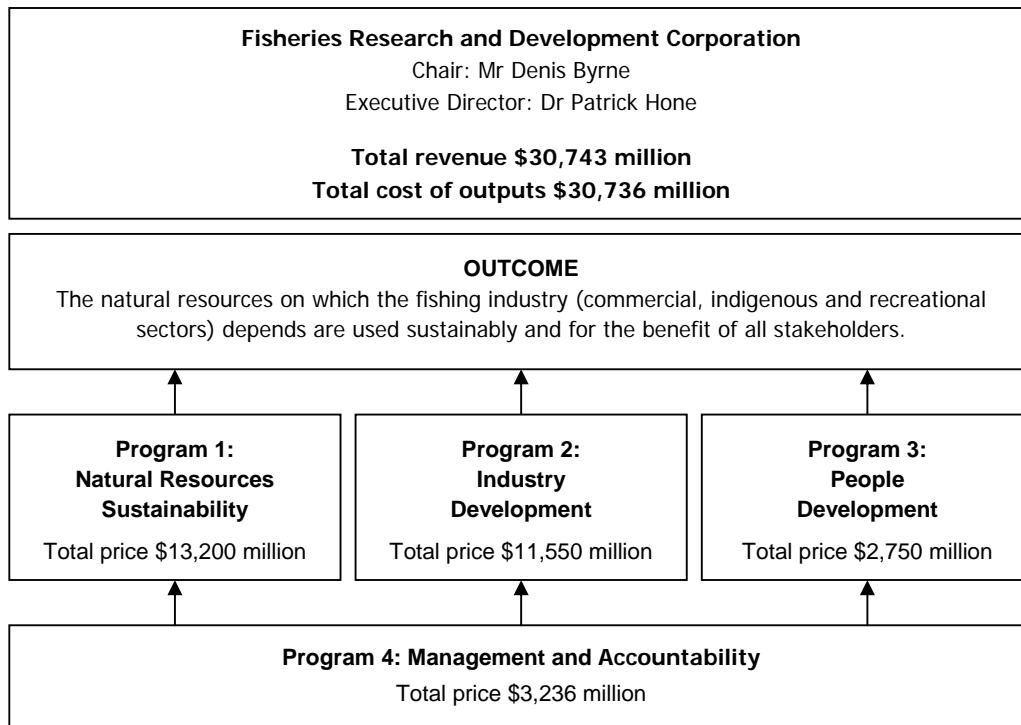
Outcome	Output groups
Outcome component	
<p><b>Natural resource sustainability</b></p> <p>The natural resources on which the commercial, recreational and traditional sectors of the fishing industry depend are used in an ecologically sustainable manner.</p>	<p>Program 1: Natural Resource Sustainability</p>
<p><b>Industry development</b></p> <p>The commercial sector of the Australian fishing industry is profitable and internationally competitive; the commercial, recreational and traditional sectors are socially resilient.</p>	<p>Program 2: Industry Development</p>
<p><b>People development</b></p> <p>The knowledge and skills of people in and supporting the Australian fishing industry, and in the wider community, are developed and used so that Australians derive maximum economic, environmental and social benefits from fisheries research and development.</p>	<p>Program 3: People Development</p>

## Outcomes

### Summary of outputs and contribution to outcome

The relationship between activities of the FRDC and the outcome is summarised in Figure 1 (below).

Figure 1: Contributions to outcomes



## Performance information for Outcome 1

The FRDC is only one of many entities, often working in partnership, whose Outputs advance the fishing and aquaculture industry and the natural resources on which it depends.

The ecological response of fisheries and the collective behavioural response of humans making use of them extends over years or decades. Consequently, most of the targets in this section extend well beyond the financial year 2007–08.

FRDC recognises the importance of reporting on the efficiency with which its research investments delivered, as well as on their effectiveness. FRDC will work with the Department and the other RDCs to develop an approach to measuring efficiency that will be incorporated into our performance measurement framework. Performance information for individual outputs and output groups relating to the FRDC are summarised in Table 2.

**Table 2: Performance information for Outcome**

Effectiveness—overall achievement of Outcome	
Performance information by output	
Output	Performance indicators
<b>Program 1: Natural Resource Sustainability</b>	
<p>Investment in research that assists in the development of formal socio-economic assessments for incorporation into fisheries resource allocation processes.</p> <p>Investment in R&amp;D on spatial management.</p> <p>Investment in R&amp;D that will assist in fisheries becoming self-managed or co-managed.</p> <p>Investment in R&amp;D that will lead to a reduction in species that are over fished or of an unknown status.</p> <p>Increased communication and extension of R&amp;D results with fisheries management agencies.</p>	<ul style="list-style-type: none"> <li>Self-managed or co-managed fisheries governance structures and processes are developed and a minimum of five fisheries brought under self-management.</li> <li>30 per cent reduction in species that are overfished or of an unknown status.</li> <li>Increased utilisation of fisheries R&amp;D Outputs by fisheries management agencies.</li> <li>Development of formal socio-economic assessments for incorporation into fisheries resource allocation processes.</li> <li>Evidence of improved use of spatial management as a tool for fisheries management.</li> </ul> <p>Price: \$13,200 million</p>
<b>Program 2: Industry Development</b>	
<p>Invest in market research that provides intelligence on international market places.</p> <p>Invest in R&amp;D activities that boost feeding efficiency.</p> <p>Integrate into R&amp;D research application cycle the need for industry participation in breeding programs.</p> <p>Invest in R&amp;D projects that will underpin or be part of a third party assessment standard.</p> <p>Invest in R&amp;D projects that will lead to the establishment of entities that utilise fish waste.</p>	<ul style="list-style-type: none"> <li>At least two companies accessing new markets for domestically produced seafood.</li> <li>Establishment of a third-party audited food quality standard for vessels and processors.</li> <li>5 per cent increase in finfish production through improved feeds and feeding practices.</li> <li>Establishment of a commercial operation specialising in the utilisation of fish processing waste.</li> <li>At least two entities utilising improved stock from selective breeding programs.</li> </ul> <p>Price: \$11,550 million</p>
<b>Program 3: People Development</b>	
<p>Investing in the Australian Rural Leadership Program.</p> <p>Investing in research that assist postgraduate students complete their courses.</p> <p>Invest in the 'Advance in Seafood' Leadership Development Program.</p> <p>Investment in extension activities that communicate the health benefits of seafood.</p> <p>Invest in R&amp;D that provides a solid understanding of the environmental impacts of Aquaculture ventures.</p>	<ul style="list-style-type: none"> <li>Two seafood people to complete the Australian Rural Leadership Programme annually.</li> <li>Minimum of five postgraduate students complete courses.</li> <li>Minimum of ten fishing industry participants attend the 'Advance in Seafood' Leadership Development Program.</li> <li>10 per cent increased consumption of seafood by Australians.</li> <li>Aquaculture ventures are able to access new sites.</li> </ul> <p>Price: \$2,750 million</p>

<b>Program 4: Programme Management and Communications</b>	
<p><b>Business Strategy and Planning</b></p> <p>The FRDC aims to have a clearly defined and implemented business plan and strategy aligned to government and industry needs which are understood and supported by stakeholders. It does this through maintaining a high level of support for the five-year plan <i>Investing for Tomorrow's Fish</i> and ensuring on-going development builds on, and drives innovation in the fishing industry. Evidence that the FRDC is succeeding in its goal include:</p>	<ul style="list-style-type: none"> <li>approval of the annual operational plan and annual report by the Parliamentary Secretary and the acceptance of these documents by the FRDC's representative organisation.</li> <li>evidence of FRAB influence on research providers — minimum 80% of applications submitted through FRABs.</li> <li>planning and reporting documents (annual report, annual operational plan and portfolio budget statements) published and submitted in accordance with legislative time frames.</li> <li>the views and priorities of stakeholders influence research providers in the development of R&amp;D applications.</li> </ul>
<p><b>Information Management Systems</b></p> <p>The FRDC aims to provide business systems that meet the requirements both of the organisation and its stakeholders. Evidence that the FRDC is succeeding in its goal include:</p>	<ul style="list-style-type: none"> <li>the FRDC website is viewed as a source of fishing industry information.</li> <li>stakeholder satisfaction with information management systems; especially Fishbase and its web interface Fishnet (project management system).</li> </ul>
<p><b>Quality System</b></p> <p>The FRDC aims to be recognised as a quality-driven organisation, through quality leadership, continuous improvement and appropriate accreditation. Evidence that the FRDC is succeeding in its goal include:</p>	<ul style="list-style-type: none"> <li>maintenance of its ISO9001:2000 accreditation.</li> </ul>
<p><b>Corporate Communications</b></p> <p>The FRDC aims to inform all stakeholders of the corporation's goals, strategies and achievements; and provide them access to information that will help them. Evidence that the FRDC is succeeding in its goal include:</p>	<ul style="list-style-type: none"> <li>adoption of the results of research and development</li> <li>positive feedback from market research on stakeholders</li> <li>reporting requirements are met on time and within budget.</li> <li>publications are of a high standard and are developed and delivered in a professional manner.</li> </ul>
<p><b>Risk Management</b></p> <p>The FRDC aims to ensure its risks are identified, assessed and appropriately managed. Evidence that the FRDC is succeeding in its goal include:</p>	<ul style="list-style-type: none"> <li>good business performance with a minimum of failures</li> <li>an operational risk management framework</li> </ul>
<p><b>Finance and Administration</b></p> <p>The FRDC aims to have best practice accounting and investment functions, managed in accordance with board and statutory requirements. Evidence that the FRDC is succeeding in its goal include:</p>	<ul style="list-style-type: none"> <li>contributions from fishers and aquaculturists above that which will be matched by the Australian Government [minimum of 85% of the contributions paid by industry to the FRDC that can be matched by the Australian Government]</li> <li>FRDC expenditure on R&amp;D programs maximised [the proportion of expenditure on R&amp;D programs, and programs support — respectively minimum 90% (including communications) and maximum 10%]</li> </ul>
<p><b>Human Resources Management</b></p> <p>The FRDC aims to have best practice in human resources management clearly focused on delivering FRDC's business objectives. Evidence that the FRDC is succeeding in its goal include:</p>	<ul style="list-style-type: none"> <li>happy, competent and well-trained staff contributing to the achievement of the corporation's objectives.</li> </ul>
<p><b>Corporate Governance</b></p> <p>The FRDC aims to have a best practice system of governance. Evidence that the FRDC is succeeding in its goal include:</p>	<ul style="list-style-type: none"> <li>an ethical business culture</li> <li>meeting statutory requirements; for example, in relation to annual operational plans, annual reports and investment plans.</li> </ul>
	Price: \$3,236 million

## **Evaluations for Outcome**

The FRDC understands the importance of reporting on the efficiency with which its research investments delivered, as well as on their effectiveness. We have a range of industry stakeholders who contribute to R&D and who take a close interest in the efficiency of our performance. We will work with the Department and the other RDCs to develop an approach to measuring efficiency that will be incorporated into our performance measurement framework.

The FRDC undertakes ongoing evaluations at a project and subprogram level. Each project seeks feedback from people who are identified as recipients of that research outcome. Sub programs are reviewed at mid term and end of each funding cycle. FRDC will be implementing the agreed RDC cost benefit analysis framework to ensure that FRDC's impact reporting articulates up to a total RDC benefit.

In addition the FRDC runs bi-annual stakeholder research and workshop to evaluate progress against the key performance indicators set out in the strategic research and development plan. The outcomes of the research and workshop are integrated into the FRDC's planning cycle to ensure future plans remain salient.

## Appendix A

## Total Investment – Composition of Government Research Priorities attributed to each R&amp;D Program (\$ and % values\*)

## 2007-08 R&amp;D Expenditure estimates across Rural Research Priorities (\$'000)

Rural Research & Development Priorities (RRDP)	Sustainable Natural Resource Management		Improving Competitiveness through a Whole of Industry Approach		Maintaining & Improving Confidence in the Integrity of Australian Agricultural, Food, Fish and Forestry Products		Improved Trade and Market Access		Use of Frontier Technologies		Creating an Innovative Culture		Protecting Australia from Invasive Diseases and Pests		Other Research	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Program 1 Natural Resource Sustainability	\$13,291	46.97	\$794	2.80					\$635	2.24	\$669	2.36	\$561	1.98		
Program 2 Industry Development	\$411	1.45	\$4,316	15.25	\$467	1.65	\$1,514	5.35	\$1,278	4.52	\$1,367	4.83	\$625	2.21		
Program 3 People Development					\$712	2.52					\$1,654	5.85				
Total Expenditure	\$13,702	48.42	\$5,110	18.05	\$1,179	4.17	\$1,514	5.35	\$1,913	6.76	\$3,690	13.04	\$1,186	4.19		

## Appendix B

## Total Investment – Composition of Government Research Priorities attributed to each R&amp;D Program

## 2007-08 R&amp;D Expenditure estimates across NRP Goals\* (\$'000)

National Research Priorities (NRP)	An Environmentally Sustainable Australia							Promoting and Maintaining Good Health				Frontier Technologies for Building and Transforming Australian Industries					Safeguarding Australia					Total
	A1	A2	A3	A4	A5	A6	A7	B1	B2	B3	B4	C1	C2	C3	C4	C5	D1	D2	D3	D4	D5	
Program 1 Natural Resource Sustainability					\$13,044		\$482						\$461		\$544	\$582			\$551			\$15,664
Program 2 Industry Development				\$428	\$496						\$1,858		\$3,989		\$463	\$2,566			\$464			\$10,264
Program 3 People Development											\$732					\$1,634						\$2,366
<b>Total</b>				\$428	\$13,540		\$482				\$2,590		\$4,450		\$1,007	\$4,782			\$1,015			\$28,294

Note: the National Research Priorities and their associated Goals are listed on ATTACHMENT 1:

**ATTACHMENT 1: NATIONAL RESEARCH PRIORITIES AND THEIR ASSOCIATED GOALS**

**Priority 1 - An Environmentally Sustainable Australia**

- A1: Water – a critical resource
- A2: Transforming existing industries
- A3: Overcoming soil loss, salinity and acidity
- A4: Reducing and capturing emissions in transport and energy generation
- A5: Sustainable use of Australia's biodiversity
- A6: Developing deep earth resources
- A7: Responding to climate change and variability

**Priority 2 - Promoting and Maintaining Good Health**

- B1: A healthy start to life
- B2: Ageing well, ageing productively
- B3: Preventive healthcare
- B4: Strengthening Australia's social and economic fabric

**Priority 3 - Frontier Technologies for Building and Transforming Australian Industries**

- C1: Breakthrough science
- C2: Frontier technologies
- C3: Advanced materials
- C4: Smart information use
- C5: Promoting an innovation culture and economy

**Priority 4 - Safeguarding Australia**

- D1: Critical infrastructure
- D2: Understanding our region and the world
- D3: Protecting Australia from invasive diseases and pests
- D4: Protecting Australia from terrorism and crime
- D5: Transformational defence technologies



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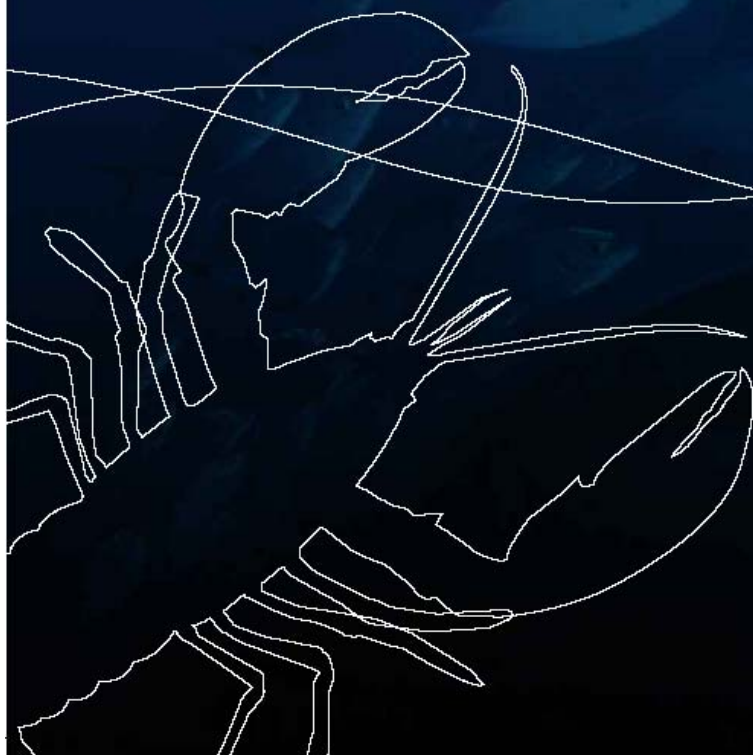
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