South East Fishery
Industry Development Subprogram: facilitation, administration and promotion

Ian A. Knuckey

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Fisheries Research and Development Corporation

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OBJECTIVES:

1. Coordinate the FRDC SEF Subprogram (applications, workshops, communication)
2. Conduct an annual research workshop to present research outcomes from the Subprogram and to define research objectives for subsequent years.
3. Facilitate travel of industry representatives and the Subprogram leader to biannual steering committee meetings.
4. Coordinate the preparation of a Subprogram newsletter, media releases, and workshop publications.
5. Integrate with other FRDC and externally funded SEF projects to ensure maximum leverage of industry funds and avoid duplication.

NON-TECHNICAL SUMMARY:

OUTCOMES ACHIEVED:

- Increased levels of communication and cooperation between those involved across the SEF whole of supply chain.
- The basis for a whole of chain R&D strategy for the SEF has been developed and a number of project proposals have been prepared within this framework.
- Establishment of a new research project targeted at SEF Industry Development (SETFIA's E-boat project).
- Development of new technologies that will benefit all people involved in the SEF.

The bulk of the research that has been carried out for the South East Fishery (SEF) over the last decade has focussed on the collection of biological data, assessment of the status of fish stocks, research into the economics of the fishery, and the impact of fishing on the environment. In recent years, the need for a broader research and development (R&D) coverage to address whole of supply chain needs of the SEF has been recognised by Industry, AFMA, the Management Advisory Committees (MACs) and the Fisheries Research and

Development Corporation. The SEF Industry Development Subprogram was established to help develop a whole of supply chain R&D strategy for the SEF and initiate new R&D projects to implement the strategy through increasing the value of SEF products by value-adding to fish products, adopting new technologies and improving utilisation of catches. To enable this, a Steering Committee of Industry representatives with expertise in the SEF whole of supply chain was formed to help foster and prioritise R&D into industry development areas. This report summarises the progress of the Subprogram over the first 18 months of operation to June 2001.

Two Subprogram meetings have been held. In the first, the role of the FRDC Subprogram and Steering Committee was outlined and the broad scope of the R&D strategy was developed. At the second meeting a range of pre-proposals were considered and we worked towards development of other projects that would fall within the scope of our priority R&D. We initially focused on two priority R&D areas: skills/training and fish waste utilisation. It was recognised that there was a need for skill development and training across the fishery's supply chain, especially in areas such as product handling, food safety and OH&S issues. We are currently working with the relevant national and state seafood training bodies to plan and implement a training package relevant to the SEF. The significant level of fish wastes that are discarded by the industry from both the catching and processing sectors was another priority area. It was agreed to promote and support R&D that aimed to improve the utilisation of non-quota bycatch species by investigating suitable and cost-effective techniques to process the wide variety of discarded fish waste into products such as aquaculture feeds, silage, fish mince, fishmeal. Another waste minimisation option that is being explored is the use of value adding, improved promotion and targeted marketing campaigns to increase retention of certain low-value species that are usually discarded. Workshops to discuss training and waste utilisation R&D are planned for October 2001 with the aim of submitting a suite of related projects for funding by FRDC and other agencies.

The Subprogram's first project entitled "The E-boat - implementation of an on-board electronic data collection and transmission system" began in May 2001. Jointly funded by AFFA and FRDC, the project is progressing well following an extensive phase of software development and modification to make it user-friendlier to the fishers. A working presentation of the software has been given at a number of venues and has received positive feedback from the industry groups. Work is progressing to enable the direct transfer of logbook data from fishers to AFMA to meet their SEF1 requirements. Trial data transfers

have proceeded well and real data transfer is expected to take place early 2002. The potential for data from the E-boat software to directly feed into E-commerce sites, such as SFM-live, is being investigated.

Although slow to start, the Subprogram has achieved many of its initial objectives. The process of getting people together from across the whole of supply chain and networking has been valuable and is proving fruitful with respect to communication, advice and feedback from all sectors of the Industry. It is expected that within the next year or two, the full benefits of the development of the SEF Industry Development Subprogram should be realised with the initiation of a number of R&D projects under the umbrella of the Subprogram. The FRDC has supported a proposal to continue the Subprogram for a further two years from July 2001 to June 2003. After this time, the Steering Committee believes there should be a review of the progress of the Subprogram and the value of its future operation.

KEYWORDS: South East Fishery, industry development, value-adding, training, waste utilisation.

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BACKGROUND

The bulk of the research that has been carried out for the South East Fishery (SEF) over the last decade has focussed on the collection of biological data, assessment of the status of fish stocks and the impact of fishing on the environment. There has also been considerable research into the economics of the fishery and how this has been affected by changing management arrangements. These areas of research have been in line with AFMA's legislative requirements, and the research priorities have been guided by a five-year strategic research plan developed by the SEFMAC Research Sub-Committee. The South East Fishery Assessment Group (SEFAG) was developed within this system to oversee and evaluate stock assessments on the SEF quota species. A number of species-specific Assessment Groups (eg. Orange Roughy Assessment Group, Eastern Gemfish Assessment Group), which require input from industry representatives, researchers and managers, have been established to undertake these stock assessments. It is generally agreed that this process has been valuable and has improved the quality of research and assessment being undertaken in the SEF. Nevertheless, as a result of this process, most of the research for the SEF has tended to have a narrow focus towards stock assessment and sustainability issues.

In recent years, the need for a broader coverage of R&D to address whole of supply chain needs of the SEF has been recognised by AFMA, the SEFMAC Research Sub-Committee and the FRDC. For example, a FRDC workshop was held in July 1998 to consider ways in which bycatch could be reduced in the SEF trawl fleet. It highlighted that there were a variety of options to reduce discarding, including changes to management, marketing and gear selectivity. It was emphasised that research should be targeted at all of these areas and to just concentrate on one of these areas would not be an adequate approach. Whilst significant steps have been taken to address the management and gear selectivity options, there has been little progress towards establishing research into possible marketing or bycatch utilisation solutions. The reasons for this are not entirely clear, but the current research priority setting process was not established to perform this role, so it is therefore likely that both the process and the people involved in this process were not appropriate to consider and incorporate this type of research project. Whilst this is only one example, it points to what many regard as general problem within the current SEF R&D priority setting process: its inability to address industry development and post-harvest issues.

This project brought together a group of people with expertise in the SEF whole of supply chain, which will help to foster and prioritise R&D into industry development areas. It was important that this group complemented the processes and committees already instituted under AFMA. Although the group was initially established as an FRDC Subprogram and was therefore initiated with FRDC funds, it was envisaged that the group would ultimately establish a far more comprehensive funding base to meet its R&D requirements.

NEED

To achieve the complementary outcomes of sustainability and economic benefits to the stakeholders in the SEF, a whole of chain approach to R&D was required by the Subprogram (which is in accordance with government direction on R&D planning). The current R&D priorities has focussed on the biology and fishery management, and has precluded more innovative ways of adding value to the SEF seafood industry. Following a workshop held in November 1999 (Canberra) a recommendation was made that FRDC develop a Subprogram to support the industry development component of R&D for the SEF. This development of this Subprogram has incorporated a whole of chain approach to produce a Strategic Plan that will be applied to SEF industry development R&D over the next two years.

OBJECTIVES

1. Coordinate the FRDC SEF Subprogram (applications, workshops, communication)

2. Conduct an annual research workshop to present research outcomes from the Subprogram and to define research objectives for subsequent years.

3. Facilitate travel of industry representatives and the Subprogram leader to biannual steering committee meetings.

4. Coordinate the preparation of a Subprogram newsletter, media releases, and workshop publications.

5. Integrate with other FRDC and externally funded SEF projects to ensure maximum leverage of industry funds and avoid duplication.

METHODS

The Subprogram was established to help develop a whole of supply chain R&D strategy for the SEF and initiate new R&D projects, which increase the value of SEF products through industry development. It was formed to ensure that research conducted in the SEF did not just focus on biology and stock assessment, but addressed other important areas that contribute to the SEF sustainability such as value adding, better seafood handling, new technologies and improved utilisation of catches. Under the Subprogram Leader, an expertise-based steering committee was formed consisting largely of industry members from throughout the SEF supply chain.

SEF Industry Development Steering Committee Members

Person	Company
Tony Bewley	Ocean Fresh
Peter Dundas-Smith	FRDC
Steven Gill	Master Fish Merchants Association
Dimitrios Goulas	Conway Fish Trading Co
Ian Knuckey	Marine and Freshwater Resources Institute
Lachlan Marshall	Presmint Pty Ltd
Michael Miriklis	Jack Miriklis Pty Ltd
Terry Moran	TJ & JJ Moran
Roy Palmer	Fishy Business
Stuart Richey	Richey Fishing Co Pty Ltd
Tony Smith	CSIRO Division of Fisheries
John Susman	Greengrocer.com.au
Ian Wells	Seafood Services Australia

The Steering Committee met twice during the year to review project progress and establish research priorities. All new industry development projects were assessed by the Steering Committee and were submitted to the FRDC Board via the Subprogram.

Role of the Steering Committee:

- To review industry financial and in-kind contribution to the Subprogram.
- To review and recommend changes on existing FRDC projects' (and any associated projects not funded but within the Strategies) research directions within the guidelines of the FRDC contractual agreement.
- Develop a Strategic R&D Plan with key performance measures and timeframes. This should be regularly reviewed.
- To prioritise new research proposals and develop a priority list that can be used by other funding agencies. They should adopt a whole of chain approach to priority setting to ensure Key Result Areas are addressed within an overall strategic plan for the Subprogram.
- To provide research direction to the relevant Fisheries Research Advisory Bodies (FRABs).
- To ensure that research objectives are commercially focused and outcome driven.
- To coordinate industry and research provider involvement, so as to maximise usage of available resources. Maximise leverage from other R&D investment sources by incorporating within the leadership of the Subprogram.
- To facilitate industry extension and technology transfer.
- To advise on flexible components of budget expenditure e.g. Subprogram administration. This would entail developing an overall budget for the Subprogram that had key performance indicators. The Steering Committee in consultation with key stakeholders would set a total annual budget for the Subprogram.
- The convening of regular meetings (minimum of one every six months).
- Develop an appropriate and approved media policy.
- Ensure efficient and effective reporting structures.
- To promote the Subprogram and its achievements so that it can become the focus for all Industry Development R&D within the SEF.
- To develop an Annual Operating Plan (AOP) for key stakeholders including the FRDC Board. To be submitted by December 1 annually.

The Subprogram Leader

The Subprogram Leader should be independent, have a good understanding of scientific principles, a knowledge of the industry, a track record of project management, a good understanding of corporate governance, excellent leadership and communication skills, vision, courage and the ability to act in the interests of the whole industry sector.

Tasks of the Subprogram Leader

To ensure:

- Timely completion of milestone objectives,
- Efficient coordination and integration of projects to ensure national collaboration of research,
- Efficient and effective organisation of meetings and workshops,
- Establishment of effective reporting structures,
- Coordination and delivery of Subprogram reports and newsletters,
- Development of an appropriate and media policy (approved by the steering committee),
- Provision of advice to the steering committee,
- Coordination of new funding applications,
- Ensure relevance of the R&D Strategic plan to industry's current research needs,
- Promotion of Subprogram outcomes through effective and efficient extension.

Facilitation, administration and promotion

Industry Consultation

Through associations with industry members, the Subprogram collated a list of industry contacts across the whole of supply chain. These will be used to establish communication flow between scientists and industry. Mailing addresses have been compiled onto a database to assist in the distribution of Subprogram reports.

Priority Setting

The Subprogram Leader, in conjunction with the Steering Committee, utilised research reports to monitor progress against objectives and to update research priorities. Formal reviews of the

direction of the Subprogram will be undertaken together with the development of longer-term research strategies. These will be presented to FRDC in the form of written research reports and coordinated research funding applications in subsequent years.

Meeting facilitation

The Subprogram Leader convened all Steering Committee meetings and research workshops. This included setting the agenda, inviting participants, organising venues, making travel and accommodation arrangements as required and preparing either minutes or proceedings for distribution.

Liaison with research groups

The Subprogram Leader attended meetings and workshops of relevant research projects. This ensured the Subprogram is privy to the directions and outcomes of similar research being conducted around Australia. The Subprogram Leader endeavoured to have at least one meeting per year with the Principal Investigators of the component Subprogram projects to ensure their needs were being met by the Subprogram and to identify any problems that could hinder the project outcomes.

Coordination of research proposals and reports

The Subprogram Leader has edited and adjusted all research application associated with SEF Industry Development, to ensure that they align with the Strategic R&D Plan and optimal use of resources. The Subprogram Leader coordinated the preparation of a set of research reports in the required time-frame for review by FRDC.

Promotion of the SEF Industry Development Subprogram

Promotion of all results from the Subprogram will be via the Subprogram Leader, who has developed media liaisons and strategies for high impact release of information. He also lobbied conference organisers to feature the Subprogram at relevant meetings and conferences.

Identification and collection of additional research funds

The Subprogram Leader took a lead role in the identification and successful procurement of research funds to enhance the existing research projects. Funding sources were identified, contacted and arrangements made for the preparation of research submissions.

Liaison with FRDC

The Subprogram Leader has been the conduit for all communications between the FRDC and Subprogram participants. The Subprogram Leader provided feedback in relation to concerns raised by project leaders, reported on project progress and made recommendation in relation to the future direction of the Subprogram. The Subprogram Leader also made presentations to the FRDC board as required.

Liaison with AFMA and members of the SETMAC / SEFAG process

Although already a scientific member of AFMA's South East Fishery Assessment Group, as the SEF Industry Development Subprogram Leader, The Subprogram Leader broadened links with SETMAC research priority setting process to ensure complementary consideration of research priorities and to avoid duplication and conflict between the two groups responsible for setting research priorities within the SEF. To this end, the Subprogram Leader has now been included as a member of the SEF Management Advisory Committee's Research Subcommittee.

Links with other Subprograms and Infrastructure Projects

This Subprogram has important synergies and collaborative links with other FRDC and non-FRDC related research. The most important links are with the Effects of Trawling Subprogram and Seafood Services Australia (National Seafood Centre). It will be important to ensure coordination across these activities to avoid duplication and maximise benefits from any investment. Other important Subprogram links were established with the Aquaculture Nutrition and SBT Aquaculture Subprograms.

RESULTS / DISCUSSION

Sector Progress

Overall, the SEF has remained reasonably stable over the last year and continues the trend of the past five years. Although many of the fish were sold as fresh fish on local markets, a significant proportion were exported overseas and there is a growing trend for more innovative and intensive marketing of certain low-value species (eg. spotted warehou) by some companies. Levels of discarding of many of the lower-value quota species were significantly lower than previous years. This provided an indication of what may be achieved with targeted marketing campaigns aimed at some the prevalent non-quota species that are usually discarded (eg. barracouta, ribbonfish).

Related projects and research linkages

AFMA funded a workshop to develop an electronic logbook for the SEF, which had implications for industry development in the case of data communication and E-commerce. See section on new projects.

Both the Farm Innovation Program and the state-run counterparts (Farm$mart, FarmBiz etc) have highlighted that they will be targeting fisheries related work in the future. The Subprogram leader has spoken with both the state and commonwealth representatives to discuss possible projects for the SEF. As a result of these talks, the Electronic logbook proposal received a major part of its funding from the Farm Innovation Program.

Role the Subprogram has played in industry development

To date, the Subprogram has played a role in two main areas of industry development. First, it has brought together of a range of people from across the SEF whole of supply chain to discuss areas of potential R&D. The varied skills and knowledge of these people broadens the perspective of the group and ensures that those involved think outside their own sector of the fishery and see the importance of the whole of supply chain approach. Second, links with other primary industry groups (eg meat) and potential sources of funding outside FRDC has expanded the potential to initiate a range of R&D projects that will benefit the SEF.

There were two one-day meetings held during the year. The inaugural meeting of the SEF Industry Development Subprogram Steering Committee was held in Melbourne on 10th May 2000. At this meeting the role of the FRDC Subprogram and Steering Committee was outlined. The reasons for setting up a specific SEF Industry Development Subprogram were discussed and the broad scope of the R&D strategy was developed.

The second meeting of the Steering Committee was held on 27th September 2000 in Canberra. At this meeting three pre-proposals that were submitted to the Subprogram were considered and we worked towards development of other projects that would fall within the scope of our priority R&D. Other meetings/contacts of Subprogram Leader are outlined below.

Company / Department	Contacts	Date
Seafood Services Australia	Ian Wells / Jayne Gallagher	3 May 2000
Beachport Sea Products	Bevan Mills	August 2000
Parson Galloway Foundation	Jeremy Simpson	September 2000
Farm$mart (Victoria)	Sam Simpson	13 September 2000
Sentinel Multimedia	Tony Millar	6 October 2000
Seafood Training Victoria	Roy Palmer	10 October 2000
Food Science Australia	J. Weerasinghe / Kees Versteeg	17 October 2000
Farm Innovation Program	Annette Sugden / Michael Lindfield	8 November 2000
VITEC	Gary Cummins / Hugo Dissler	16 November
Restaurant & Catering Association	Wendy Lake	20 November 2000
Agriculture Victoria	Clive Noble	7 December 2000

Summary of strategic plan or directions

The Sub-program was established to develop a whole of supply chain R&D strategy for the SEF and initiate new R&D projects which increase the value of SEF products through value adding, new technologies and improved utilisation of catches. Within this broad framework, the Subprogram Steering Committee prioritised two main areas on which we are focussing R&D: skills/training and bycatch utilisation. Details of the R&D strategy and the work being done to achieve this are outlined below.

Skills & training

There was a need for skills development and training across the fishery's supply chain, especially in areas such as product handling, food safety and OH&S issues. Whilst it was recognised that this was a high priority for the fishery, it was understood that implementation of this type of industry development would be a medium to long-term goal for the Sub-program. We are currently working with the relevant national and state Seafood Training bodies to plan and implement a training package relevant to the SEF.

Bycatch utilisation

It is acknowledged, both within and outside the industry, that there is a significant need to reduce the levels of bycatch currently caught by the trawl sector of the fishery. Although methods of reducing this bycatch through gear modification are presently being investigated, utilisation of bycatch is an option for the fishery, which has the advantage of potential economic returns for the fishery. We endeavoured to improve the utilisation of non-quota bycatch species by investigating techniques to process the wide variety of discarded fish into products such as aquaculture feeds, silage, fish mince, and fishmeal. The challenge remains to determine which techniques are suitable and cost-effective for the SEF given the wide geographical area covered by the fishery and the particular characteristics of the vessels in the fleet. Another option we are exploring is the use of value adding, improved promotion and targeted marketing campaigns to increase retention of certain low-value species that are usually discarded such as barracouta, frostfish and some dory species.

Current Projects

In May 2001, AFFA ($73K) and FRDC ($20K) jointly funded the Subprogram's first project entitled "The E-boat - implementation of an on-board electronic data collection and transmission system". The project is progressing well following an extensive phase of software development and modification to make it user-friendlier to the fishers. This was considered a critical phase of the project, because to present fishers with a package that was difficult to use or understand would have spelt the end of the project. A working presentation of the software has been given at a number of venues and has received positive feedback from the industry groups. SETFIA have indicated that they will be accepting an offer to be the Australian agents for the software and will be employing an industry-based person to distribute the software, promote industry uptake and undertake much of the extension work for this project.

Work is progressing to enable the direct transfer of logbook data from fishers to AFMA to meet their SEF1 requirements. Trial data transfers have proceeded well and real data transfer is expected to take place early 2002.

The potential for data from the E-boat software to directly feed into SFM-live is being investigated. It was believed that only minor changes would be required to enable simple transition of data. The technical details of the most appropriate form of data transfer would need to be further discussed between E-boat software developers and SFM-live technicians.

Proposed new research

Specific projects submitted to FRDC

Title	Development of a quality index for spotted warehou (SEF) to improve product shelf life and acceptability.
Rating	Not supported
Comments	This project seemed very expensive and incorporated an inappropriate level of detailed research given the progress some companies have made into the sales and marketing of this species. Based on the overall decision of the committee not to be involved with utilisation R&D for quota species at this stage, the project was not supported.
Title	The E-boat: implementation of an on-board electronic data collection and transmission system. A working model from the South East Trawl Fishery
Rating	High Support
Comments	SETFIA submitted a small project proposal to the Subprogram on the development of an electronic logbook for use on commercial fishing vessels. Feedback from the Subprogram was that the potential industry development aspects of the project would need to be emphasised before FRDC would consider funding such a project. SETFIA has made considerable changes to the project and have expanded the scope of the project with respect to industry development. The project now examines the full industry development potential of electronic data collection and transmission on board a working SEF vessel. This project will be submitted to FRDC with the Subprogram's endorsement. This project also falls within the scope of industry development funded by the AAA-Farm Innovation Program and will be submitted for consideration in February 2001.
Title	Commercialisation trials using value-added seafood waste for aquafeed utilisation
Rating	Supported
Comments	There is a significant need to reduce the levels of bycatch currently caught by the trawl sector of the SEF. Although methods of reducing this bycatch through gear modification are presently being investigated, utilisation of bycatch is an option that has the advantage of potential economic returns for the fishery. We are endeavouring to improve the utilisation of non-quota bycatch species by investigating techniques to process the wide variety of discarded fish into products such as aquaculture feeds, silage, fish mince, fishmeal. The concept of the proposal has good potential benefits for Australia's seafood industry as a whole, and ties in well with the long-term goals we are trying to achieve in the SEF. The challenge is to determine which techniques are suitable and cost-effective for the SEF given the wide geographical area covered by the fishery and the particular characteristics of the vessels in the fleet.

Title	Effect of freezing and frozen storage of by-catch fish (SEF) on the quality of value added products.
Rating	Moderate support pending significant modifications
Comments	It was considered that this project fell well within the bounds of R&D that would be supported by the Sub-program. Nevertheless, various members of the Steering Committee have expressed considerable concerns about a range of aspects about this project. I have summarise the changes that would be required of the project before it would be supported. 1. The application should be submitted to Seafood Services Australia for funding. 2. The project should be reduced to the first year of research requiring funds of <$ 40K. 3. Either a). Details of the initial product preparation techniques should be made available to a wider range of SEF processors to ensure the results of the freezing research have broad applicability; Or b). A significant $ contribution should be made to the project by Mantzaris Fisheries. 4. If the former, a broad-brush economic analysis of the product should be undertaken, including costs of raw materials, transport, processing freezing, further processing etc. If the latter, support for the project should be pending a favourable Business Plan (as above) developed by Mantzaris as part of the NIDP funding. 5. Supply of raw materials should not be a risk (B10). Apparently there is good support from a consortium of fishermen. Letters indicating this level of support should accompany the proposal. 6. There needs to be clarity about the outputs from the project. One final report containing all of the results should be submitted to FRDC. If some of this information is commercial in confidence, then the results should be withheld from public distribution for 12 months.

Of these projects, the E-boat proposal, which received strong support from the Subprogram was recently funded by FRDC and is currently underway. The aquafeed project formed the basis of a project that is likely to be submitted for funding in the coming year as one of a suite of projects addressing waste utilisation. The other two projects were not funded.

FURTHER DEVELOPMENT

The Subprogram will continue to work towards its R&D priority areas of training and waste utilisation whilst actively seeking and supporting other opportunities for industry development R&D. Seafood Training Australia has developed a comprehensive seafood industry training CD and we will investigate the potential for this to be introduced across the SEF supply chain.

It is envisaged that training and OH&S issues that need to be addressed in the SEF will be an ongoing project for the Subprogram for the next couple of years.

There are a number of meetings going on to bed down a proposal to utilise SEF fish waste as source for Liquid Fish Protein or fish powder for use in aquafeed, stock feed or fertilizer. Discussions are underway with various commercial companies in an effort to outline suitable research projects with the SEF catching sector and to help develop markets for the products. Although a reasonably simple concept, the practicalities involved in actually making this a viable process (onboard storage, processing, distribution, marketing etc) are not minor. I believe that the next step in progressing this line of industry development will be to have a workshop with participants from the catching, processing and marketing sectors to decide the best approach.

Work is also underway with the wholesale, marketing and retail sectors of the SEF to improve the marketing of individual underutilised species such as ribbonfish and barracouta. In line with this effort, SEF fishers provided ribbonfish to processors who filleted the fish and provided the fillets to the RACV Annual Restaurant and Catering Association Christmas dinner. These were cooked as a ribbonfish roulade by the chef and received many accolades. The Master Fish Merchants Association has organised TAFE students to further develop recipes and marketing for these species.

Meetings with Farm$mart, the Victorian component of FarmBiz, have outlined a plan to provide business planning advice to SEF fishers. Many of the underlying principles of farming are the same as the fishing industry, and with input from Seafood Training Victoria, Farm$mart is currently working to provide a syllabus that is focussed towards improving business management in the seafood industry rather than farming.

PLANNED OUTCOMES

Outcomes

- The development of whole of chain R&D strategy for the SEF
- Establishment of new research projects targeted at SEF Industry Development
- Increase the value of SEF products through value adding and improved utilisation of catches
- Increased levels of cooperation between those involved in the SEF across the whole of supply chain
- Development of new technologies that will benefit all people involved in the SEF.

Beneficiaries

- The SEF catching sector
- SEF processors and wholesalers
- Those involved in marketing and retailing SEF product
- Consumers of SEF produce
- Suppliers of products and services to the industry
- Those conducting research and management relating to the SEF

CONCLUSION

Although slow to start, the Subprogram has achieved many of its initial objectives. The process of getting people together from across the whole of supply chain and networking has been valuable and is proving fruitful with respect to communication, advice and feedback from all sectors of the Industry. It is expected that within the next year or two, the full benefits of the development of the SEF Industry Development Subprogram should be realised with the initiation of a number of R&D projects under the umbrella of the Subprogram. By December 2000, the initial 1-year project was under-expended by $15K and it was proposed to use these remaining funds for the Subprogram to keep working towards its goals from Jan - June 2001. The FRDC has supported a proposal to continue the Subprogram for a further two years from July 2001 to June 2003. After this time, the Steering Committee believes there should be a review of the progress of the Subprogram and the value of its future operation.