

Final Report FRDC Project no 97/349



Support for Outlook 98 and a post economic analysis of Wallis Lakes – impact of hepatitis A

ABARE Project no 1241

Principal Investigator Perry Smith Fisheries Economics Section ABARE PO Box 1563 Canberra ACT 2601

Telephone (06) 272 2024



ii. Summary

In late February 1997 there was a major outbreak of hepatitis A at Wallis Lakes with infection associated with oysters from the region. Such incidents raise issues in relation to quality and safety management in the domestic seafood industry, including the likely longer term impacts on demand, the external costs to other sectors, and appropriate strategies for dealing with such risks and their outcomes.

The effects of a safety or quality problem are national issues. They are generally unlikely to be localised to the area where the problem originated and rarely remain within State borders. In relation to oysters, the key impact was on producers on the South Coast and in South Australia. Northern New South Wales and Tasmania actually had very little product to sell.

The oyster industry had a number of strategic advantages which would not apply to other sectors. The oysters which were available for marketing were left to grow out further rather than being harvested. So while cash flows were affected, the stock losses were not substantial. Moreover, the improved quality of oysters obtained as a result of the increased growout when they were harvested was a major factor in ensuring market recovery at the end of 1997.

A key question is who else was affected. Many of the costs fell to the wholesale and retail sectors, which were affected to varying degrees. Based on a survey of 60 Sydney businesses undertaken in July last year, 60 per cent had their turnover reduced by the publicity. While it was not possible to put a dollar figure on it, the average turnover loss reported was around 20 per cent in those three months. For two thirds, sales had not recovered by July.

Sales had recovered by December. In fact, retail sales of oysters in Sydney in the Chrismas season were around 15 per cent higher than the previous year, allowing producers to recover much of the earlier income lost.

iii. Background

This project aimed to assess the impact of a disease outbreak on seafood demand. The Hepatitis A outbreak associated with Wallis Lakes oysters provided a good opportunity to identify and quantify the costs of such outbreaks, including the loss of sales, falling prices and increased marketing costs.

The original objective was to collect the information necessary to evaluate these costs to provide a case study for presentation at the fisheries marketing session of Outlook 98.

iv. Need

In the original application, the need for the research was predicated on the requirement to determine the costs of a major disease outbreak and the benefits of effective food safety plans. The Wallis Lakes case study provided an opportunity to examine

- the economic costs to the industry as a result of reduced market acceptance for oyster products;
- the extent that the outbreak impacted on other seafood products; and
- the issues associated with addressing food safety in the seafood industry.

v. Objectives

- 1. To quantify the extent of the reduction in oyster sales as a result of the hepatitis A outbreak;
- 2. To quantify the costs to other sectors of the seafood industry as a result of the outbreak, focusing primarily on the Sydney seafood markets; and
- 3. To extend the results both as part of Outlook 98 and as a case study for industry.

An original objective, to make the costs involved with disease outbreak the major focus of the Fisheries Outlook Session, was altered when it became apparent that the level of detail needed to complete the analysis was not available. Moreover, there was a need for a change in focus with the emergence of the Asian financial crisis and the potential impact on the seafood industry, given its reliance on Asian markets. These changes were discussed and cleared with the Executive Director of FRDC.

The Outlook session was structured to cover both the impact of the Asian crisis and domestic seafood quality issues, with the Chair of the Australia New Zealand Food Authority concentrating on food safety issues in the Australian seafood industry. The ABARE presentation also provided some focus on the domestic issues involved.

The original objectives were only partly achieved. The key constraint was the inability of various sectors of the seafood industry to provide quantitative data, particularly on the loss of sales following the Hepatitis A outbreak.

vi. Methods

The Wallis Lake case study was separated into three components:

(a) Data Collection

The objective was to collect data on oyster production and sales by region (Wallis Lakes, Northern NSW, Southern NSW, Sydney), through New South Wales Fisheries, and obtain similar detail on Tasmanian and South Australian production. Information was sought from major producers on the volume sold and unit price, together with marketing costs.

This part of the study was not successful and restricted any more detailed analysis. The oyster production survey undertaken by New South Wales Fisheries had not been completed, while producers could only supply very limited information.

(b) Analysis of other supplier sales

The objective was to establish whether the Wallis Lakes outbreak had an impact on sales of other species of fish and shellfish or on imports.

Data on four years sales at the Sydney Fish Market was used to established whether the outbreak and its attendant publicity (in February 1997) had any impact on the volume and value of sales.

The possible impact on oyster imports was assessed through an analysis of New Zealand Fishing Industry Board oyster export data to Australia over the period January 1995 to October 1997.

(c) Impact on retail sales

The impact on retail sales was undertaken through the use of face to face interviews undertaken in July 1997. Interviews were conducted with 56 Sydney retailers and wholesale businesses and were compared with the results of an earlier study undertaken privately in January/ February 1997, when 62 businesses were interviewed.

vii. Detailed results

(a) Producer impact

New South Wales

The impact varied significantly between areas and over time. At Wallis Lake, sales stopped at the start of the incident and slow sales were recorded until October. However, North Coast and Wallis Lake had already sold about 66 per cent of their production by the time of the incident. Some small producers discounted prices by 10

per cent but only limited volumes were involved. With reduced turnoff more oysters were left to grow out, resulting in very strong end year demand for oysters from the region, allowing producers to recover lost revenue.

South of Sydney the immediate impact was for strong growth in demand but fell sharply with the subsequent publicity. There were a lot of oysters being sold as Batemans Bay oysters following the publicity. The fall in demand was not as prolonged as for North of Sydney and sales also recovered strongly. The predominant view was that very little money was lost by producers in the region.

Tasmania

TASEA is the marketing company for many Tasmanian farmers. The impact of Wallis Lake 'was not really that bad—we didn't suffer that much'. At that time they had very little stock to sell because of normal spawning season.

TASEA had to spend a little more than normal on market visits to assure customers of QA programs and safety of Tasmanian oysters and generally bolster support. They estimated that they probably spent about \$15-20 000 because of the Wallis Lake incident on extra visits to customers and some point of sale material. Business had recovered by the end of 1997. One positive outcome was that customers are not so price conscious as before, and are prepared to pay a little more for a safer oyster.

South Australia

Sales were directly affected with a loss of 59 per cent of sales immediately following the media coverage of Wallis Lake. OYSA spent about \$50 000 to "keep the business going" through on road promotion in South Australia, based on appeal to locals regarding their safe waters and the South Australia Quality Assurance program. The company also undertook a visit to Victorian processors to assure them of safety of South Australia oysters as well as advertising both in South Australia and in Victoria through radio. Sales in December 1997 had recovered to 85 per cent of the levels before Wallis Lake oyster contamination.

Oyster Imports

The possible impact on oyster imports was assessed through an analysis of New Zealand Oyster exports to Australia over the period January 1995 to October 1997. This revealed that there was an increase in oyster exports in February 1997 compared with the two previous years, with the most likely reason being to cover the shortfall resulting from the removal of Wallis Lakes oysters from the market. However, sales of chilled half shell oysters (the closest substitute for fresh Australian oysters) in between

March and June 1997 were 58 per cent below the average for the same period in the previous two years (see attachment A, which shows the New Zealand oyster imports to Australia by month).

Impact on Sydney Fish market

An analysis of seasonality of sales was completed using data covering the period before and after the outbreak to identify any possible fall in sales or in prices. Comparison of sales in the periods revealed no loss of sales or impact on price levels (see attachment B which shows monthly volume and value of sales by the Sydney Fish Market).

Retail surveys

The first survey was carried out in January and February 1997 and the second in July 1997. In the first, 62 Sydney businesses associated with fish retailing or wholesaling were interviewed. In the second survey, 56 businesses were covered. While the aim of the initial survey was to obtain information on industry outlook expectations, the second survey aimed to identify the changes in their expectations as a result of the publicity surrounding the outbreak. In the second survey the impact on their turnover was also sought.

Survey results

First Survey: January, February 1997.

62 fish retailers and wholesalers were asked "What about the future of the fish business generally, will it be better, same or worse?"

Response	Frequency
Same	6
Better	24
Worse	24
Uncertain	8

Those respondents that answered "same" or "worse" gave the rising prices of seafood (n=21) as the major factor, followed by the growing restrictions on supply (n=14) and growing competition including the increasing involvement of supermarkets (n= 12). Not one negative respondent mentioned a possible loss of business as a result of a seafood scare, such as stemming from an outbreak of a seafood-related food poisoning. When the same question was asked in the July survey there was increased pessimism in relation to seafood retailing, as shown below.

Survey: July, 1997

Response	F	requency
Same		17
Better		6
Worse		32
No comment		1

Fifty six fish retailers and wholesalers were asked to comment on the turnover of their businesses when compared to the same period in the previous year. On average turnover was estimated to be 14 per cent lower but there was a wide spread in responses received. Traders estimation of the percentage change in their business was as follows:

% degree of change (+/-)	Frequency
+20%	2
+15%	1
+10%	3
zero change	17
-5%	1
-10%	5
-15%	2
-20%	9
-25%	4
-30%	8
-40%	2

One respondent who said business was worse, did not give an estimation of how much business had been lost.

To establish the reasons for the downturn, those businesses which had experienced the downturn in turnover were asked (through an open question) for the key reasons behind the change. The responses show a variety of reasons in addition to the oyster problems, including the economy, local and and personal issues. The reasons given are summarised as:

Comment	Frequency
Economy poor	15
Weather poor	6
Bad Publicity [general, but including oyster publicity]	11
Oyster Scare	16
Lake Macquarie publicity	2
Burmese Prawns pub; licity	1
Increased Competition (includes 6 re Supermarkets0	9
Personal/Local Issues	13
Increased Prices at Markets	4
Condition of Substitutes i.e Price/Promotion of other meats	1
Don't Know	5
Lack of Promotion	3

Note: more than one reason given by some respondents

The respondents were then specifically asked about the impact of the pollution publicity earlier in the year on their business. Sixty per cent (34/56) believed that the publicity had negatively affected their trade. This was a stronger response than that received in the earlier (open) question, which suggests that the combination of factors were involved. When asked to identify specifically the impact on their business, thirty respondents answered as follows:

Impact on business (of oyster scare)	Frequency
-5%	6
-10%	4
-15%	3
-20%	7
-25%	. 2
-30%	7
-35%	1

These data suggest an average reduction in business of 18.3%. However, this information would need to be weighted by the turnover of the respondents business to provide an estimate of the actual losses involved. This information was not provided.

Oyster sales were affected in 90 per cent of businesses. For those businesses the unweighted average fall in oyster sales was 80 per cent. The estimated fall in sales by business was as follows:

% Decrease in Oyster sales	Frequency
0	1
-5	1
-10%	1
-20%	1
-50%	4
-60%	2
-70%	3
-80%	9
-90%	6
-99%	1
-100%	20

Oyster sales had recovered in the six months following the outbreak for 43 per cent of businesses affected. However, there was increased pessimism since the food poisoning outbreak. When all the respondents were asked "What do you think of the future for your business?", 56 respondents answered as follows:

Response	Frequency
Same	9
Better	19
Worse	22
Don't Know	6

Reason	Frequency
Price of Fish	10
Increased Competition	22
Maintenance of Supply	7
Supermarkets (Sale of "poor" quality products gives bad	10
reputation)	
Deregulation, restriction of supply	4
Quality Assurance, product handling	3
Fall in consumer disposable income/consumer confidence/slow	8
retail sector	
Fisheries Policy/Quotas	5
Bad Publicity/Public relations	8
Lack of Promotion	19

(note respondents could cite more than one reason)

It is clear from these data that although the earlier data suggest that the oyster scare had a strong negative effect on their businesses, the majority of fish merchants expect their business to worsen because of increased competition and a lack of promotion and implies that they expect the negative publicity attributed to the health issues to have only a short term impact.

viii. Benefits

The cost of health outbreaks involving seafood can be assessed against the cost of developing food safety plans to encourage industry to develop strategies to address these issues. However, such analysis involves a large number of sectors and has major data requirements.

ix. Intellectual property

Not applicable

x. Further development

Both the issues covered in the project – the impact of safety issues on demand and the development of an economic framework for analysing safety strategies for the seafood industry – are high priority issues and require work. However, while the availability of production data will be less of a problem in the medium term, such an analysis will still require detailed industry data on production and marketing costs.

xi. Staff

Perry Smith Greg Griffiths John Grivas Nick Ruello

xiii Distribution

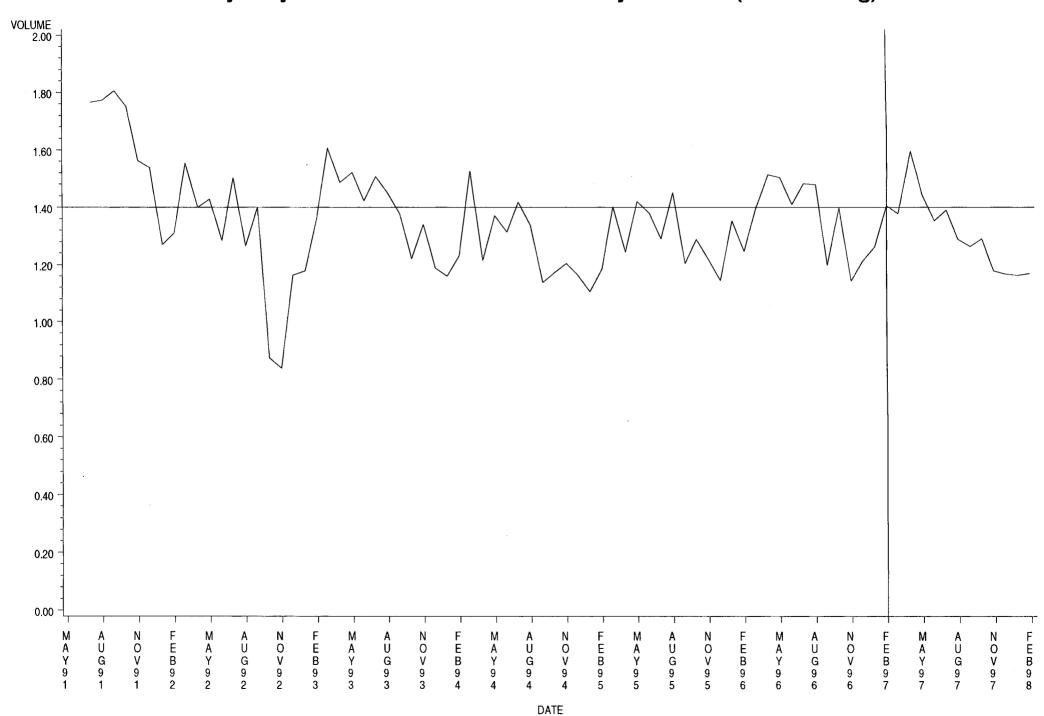
The Outlook 98 papers were widely distributed in summary form though FRDC R&D News Vol. 6 No. 2 April 1998 pp. 8–12, and through trade magazines (Queensland Commercial Fisherman and New South Wales Fisherman). There was also wide press coverage, including a segment on the ABC Country Hour.

Shee

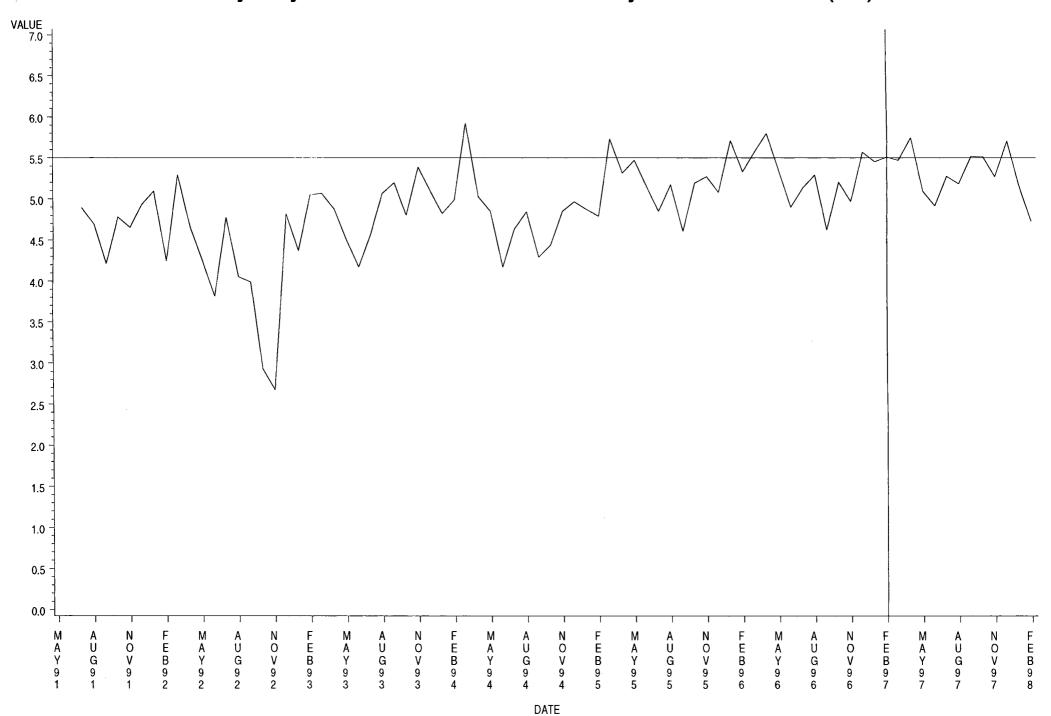
A: New Zealand Exports of Oysters by Month.

				AUSTRALIA																	-									
onth	Oyster	s chilled ha	ifshell	Oyst	ers chilled	meat		ers chilled y		Oyster	s dredge f	z meat	Oyste	rs dredge	fz h-s		rs frozen h			ers frozen			ers frozen			ters live ch		Oysters of		
			Unit value 6.46	Weight	FOB value	Unit value	Weight 721	FOB value 4765	Unit value 6.61		FOB value	Unit value	Weight	FOB value	Unit value	Weight	FOB value 235897	Unit value 5.45	Weight	FOB value	Unit value	Weight	FOB value	Unit value	Weight	FOB value	Unit value	Weight	FOB value 16626	
Oct-97 Sep-97	13313	85997	6.46				/21	4/65	0.01					•		43306	235897	5.45					-	-				2700	10020	T
Aug-97	24323	177231	7.29	4000	16983	4.25	1320	5527	4,19							26413	238001	9.01				968	7172	7.41						
Jul-97		132581	7.55										1000	6973	6.97		248064	7.86	593	5280	8.9									1
Jun-97	4713	38800						4773					157	975	6.21		143428	7.61				292	2400	8.22			-			├
May-97 Apr-97	4884 3758	37377 32190	7.65 8.57				703	4//3	6.79								126696 102337	9.1 8.4	-											+
Mar-97	2530	19447	7.69	14951	134617	9										12177	102007	0.4				282	2351	8.34					-	\vdash
eb-97	9989		8.47				1120	3526	3.15							18365	159885	8.71				730								
Jan-97	3106	19375	6.24										500		8.84		405035	8.12												↓
ec-96	12789	92034	7.2				2496	12965	5.19				1652	15627	9.46		440905	7.59				775	6483	8.37						┼
ov-96 Oct-96		110456	7.12 7.92				466	3658	7.85				310	2581	8.33		253520	8.72 8.52				85	558	6.56						+
ер-96		153661	8.41				636	5403	8.5				- 0.0		0.00		265047	8.96				- 00								
ug-96		171277	8.5	185	1009	5.17	604	4914	8.14								161432	8.94				188	1639	8.72						
Jul-96		124302	8.21				1961		6.5				1204	10060	8.36		241964	9									ļ			
un-96	10367	90315	8.71		<u> </u>	ļ	648		10.16				550	4012	0.70		247379 115222	9.19 8.57				2122	17327	8.17	-		 			+
ay-96 pr-96	8808	74223	7.69 8.43				04)	6511	10.16				1325	4818 5473	8.76 4.13		135592	9.41		12600	11.36	2122	1/32/	6.17						\top
Mar-96	5072	41630	8.21	89	387	4.35							1000	9145	9.15	8435		9.44			50									
eb-96	5117	38042														24926	202813	8.14												╨
Jan-96	400:0	407000				-	-			-				*		00:00	47/22-							-			 			+
lov-95		137277	8.46 6.47				430	2140	4.96	-	-		912 2086	7906 18970	8.67 9.09		171066 297125	8.5 8.02	1						576	6570	11,41			+
ov-95 ct-95	24591		5.57				430	2140	4,96	1			990		8.92		176871	5.89	 			3928	12169	3.1	3/6	<u> </u>	11.41	-		\top
ер-95	14232		7.72	242	2016	8.33	293	2069	7.06				1290		8.6		276560	7.28				915								
ug-95		144402	7.75										637				246162	8.37				279					L			1
Jul-95		130429	7,42										1126	10196	9.06		172541	7.71				844	10000	11.85						+-
Jun-95		138359 121944	8.52				242	1701	7.02	126	785	6.23					157339	8.95				26	207	7.00	908	7027	7.74			+
1ay-95 1pr-95	3703	24167	8.18 6.53				242	1701	7.03				211	948	4.49		165758 62841	9.04 9.2					207	7.96	810	5434	6.71			+
Mar-95	3459	28186	8.15											- V			112642	9.53												
Feb-95	6436	49890															117627	8.4												_
Jan-95	10192	91826	9.01	164			40004	70004	24.40	400	705		44050	400700	400.4		220105	8.73		47000		44404	70054	400	2294	40004	25.86	0700	16626	5
IAL	395223	3E+06	239.76	18631	156129	37.91	12201	76084	94.43	126	785	6.23	14950	123/63	120.1	762471	6E+06	260.36	1702	17880	20.26	11434	/6654	104.3	2294	19031	23.00	2700	10020	+
							i														<u> </u>									\dagger
																	ļ													I
1									*************		*************			L		ļ	ļ							1						+
4						Overen I	mports f	N7							-	-			 						-		-			+-
800	46					Oyster i	iliborie i	IUII NA				y 10				<u> </u>							 			$\overline{}$				+
	"																													
]							$/\Delta$				$\mathcal{A} \setminus \mathbb{R}$		- Oysters																	4
-		١.,	Λ		. /					T.	,	1"	chilled halfshell												<u> </u>		 			┿
500	00	$\lambda \cdot J$	<i>)</i> —			-		. N.	\ ^	M_{∞}	/ Y		Weight					<u> </u>					 	+	 	 	-			+
┧		- 4/1	موسر ا	~~	/		/ \ [*]	~~	$\mathbf{X} \mathcal{L}$	\lor $\!$		7 8		 		1				1			1	 			1			+
		/ "	/				N.		\ <i>T</i>]	·· Osyters			1				1			i							
]				\ <i>[</i>	•			1			\/	7	frozen halfshell]							Τ.
	100			V				, A	M		٧		Weight	II			1									₩	 			+
- `````````					<u> </u>			`	W			6	-				 		 	 -			-				-			+
"				,	1	Λ			¥			I II	Oysters			t .	T	 	1	t -			1	1	-		-			+
				1		1			_			16	chilled			1	İ		L											土
	00			- 1		- \			1				halfshell Unit value	, [\Box
300	-00											40000		₿I	1		-				<u> </u>		ļ						 	+
	00		١	- 1		×				•		200 A 200 A							1	1										1
300		1	\	1		`			4	•	\	_	— Osyters			_	 		1							-	 			+
		\	7]	,		_	. /	١.			 	— Osyters frozen																	‡
300		1	1					J] :	frozen halfshell																	Ŧ
300		1	7	Ι,		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		J				-	frozen	-																

B1: Sydney Fish Market - Total Monthly Volume (000 000 kg)



B2: Sydney Fish Market - Total Monthly Value of Sales (\$m)



Fisheries Research and Development Corporation

Statement of Receipts and Expenditure for the period ending 30 June 1997

Name of Research Organisation	ABARE
FRDC Project Number	97/349
Title of Project	A post economic analysis of Wallis Lake - Impact of hepatitis A

Budget Summary	1996-97	1997-98	
Original Budget		\$14,994.00	
Current Budget			

Summary Receipts and Expenditure for the project since commencement

	1996-97	1997-98		
B/F	\$0.00	\$0.00	\$0.00	\$0.00
FRDC Funds (Plus)	\$0.00	\$7,497.00	\$0.00	\$0.00
Expenditure (Minus)	\$0.00	\$0.00	\$0.00	\$0.00
Refunds (3)	\$0.00	\$0.00	\$0.00	\$0.00
Balance C/F	\$0.00	\$7,497.00	\$0.00	\$0.00

Details Fina	ncial Year to 22/6/98										
} -	Funds Available										
	Balance brought forwar Total funds received fr	*	\$7,497.00								
Allocation		Less Expenditure									
	\$6,794.00	Salaries Travel	\$5,842.00								
·	\$8,200.00	Operating Capital	\$7,173.00 * \$0.00	\$13,015.00							
	\$14,994.00	Balance as at 22/6/98		(\$5,518.00)							
Notes			<u> </u>								
1	Use this column for the final year ONLY regardless of the length of the project										
2		Total current budget shall not exceed Total original budget without the approval, in writing, from the FRDC									
3	Refunds should only be paid at com	Refunds should only be paid at completion of the Project together with the final audited statement									
4	ACTUAL EXPENDITURE (whether case	ACTUAL EXPENDITURE (whether cash or accrual) ONLY. Commitments shall not be included									
5	Show allocation for the current financial year. Transfers between budget heads allowed under 9(f) of										
	the project agreement, or approved, in writing by the FRDC, shall be listed in the comments.										

* Includes the \$5,000 paid directly to Nick Ruello

Certified by:

M Wester.

22-Jun-98

(Signature and date)

Outlook for the Australian seafood industry

Speaker: Perry Smith, Principal Research Officer, Fisheries Economics Section, ABARE

Author: P. Smith, ABARE

- Asian economic developments are expected to have a major effect on the short and medium term outlook for the Australian seafood industry. Three key factors devaluation of the currencies of key Asian seafood suppliers, a weaker economic outlook in Japan and Hong Kong, and stricter application of Chinese Taipei's tariff policies will have a major impact on Australian seafood exports.
- The developments in Asia are expected to flow to the domestic seafood market. Effects are likely to include increased import competition, lower exports and lower demand as a result of weaker Australian economic growth and lower consumption by tourists. Catches of a range of species are also expected to be lower in the short term as El Niño weather patterns affect domestic catches.

Introduction

The outlook for Australian fisheries products is likely to be influenced by a range of important issues, including the impact of El Niño weather patterns on short term catch rates, considerable uncertainty about the economic outlook in Australia's key markets and the prospective impact of developments in these markets on the Australian seafood industry in both the short and medium term.

The value of Australian fisheries production is forecast to fall in 1997-98, with both lower catches and prices expected across a range of fisheries. Several potential influences involved with El Niño conditions can reduce catches, including: reduced estuarine runoff resulting from below average rainfall; lower nutrient levels; higher water temperatures; changes in currents; and increased cyclonic activity with associated

seagrass damage. The extent of any reductions in catches is difficult to estimate because other factors, such as fisheries recruitment, are involved.

Not all fisheries are affected. Catches in the Western rock lobster fishery (Australia's most valuable fishery) are expected to rise as a result of earlier high peurulus settlement. However, with the last major occurrence of El Niño in 1985-86, catches were significantly lower in prawn fisheries (figure 1) and finfish catches were reduced.

It could also be expected that El Niño conditions may reduce catches from other countries in the Asian region, with the result that total supplies of a range of seafood may be reduced in the short term. Catch rates in wild prawn fisheries, for example, could be expected to be influenced by drought in countries such as Indonesia. It seems likely that mariculture activities will be less severely affected, but the availability and quality of water supplies is crucial to farmed seafood production so a range of outputs could be lower.

Economic conditions in Asia will have a significant negative impact on the Australian seafood industry. A large part of the Australian seafood industry sells directly to Asian markets and those sectors supplying the Australian domestic market are also likely to be influenced by recent and expected Asian economic developments. Consequently, outcomes in Asian economies and their likely impact on seafood demand and trade flows are likely to be crucial influences on the seafood industry in the short and medium term.

Australian seafood exports were valued at \$1070 million in 1996-97, 90 per cent of which came from sales to Asia. Exports were

Outlook for seafood

	Unit	1995 -96	1996 -97	1997 -98 f	1998 -99 z	1999 -2000 z	2000 -01 z	2001 -02 z	2002 -03
Gross value of prod		- 50	,	30 1	,,, <u>,</u>	2000 2	012	02 2	-03
Tuna a	· A\$m	85	94	82	80	80	82	83	84
– real b	A\$m	89	96	82	<i>7</i> 8	<i>7</i> 6	<i>7</i> 5	74	<i>7</i> 3
Other fish	A\$m	358	360	350	360	374	386	386	386
– real ъ	A\$m	373	367	350	351	354	355	345	334
Prawns	A\$m	366	344	300	289	280	290	295	295
– real b	A\$m	382	350	300	282	265	267	263	256
Rock lobster	A\$m	372	409	350	450	452	410	410	410
– real b	A\$m	388	417	350	439	428	377	366	355
Abalone	A\$m	142	140	122	107	113	123	133	136
– real b	A\$m	149	143	122	105	107	113	119	118
Scallops	A\$m	71	53	54	58	59	60	60	65
– real b	A\$m	74	54	54	57	56	55	54	56
Other	A\$m	305	356	276	281	294	295	307	308
- real b	A\$m	318	363	276	275	278	272	274	267
Total	A\$m	1 700	1 <i>7</i> 56	1 535	1626	1 652	1647	1 675	1 684
– real b	A\$m	1774	1 <i>7</i> 90	1 535	1586	1 565	1514	1 495	1 459
Export value			•						
Tuna a	A\$m	56	67	65	55	-55	55	56	57
- real b	A\$m	58	69	65	54	52	51	50	49
Other fish	A\$m	111	7 8	101	100	105	95	90	85
- real b	A\$m	116	80	101	98	99	87	80	74
Prawns	A\$m	223	184	167	150	150	140	140	150
– real b	A\$m	233	187	167	146	142	129	125	. 130
Rock lobster	A\$m	418	453	398	448	469	474	474	502
– real b	A\$m	436	462	398	438	444	436	423	435
Abalone	A\$m	147	170	148	135	135	145	150	160
– real b	A\$m	153	173	148	132	128	133	134	139
Scallops	A\$m	67	37	32	34	35	37	38	4 0
- real b	A\$m	7 0	37	32	33	33	34	34	35
Other	A\$m	306	316	263	278	261	294	312	326
- real b	A\$m	320	322	263	271	248	270	279	282
Total	A\$m	1 328	1 305	1 1 <i>7</i> 5	1 200	1 210	1 240	1 260	1 320
- real b	A\$m	1 385	1 330	1175	1 171	1 147	1 140	1 125	1 143

a Tuna transhipped at sea or captured under joint venture or bilateral agreements are not included. b In 1997-98 Australian dollars. f ABARE forecast. z ABARE projection.

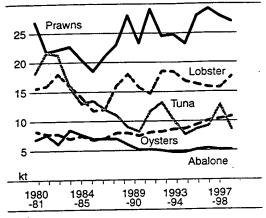
Sources: Australian Bureau of Statistics; ABARE.

focused on three main countries — Japan (40 per cent), Hong Kong (21 per cent) and Chinese Taipei (20 per cent) (figure 2). China also emerged as a major market during the year, with the value of its imports of Australian seafood increasing by 250 per cent to \$53 million in 1996-97. Rock lobster, abalone and tuna exports all recorded relatively strong growth, but prawn, crab and scallop exports fell sharply. The reduction in prawn exports was a result of a 5 per cent

fall in catches and a redistribution of catches to domestic markets, while the reduction in scallop exports was associated with lower catches.

The economic upheavals in major South East Asian countries — Thailand, Indonesia, Malaysia and the Philippines — have raised concerns about the likely effects on Australian seafood exports. The region is not a major market for Australian seafood compared with North Asian markets. South

Figure 1: Volume of Australian catch, by selected fish products

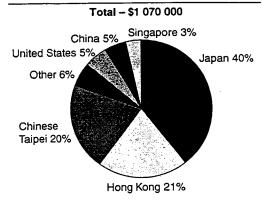


East Asia only accounted for around 4 per cent of the \$1070 million earned by Australia's seafood exports in 1996-97. Singapore was the main market for Australian seafood in the region, with sales of around \$34 million (mainly abalone). Some reduction in sales is expected, but Singapore is the least affected of South East Asian countries by the economic downturn.

Australian seafood imports from the Asian region are expected to increase as landed prices decline in the wake of sharp falls in the values of several currencies. The Asian region is a major supplier of seafoods to Australian markets, accounting for over one third of Australian seafood imports (totalling \$600 million). Thailand is Australia's largest supplier of imported seafoods, mainly supplying prawns and canned fish (figure 3). The Australian prawn industry and manufacturers of canned tuna are likely to face intensified price competition as a result of the lower currencies.

The economic problems in South East Asia and South Korea could have significant short and medium term effects on the Australian seafood industry through their impact on Australia's main seafood markets in Japan, Hong Kong and Chinese Taipei. First, economic problems are expected to reduce demand in these markets through their negative effects on the

Figure 2: Australian seafood exports, by market, 1996-97

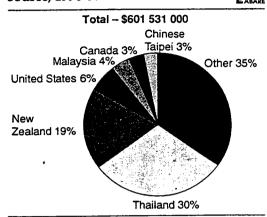


incomes and wealth of key consuming groups. Second, the large currency depreciations in South East Asia mean that seafood exports from these countries could provide substantial price competition for Australian exports of similar products into the three key north Asian markets (figure 4).

Consumer demand for seafood in Japan is likely to remain relatively weak, given low expected economic growth. But Japan's government has attempted to stimulate spending through cuts in tax rates, which could significantly boost seafood sales. Growth is expected in some areas of seafood retailing because a range of retailing innovations have been introduced, aimed at reducing the selling costs through more direct marketing (bypassing much of the highly structured import and wholesale sectors). However, the prospects for the Australian industry are more directly affected by developments in the prestige markets for rock lobster, abalone and sashimi tuna that depend on corporate entertainment, which reportedly has been cut back sharply.

Demand for Australian seafood in Japan is expected to recover progressively in the medium term as Japan's economic growth recovers. However, the aggregate growth in Japan's demand for seafood is expected to slow in the medium term as a result of

Figure 3: Australian seafood imports, by source, 1996-97



improved access to Japan's market for other foods (such as beef), the changing demographics of that country's population, and the impact of changes in tastes (with the strong growth in fast foods).

The Hong Kong market is also expected to weaken in the short term, with lower sales and prices. A major banking and financial services centre, the Hong Kong market is expected to experience some repercussions from the economic problems experienced elsewhere in the region, and these are likely to reduce the demand for the high valued species such as abalone and rock lobster. The envisaged role of Hong Kong as a gateway to seafood trade with China has not been as strong as expected, because a large amount of trade has been conducted with China's markets directly. A major slump in tourism (down around 30 per cent) since the transfer to Chinese rule in July has also weakened the Hong Kong market for seafood. Again, some medium term recovery is expected with the strengthening economic growth in the region.

Chinese Taipei is likely to be the least affected of the key markets by the regional economic problems, but Australia's seafood exports are likely to be the most disrupted (particularly in the short term) because the effective tariff rate applied to rock lobster (see below) has greatly increased.

Figure 4a: Australian seafood exports to Japan, 1996-97

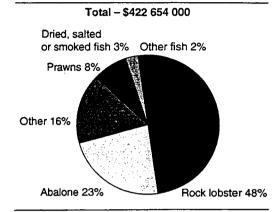
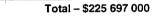


Figure 4b: Australian seafood exports to Hong Kong, 1996-97



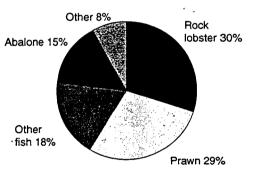
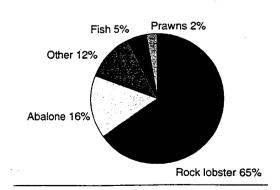


Figure 4c: Australian seafood exports, to Chinese Taipei, 1996-97

Total - \$215 024 000



Rock lobster

The rock lobster industry faces a sharp downturn in market prospects in the short term. Catching prospects in 1998 are strong — particularly in Western Australia where peurulus settlement indices have been at high levels — the prospects are weaker on the main markets (Hong Kong, Chinese Taipei and Japan). Opening 1998 season prices in the Western Australian industry were around A\$20, over 20 per cent down on 1997 opening levels.

The falls in rock lobster prices are directly related to developments in Chinese Taipei. Recent changes to customs arrangements for lobster importation are causing considerable difficulty for Australian exporters. Chinese Taipei has introduced a deposit system to prevent importers undervaluing lobster imports and therefore avoiding part of the 42.5 per cent tariff. The tariff deposit now payable is NTD\$300 (A\$13.70) a kilogram, while the specific rate previously paid was NT\$96 (A\$4.38) a kilogram. Australia is Chinese Taipei's largest source of lobster, supplying 70 per cent of all imports by volume (nearly 4000 tonnes worth A\$167 million a year), so the change will reduce the value of Australian rock lobster exports by around A\$35 million in the 1998 season.

Some easing of the above trade barrier is expected under the terms of the bilateral World Trade Organisation (WTO) market access arrangement, concluded in October 1996. When Chinese Taipei becomes a member of the WTO, the tariff on Australian lobster will be reduced to 20 per cent, then reduced by 1 percentage point a year over five years to reach 15 per cent. Even at these rates, the tariffs will be double those which effectively applied previously. Nonetheless, they will allow the Australian industry to expand sales. The second possibility for a reduction of tariffs is through accelerated liberalisation of seafood trade in the APEC region (proposed for completion by 2002).

The demand for live rock lobster is likely to be relatively unresponsive to price changes because it is a luxury good, but the magnitude of the increase in effective tariffs is already large and is likely to be amplified by the markups between import and the retail level. As a result, administrative revisions to the application of tariffs are likely to result in significantly lower sales of Australian lobster. Product not sold on the Chinese Taipei market will need to be sold on alternative markets, putting further pressure on prices.

Hong Kong has been the largest market for Australian live lobster since 1992-93, with sales of 2600 tonnes (valued at around A\$100 million) in 1996-97. However, several factors are expected to contribute to reduced sales and weaker prices in 1998 and in the medium term: as previously discussed, the repercussions of the economic problems experienced elsewhere in the region and the slump in tourism are reducing demand for seafood.

Sales of rock lobster to Hong Kong over the medium term are not expected to reach their high previous levels because direct sales to China will grow. Improved access to China has resulted in reduced sales to Hong Kong, which previously acted as an intermediary to China's market. This trend is expected to intensify over the medium term. China has emerged as a significant market for Australian rock lobster, with Australian exports (valued at A\$32 million) reaching around 850 tonnes in 1996-97. These sales are likely to expand further in the medium term. However, short term growth in China's market is not expected to be sufficiently strong to offset the loss of sales to Chinese Taipei until tariffs in the latter are reduced.

There are only limited prospects for increasing lobster sales to Japan in the short term, but a gradual recovery in the market is expected as business confidence returns with stronger growth. Japan's imports of rock lobster declined by 10 per cent to 7200 tonnes over the first ten months of 1997,

OUTLOOK 98 225

with all of the reduction in supplies from countries other than Australia.

Australia supplied almost 30 per cent of rock lobster imports to Japan in 1996, and was able to maintain its market in 1997 with a strong emphasis on exporting live lobster. It is expected that this will be more difficult in 1998. Japan's demand for rock lobster is expected to be weaker in the short term reflecting lower demand from the business sector and in private catering — and is projected to recover only gradually. Bridal banquet consumption of rock lobster has contracted sharply, with October and November sales 30 per cent below levels in the same months in 1996. The result has been a fall in prices to boost sales (Ryuken Research Institute 1997).

Prawns

The Australian prawn industry is likely to face a difficult year, given lower production in several fisheries as a result of El Niño weather conditions and difficult trading conditions. Wild catches were 26 200 tonnes in 1996-97 — 5 per cent below the previous year's level but nonetheless above the longer term average. However, production in both sectors is expected to be lower in 1998 than in 1997. Wild prawn catches are expected to be reduced as a result of lower than average rainfall, while above average cyclonic activity means that increased seagrass damage is possible. Farmed prawn production was up 4 per cent to around 1600 tonnes in 1996-97, but is forecast to fall in 1997-98 and no substantial increase is expected over the next few years under the prevailing market conditions.

International markets for prawns are likely to face trade disruptions in the short term and weaker longer term prospects. The impact of the economic problems in South East Asian countries is likely to be a key influence on their prawn industries and trade. These countries together held around 30 per cent of the total world production in 1995. Thailand remains the largest producer

of black tiger prawns through aquaculture, with production of 277 000 tonnes in 1995 (up from 108 000 tonnes in 1990). It has a large market influence. The larger prawns directly compete with Australian produce and have indirectly set market price levels in Japan. They have also been a major source of supply to the United States.

Prawn supplies in Asia are set to expand further. However, in the short term, the currency devaluations of the key South East Asian suppliers of prawns appear unlikely to evoke a major increase in supplies. The impact of El Niño is likely to restrict any expansion in wild catches, while all prawn industries of the region are already strongly export focused, limiting the potential for diverting products from domestic markets. However, the devaluations do allow suppliers to discount prices to boost sales, and this will be reflected in offer prices for Australian prawns.

The Asian currency devaluations will strengthen the competitiveness of South East Asian suppliers on world markets in the medium term, so there are prospects for further expansion of these industries. Indonesia in particular has expanded its production of farmed prawns and has a number of large farms entering the market with annual turnoff of around 10 000 tonnes each. Indonesian sea caught brown tiger and banana prawns are also major competitors for Australian product on Japan's market.

The key influences on the Australian export sector will be developments in demand and supply in Japan and changes in the trade flows resulting from barriers imposed in the United States and European Union markets. Japan's demand for prawns was relatively subdued over 1997 but prices were unstable, with periodic shortages of large prawns boosting Australian prices during the second half of the year.

However, given the combined impact of weaker demand in Japan (see factors outlined above) and substantial devaluations in the currencies of major South East Asian

suppliers, prices are expected to ease as traders with exchange rate advantages attempt to boost sales by discounting prices. The demand for live kuruma prawns is likely to be affected by the slowdown in business demand within Japan, such that Australia's live prawn trade based on farmed kuruma prawns may be at some risk (particularly in the short term but also over the medium term if currency advantages lead to intensified competition).

Japan imported 223 000 tonnes of prawns in the first ten months of 1997, 6.5 per cent below comparable 1996 levels. The four countries most affected by the currency upheavals (Thailand, Indonesia, Malaysia and the Philippines) supplied 35 per cent of this total. Indonesia is now the largest supplier of prawns to Japan, with sales of almost 50 000 tonnes in the ten months ended October 1997. Thailand's exports to Japan fell by 25 per cent to 20 300 tonnes in the same period, as its sales to the United States were expanded.

Further factors likely to elicit changes in prawn markets are the continuing disruptions to trade with the United States following the ruling by the US Court of International Trade on Public Law which requires all countries exporting wild caught prawns to the United States to have a sea turtle conservation program in place and to use sea turtle excluding devices in trawl nets.

The decision has prevented Australia and a number of other countries with a trawl based industry from exporting to the United States and has resulted in highly concentrated trade with the aquaculture producers who supply most imported prawns to that market — Thailand (26 per cent) and Ecuador (25 per cent).

US demand is relatively strong, with imports nearly 10 per cent higher in 1997 than in 1996. However, some further disruption to trade is likely with new US health requirements on prawn imports requiring exporting countries to have approved Hazard Analysis Critical Control

Point systems in place on all prawn processing facilities.

The European market for prawns is also expected to undergo significant changes as a result of EU bans on product from a number of countries (including Bangladesh and India) on hygiene grounds. A further change is likely with the removal of Thailand from developing country status under the Lomé Convention. Removal of this status will mean the elimination of Thailand's tariff advantage over suppliers from developed countries such as Australia. The high tariffs applying to prawn imports on the EU market restrict the potential growth, but demand is nonetheless expected to grow, both in the short and longer term

The Australian domestic market for prawns will also be affected by the developments in Asia. Thailand is the largest supplier of prawns to Australia, supplying 62 per cent of the 8300 tonnes of fresh, chilled and frozen prawns imported in 1996-97. These prawns, valued at A\$108 million, increasingly compete with Australian trawl caught prawns (mainly from the east coast) and the farmed black tiger prawns for the supermarket, club and restaurant sectors. This competition is expected to intensify in the first half of the outlook period

Abalone

Australian abalone producers face weaker prospects in both the short and medium term. Opening prices for the 1998 season are forecast to fall by around 20 per cent, given the weaker prospects for prestige seafood products in Japan and Hong Kong. Chinese Taipei and China are both strong emerging markets for abalone, but growth in these markets is unlikely to offset the downturn in the established markets.

Australia's position as the major supplier of wild caught abalone is likely to continue in the medium term, although there is some threat of depletion through poaching activities. Abalone is susceptible to stock depletion as a result of its low mobility and unregulated fishing can threaten stocks through high fishing in more accessible areas and of particular year classes.

The emergence of farmed abalone as an alternative supply source could weaken the Australian position in the medium term. The high price of wild caught abalone reflects its limited prestige market and low supplies. There appears to be little market competition between the two on overseas markets because they differ in size and because farmed product is currently available in only limited volumes, but it seems likely that prices for wild caught abalone may be weakened as increased volumes of farmed product become available. Farmed product is being used to reseed depleted wild stocks in South Korea and may also be used in this manner in other countries over the medium term.

Tuna

Concerns continue to exist in relation to the status of southern bluefin tuna stocks and the impact on the Australian industry of any strategies to rebuild stocks (Bureau of Resource Sciences 1997). The Commission for the Conservation of Southern Bluefin Tuna has set a goal of rebuilding the stock from the current 5–8 per cent of the 1960 parental biomass to around 20 per cent. Global quotas for catches have not been set, but it is highly likely that catches will need to be reduced.

However, increasing nonmember catches are putting at risk the existing tripartite fisheries management plan (between Australia, Japan and New Zealand) based on a global quota. To deal with catches outside the global quota (around 4000–5000 tonnes), Australia has proposed to Japan that a trade certification scheme be introduced to monitor and control international trade.

With global quotas not yet set, the Australian industry is facing significant uncertainty about access to catches in the

main Australian catching season (December to March). Moreover, demand prospects in Japan are likely to be weaker, at least in the short term. However, severely constrained supplies and the quality reputation of southern bluefin tuna on Japan's market mean that longer term market prospects remain sound if fishing access can be maintained.

Domestic market developments

The Australian domestic market for seafood was relatively sluggish in 1996-97, with few changes in either the aggregate supplies or in the general level of prices. However, assumed stronger economic activity will provide some boost to household demand for seafood in Australia in 1997-98. Against this, the full impact of the economic slowdown in Asia has yet to be transmitted to the domestic economy, while a number of the factors influencing our export markets are also likely to affect the domestic seafood market.

While Australian supplies of seafood are expected to be lower as a result of the climatic conditions outlined above, the fall in catches is likely to be felt more on the domestic market because it relies more on fish from estuarine sources. At the same time, the expected intensification in competition in the export markets is expected to result in an increased focus on domestic market opportunities. As a result, some increase in a range of seafoods usually exported (including rock lobster and prawns) is expected to be sold on the domestic market. Given that many seafood imports will also be cheaper, the level of competition in domestic markets is expected to increase, leading to falling prices for some products.

Household demand for seafood in aggregate is likely to be boosted through sustained domestic economic growth and improved retail availability. The expanded role of supermarkets in Australian seafood

retailing has increased consumer access to seafood. A major supermarket chain has expanded its activities in fresh seafood retailing on a trial basis, selling a limited range of seafood. This lead is expected to be followed by others and will result in increased consumer access to seafood as part of normal shopping.

If successful, the development is expected to boost household consumption, although part of this increase may be a transfer of sales from more specialist seafood retailers (putting greater pressure on these retailers to compete more effectively). Moreover, only a limited range of seafood is stocked by supermarkets (much of it imported or aquaculture species for which supplies are more easily assured), so there will be increased pressure on domestic producers.

The 'out of home' consumption of seafood may also gain some boost from increased domestic economic activity. However, any gains to the hotel and restaurant sector from increased domestic sales may be offset by lower tourism activity. Tourism was expected to form a major source of growth in domestic demand for seafood in the medium term (Smith 1997) with relatively strong growth mainly sourced from Asia. However, given the depreciating currencies and lower economic growth prospects in key Asian economies such as South Korea, this sector is not expected to experience major growth in the short and medium term (Tourism Forecasting Council 1997).

Other important factors will also influence domestic markets — for example, demand in Australia could be affected by the past year's adverse publicity over health and disease risk associated with seafood consumption. An outbreak of hepatitis A originating in Wallis Lakes in February 1997 had a severe impact on the demand for oysters. Other less severe incidents included high pollution levels affecting seafood from Lake Macquarie, a Sydney food poisoning case associated with imported prawns, and

attention to mercury levels in some seafood species.

Such incidents raise issues of quality and safety management in the domestic seafood industry, including the likely longer term impacts on demand, the external costs to other sectors, and appropriate industry strategies for dealing with such risks and their outcomes. The effects are generally unlikely to be localised to the source of the problem — for example, the oyster problem had a wide impact on producers, wholesalers, retailers and restaurants (regardless of their sources of supply) and may have had impacts on other seafood products.

The positive health attributes of seafood are major factors influencing the demand for seafood. The 1992 National Seafood Consumption Study (Fisheries Research and Development Corporation 1992) cited health reasons as major factors behind fish consumption for over half of those surveyed, while 86 per cent of respondents were concerned about the impact of pollution on seafood safety. If the positive attributes of the product are confounded for consumers, demand may be significantly affected.

Any strategies adopted to address quality and safety issues must address the fundamental sources of the problems and the industry's control over them. A key problem is that quality is difficult to define and is inherently tied to consumer expectations. For the restaurant and catering sector (a major user of Australian fish), the 1992 National Seafood Consumption Study identified deficiencies in quality. Compared with other meats and chicken products, the quality of fresh and frozen fish was more variable and the produce was more likely to be discarded. Food businesses also found it more difficult to obtain the products, to ensure ongoing supplies, and to source portions of the required size. Fresh and frozen fish were also subject to wider fluctuations in price (Smith, Tran and Ruello 1995).

The objective of quality systems is to identify, manage and monitor the risks asso-

ciated with the processes between catching and marketing. The benefits of adopting such systems result from improvements in the consistency of product characteristics, the removal of identifiable risks and the establishment of verifiable standards of product handling. These activities benefit companies in their production (through the elimination of dangerous or wasteful practices) and in their marketing (through improvements in market share) (Sumner 1996).

Quality systems must be capable of implementation and cost effective in achieving results. Any systems developed must also account for the structure of the fishing industry and for the sales intermediaries who are likely to be affected by their implementation and who will determine their success. These intermediaries are mostly small businesses dealing with a highly perishable product in relatively limited volumes. The main factors influencing product handling are consumer demands and the marketing systems used. If a quality practice improves the profitability of a business, then it has more chance of being adopted.

The absence of any standardised trading framework for seafood on the domestic market is a key impediment to the improvement of seafood quality. A standard trading framework is also a prerequisite to effective implementation of quality systems in the industry. A key problem identified by the catching sector is that premiums for quality practices are not apparent in the prices that they receive.

The trading framework for seafood has a large impact on whether quality practices are adopted. If the framework rewards fishing operators through premiums for freshness, icing and grading, then they are more likely to adopt improved handling of the product. Similarly, if there are benefits to marketing intermediaries through improved shelflife, fewer discards and increased sales, then quality issues will be more important.

Conclusion

It is still too early to determine the full magnitude and timing of effects of changing economic conditions in Asia, but it is likely that there will be significant longer term implications for both fisheries trade and the seafood industry. One positive implication is likely to be improved visibility of trade impediments and rationalisation of both direct and indirect industry assistance measures. A condition of International Monetary Fund assistance in both Indonesia and South Korea has been the dismantling of a range of trade barriers, while the financial pressure will also encourage dismantling of more direct industry assistance measures.

The weaker market outlook will also increase existing pressures for structural adjustment within the Australian fishing industry. These pressures already exist as a result of rising fishing effort and other demands on fisheries resources, including recreational and conservation uses.

The emerging market conditions will also result in increased pressures for adjustment in marketing through the squeezing of marketing margins and greater competition as a range of Asian economies intensify their efforts to expand export oriented primary industries in a period of subdued regional demand.

The values of seafood production and exports are both forecast to fall by around 12–13 per cent in 1997-98, before partly recovering in the medium term. The value of exports is projected to fall by almost 3 per cent (in 1997-98 dollars) to reach around \$1.1 billion in the medium term.

References

ABARE 1997, Australian Fisheries Statistics 1997, Canberra.

Bureau of Resource Sciences 1997, Fisheries Status Reports 1997, Canberra.

Fisheries Research and Development Corporation 1992, National Seafood Consumption Study, Canberra.

Ryuken Research Institute 1997, Shrimp Market Report 1997, Tokyo.

Smith, P. 1997, 'Outlook for fisheries products', In *Outlook* 97, Proceedings of the National Agricultural and Resources Outlook Conference, Canberra, 4–6 February, vol. 1, *Commodity Markets and Resource Management*, ABARE, Canberra, pp. 249–57. ——, Tran, Q. and Ruello, N. 1995, *Electronic*

—, Tran, Q. and Ruello, N. 1995, Electronic Marketing of Fisheries Products, ABARE Research Report 95.3, Canberra.

Sumner, J. 1996, 'Developing and implementing quality systems for the seafood industry', In *Outlook 96*, Proceedings of the National Agricultural and Resources Outlook Conference, Canberra, 6–8 February, vol. 1, *Commodity Markets and Resource Management*, ABARE, Canberra, pp. 258–65.

Tourism Forecasting Council 1997, Short Sharp Shock or Lower Growth Outlook, Special Report no.1.

OUTLOOK 98 231

Getting the food regulatory environment right – implications for the Australian seafood industry

Speaker: Winsome McCaughey, Chairperson, Australia New Zealand Food Authority, Canberra

Introduction

This paper deals with the way the Australian and New Zealand Food Authority is working to get the food regulatory framework right and some of the implications of the new environment of food regulation for the Australian seafood industry.

Australians have access to a varied, plentiful and safe food supply. But as any particular food product that we eat may contain many components, go through numerous stages and be handled by many parties, there are always plenty of opportunities for something to go wrong across the food supply chain. And it is only when something goes wrong that the many steps in the process are highlighted and consumers and the media start expressing concerns about quality and safety of the whole food industry.

The seafood industry has had its share of scares. There was the recall of live pipis following an acute gastroenteritis break out just before Christmas, and we saw from the oyster linked outbreak of hepatitis A in New South Wales, which affected more than 700 people a year ago and saw oyster sales slump by 80 per cent in its aftermath, how quickly the industry can be damaged, if one part of it fails to get it right.

In addition to these incidents from the seafood industry, over the past few years we have had some major outbreaks of foodborne illness:

 the Garibaldi incident in 1995 resulted in the death of one child and left many other children with permanent disabilities; it also dealt a severe blow to our entire small goods industry, and knocked out some parts altogether;

- a chocolate dessert on flights from Cairns to Japan left hundreds of passengers ill and damaged our reputation in that country as a supplier of safe food;
- the 1996 recall of peanut butter due to salmonella contamination, has led to a class action involving around 1400 people, with Kraft facing a multimillion dollar payout; and
- outbreaks of salmonellosis in Victoria early last year, and 'the pork roll' incidents last November affected more than 500 people.

This shows that the issues of food safety, and the competitiveness and even the survival of food businesses and sectors, are interdependent and should not be taken for granted. They also demonstrate that when it comes to reputations, a food sector or a country are only as strong as the weakest link in the food supply chain.

Indeed when it comes to food, the interests of consumers and industry and of all parties across the food supply chain are very closely linked. Consumers benefit from a nutritious, safe, good quality food supply, and industry benefits when consumers are confident in that food supply and are strong advocates for it.

Food regulation in Australia – the challenge

The big challenges facing both the food industry and food regulators today include:

 for the Australian food industry — how to become more competitive and to secure a larger share of the global food market, particularly the Asian market in the current rapidly changing economic environment; and

• for food regulators — how to protect the health of our consumers and Australia's reputation as a supplier of clean food in a world where there is increasing opportunity for the spread and mutation of quite virulent food pathogens (what I call the new food safety circumstances), while working as part of a federated system and in the new global deregulatory environment.

Australia's food industry — in all its manifestations across the food supply chain (from primary commodities, transport, wholesalers, retailers, to restaurants and catering) — is a vigorous and expanding one and of great importance to this country. Its total value is estimated to be around \$60 billion a year, with the Australian seafood industry worth \$1.07 million a year. The health of our food industry is obviously critical not only to the physical health of all Australians, but also to the economic health of this country.

Members of the Australian seafood industry I am sure are aware of the breadth of the food supply chain as it spans from the pier or aquaculture pond to the plate. Coordinating food regulation in Australia today is a major challenge for the Australia New Zealand Food Authority (ANZFA) and it can be quite a juggling act. The three levels of government, Commonwealth, state/territory and local are all involved, as well as the range of industry bodies and authorities across the food supply chain, plus the various portfolio interests in food regulation from both the primary industry and health areas. Since the treaty signed with New Zealand in July 1996 ANZFA is also becoming responsible for food regulations across two countries.

In the production/harvesting phase, fish and agricultural commodities are the responsibility of the primary production portfolios. They then become the responsibility of the health portfolios once the food is being transported, processed, manufactured and sold.

There is also the additional complexity of the relationship between levels of government. The Commonwealth is responsible for coordinating the food regulatory arrangements while the states and territories own and administer the food law.

All of this is a considerable challenge. So how is ANZFA progressing food regulation in this challenging environment?

ANZFA and the national food regulatory agenda

Food regulation in Australia is a partnership arrangement between the nine governments of Australia, through their health portfolios. The Australia New Zealand Food Standards Council (ANZFSC) is comprised of the Commonwealth Parliamentary Secretary to the Minister for Health and Family Services and the health ministers for the states, territories and New Zealand. The Australia New Zealand Food Authority (ANZFA) was created after an agreement between these governments and reports to the Ministerial Council.

ANZFA unites the nine health ministers of Australia and their portfolios, and New Zealand, in open, consultative and efficient processes for setting and revising national, and now bilateral, food standards. The ANZFA model is unique in the cooperation between state and territory governments; and it is also the first time that food law has been set by a joint authority for our two countries. For the past six years the combined governments have been determining jointly the nature of the food product standards in the Australia New Zealand Food Standards Code.

More recently the nine governments of Australia, under the direction of the health portfolios, have embarked on a national food regulatory reform agenda of unprecedented scale. This is being worked through in a consultative manner with the officials from health and agriculture portfolios at Commonwealth and state levels and with industry and consumers.

OUTLOOK 98 233

It is an agenda that aims to meet the objectives of creating a new co-regulatory environment that is capable of keeping our food supply safe for consumers, protecting our reputation as a supplier of 'clean food', and freeing business, particularly small business, from unnecessary regulatory burdens. These objectives are not mutually exclusive, indeed, they are inextricably linked.

The health portfolios of the Commonwealth, states and territories, as well as New Zealand, are progressing very well on coordination around the country in the areas of processing, manufacturing, retailing and service areas. The major reform initiates that ANZFA is undertaking at the direction of the combined health ministers include:

- reviewing the Food Standards Code and harmonising the food regulatory framework between Australia and New Zealand Code and associated regulatory and co-regulatory arrangements. This review, which commenced in 1994 and is scheduled to take five years, aims to create a code which is more consistent internally, less prescriptive and simpler to use. It is indeed a major undertaking which ANZFA is aiming to have completed in time for the beginning of the new millennium. The outcome of the review will be the new joint Australia New Zealand Food Standards Code.
- developing a new food hygiene regulation framework through reviewing and harmonising state/territory regulatory and co-regulatory arrangements; this involves the development of the new food hygiene regulatory framework, a national notification system, and a national food surveillance and compliance system; and
- reviewing and reforming the state and territory food Acts to develop uniform Acts, and amending the ANZFA Act to enable prioritisation of ANZFA's work program and public resources.

There is one further major reform proposal initiated by the Commonwealth

which will help to bring all of the above together, and that is the Food Regulation Review being carried out under the chairmanship of Dr Bill Blair. I will come to that in more detail later.

I now want to look at the proposed new food hygiene regulatory framework and then how it links into primary production.

Proposed new food hygiene regulatory framework

The current situation with food hygiene regulations in Australia has been recognised by governments, industry and consumers as being less than satisfactory in a number of areas:

- regulations governing the hygienic processing, manufacturing, transport, retailing and handling of food are currently covered by eight different sets of regulations of the respective state and territory health authorities. These are interpreted and enforced, often very differently, by the state and territories and differently again at the local government 'front line';
- business has indicated to the government that the inconsistent nature of the food regulations currently operating across states and territories is detracting from industry competitiveness;
- the regulations do little to really require that industries themselves take responsibility for the safety of their production processes themselves; and
- some of these regulations have not been updated for some time, have been criticised as being inappropriate for modern practices and the changing global conditions I have described.

ANZFA has started the process of reforming Australia's food hygiene regulations. The purpose of the proposed reforms is to enable Australia to have in place nationally uniform and cost effective regulatory arrangements for the safe and hygienic production, storage, transport, retailing and handling of food.

ANZFA is therefore working closely with state and territory governments and industry in the development of a hygiene package:

- the three new national food hygiene standards to go into the Food Standards Code — the Food Standards Code currently covers food composition, residue and contaminant levels, and labeling; it does not cover food hygiene regulations;
- the major supporting or infrastructure measures that will need to implement these standards; many of these infrastructural amendments will be reflected in the new nationally uniform set of state and territory food Acts; and,
- a joint national project with the other governments to assess cost effective options for implementing the standards, and to establish detailed costings for governments.

These standards represent a new approach to food hygiene regulation in that they will be risk based, preventative and uniform across all states and territories.

The Food Standards Code will be amended to include a new section on food hygiene standards. In addition to standards on interpretation and application, three food hygiene standards are currently being developed:

- 4.1 food safety programs and general requirements;
- 4.2 premises and equipment; and
- 4.3 handling and storage.

Standard 4.1 has already been provided to the ministers for health for their consideration and standards 4.2 and 4.3 will go to them in mid-1998. These second and third standards essentially update current food hygiene regulations and incorporate good hygienic practices which are a pre-requisite to implementing food safety programs. Current state and territory food hygiene regulations are being assessed in the development of the new standards.

The effect of the three proposed food hygiene standards will be to require all food businesses to:

- adopt food safety programs;
- provide for food recalls;
- notify themselves to a relevant authority;
- ensure that their staff and supervisors have skills and knowledge in food hygiene commensurate with their work activities; and
- abide by standards which set out good hygienic practices for food handling and storage and standards for premises and equipment.

There is a fairly high level of support on the part of much of the food industry for the hygiene standards, not the least of the reasons being a recognition that compliance with them will bring with it an extra degree of protection that will be afforded to those businesses who 'do the right thing'.

In today's climate in which class actions and/or actions by insurance companies or other food companies down the food supply line are being taken against food companies on food safety issues, the standards bring into play the valuable defence of 'due diligence'. This means that proof by a food operator that they took reasonable precautions in producing or retailing a food, may be accepted as a mitigating circumstance — they may not be held liable for circumstances which they can demonstrate are beyond their control and knowledge.

To make the proposed reforms work will require substantial supporting infrastructure including:

- food industry guidelines to assist businesses implement food safety program;
- a national audit system;
- training competencies and training delivery;
- a risk classification system for food businesses; and
- a business notification system.

ANZFA has developed a document to provide a framework to assist each food industry sector develop guidelines to assist their respective industry members to comply with the new hygiene standards and to develop food safety programs. This framework document is currently being

reviewed by peak industry bodies and following revision, will be circulated to state and territory health authorities for comment.

We will also endeavor to facilitate the development of a nationally uniform audit system for food safety programs, in association with the states and territories, industry bodies and auditing bodies.

Auditing of food safety programs (like all enforcement activities) will remain under the jurisdiction of the state and territory health authorities. Many of these have indicated that environmental health officers will play a significant role in these audits.

In association with the states and territories ANZFA will also:

- work with the Australian National Training Authority to develop a Code of Practice for Food Industry Training Competencies to guide both food business proprietors and enforcement officers:
- coordinate the development of a nationally uniform risk classification system for food businesses this will be needed to meet certain implementation requirements of the food hygiene standards, which include allocation of risk classification to a food business at the point of notification and/or registration, type and level of complexity of the food safety program and auditing requirements; and
- develop a system for nationally consistent arrangements for notification of food businesses to a relevant authority.

Implication of food hygiene standards for primary industries

While there has been some useful progress in bringing the two sets of health and primary industry portfolios together across the two layers of government there is still a fair way to go. A good start has been made with the agreement of the health and primary industry ministers, and their portfolios, that a whole of foodchain approach is imperative to improving and maintaining the safety of food in Australia; and that to this

end we should be working toward a national safe system.

In July 1996 the health ministers of each state and territory, and New Zealand, in their capacity as the Australia New Zealand Food Standards Council (ANZFSC), recognised that the new food hygiene standards would have implications right across the food supply chain. They have therefore joined forces with the Agricultural Resource Ministerial Council of Australia and New Zealand to establish a National Safe Food Working Group to develop a conceptual framework within which the different government agencies can work together develop common goals, policies and principles. (A National Safe Food Working Group, made up of representatives from Commonwealth, state and territories health and agriculture departments - and industry — is doing some work on the development of this framework and they will feed their ideas into the Review of Food Regulations).

In July 1997 the health ministers also provided formal advice to the primary industry ministers that the hygiene reforms are under development and may inevitably have implications for the primary sector — because of possible increased liability at the primary end of the food chain, and potential legal actions, insurance claims, etc that could arise if primary producers are found not to be adopting these measures. The health ministers therefore requested formal advice back from the primary industry ministers as to how the food hygiene reforms will be dealt with in the primary industry area.

There is certainly very strong interest as to how the proposed food hygiene standards of the combined health ministers will apply to primary industries. In particular commodity producers are understandably fairly anxious to know whether the new health hygiene standards will become obligatory for every farmer and fisher.

Before discussing whether they will or should cover primary sector food busi-

nesses, it is useful to reflect on a mistaken perception that seems to be around on the part of some in the primary industry sector, that it is the proposed new food hygiene standards themselves that will extend the application of the current food hygiene powers of the state and territory health authorities. But in fact this is not the case as the current health regulations already apply to the agricultural and fisheries industries. That is, under the present state and territory food Acts and regulations, all food in Australia, whether in the primary industry sector or otherwise, is subject to existing food hygiene requirements as determined by the respective health authorities. For example, the Australian New Zealand Food Standards Code covers commodities and processed food as demonstrated by MRLs for pesticides and MPCs for contaminants, such as for mercury in fish.

The proposed revisions of the state and territory food Acts include a regulation making power similar to the current power, under which health regulations will be able to be made concerning the handling of any food by a food business.

Under current state and territory jurisdictional arrangements, compliance by the primary industry sector is usually enforced by agencies within the relevant state and territory primary industry portfolios — for example, the meat and dairy authorities. The application of the state and territory food Acts and regulations to food within all industry sectors is in line with the whole of food chain approach that it is generally agreed is imperative to improving and achieving food safety.

Current thinking within the primary industry portfolios as to whether the hygiene standards should apply to commodity businesses appears to be along the following lines:

 businesses engaged in the primary production of food should not be exempted from the principles and objectives of the standards, but the application of the standards to individual farms, fishing vessels and aquaculture facilities should not be mandatory — rather it is being suggested that the equivalent voluntary regulatory arrangements that are in the process of being developed by the respective primary industry sectors, and which are based on the respective assessed food safety risk associated with a particular primary industry, should be taken into account and recognised as being equivalent; and

 enforcement to ensure the principles and outcomes of the food hygiene standards are achieved in the primary industry sector should be taken by the primary industry portfolios, not health portfolios.

ANZFA will be working cooperatively with the Commonwealth, state and territory primary industry portfolios to devise the most appropriate way forward in terms of regulatory reforms, and we anticipate that ARMCANZ will soon have a formal response back to ANZFSC on their July 1997 request.

One matter that may be resolved through Blair Review processes is the rationalisation of the ARMCANZ meat standards and the Australian New Zealand Food Standards Code. The Meat Standards were developed through a different process to that followed by the Food Standards Code and currently sit outside the code. In the mind of the consumer, meat and fish are considered food at all stages in the food chain.

Primary industry ministers seem to be very supportive of the suggestion that standards for commodities and food being subject to common principles, specifications and processes.

Food regulation review (Blair review)

I would now like to briefly look at the major reform proposal put forward by the Commonwealth which will help to bring all of the previously mentioned reforms together. The Food Regulation Review, chaired by Dr Bill Blair, is currently examining the food regulatory arrangements currently operating across all three levels of government in this country across the various portfolios with an interest in food. It will consider food regulations, regulatory policies, compliance and enforcement arrangements, and agency roles and responsibilities. It will cover food produced for domestic consumption, as well as exports and imports.

The Food Regulation Review came about as a directive of the Prime Minister and will report ultimately to the Council of Australian Governments (COAG) in the middle of this year. The review committee of twenty-seven involves representation from Commonwealth and state/territory health and primary industry portfolios, local government, the food industry and consumers.

The review is a whole of government, 'paddock to plate' review of food regulations and regulatory systems, including policy, administrative and enforcement arrangements. ANZFA coordinates the Review secretariat which involves staff from other Commonwealth portfolios.

The review objectives are:

- while protecting public health and safety, to:
 - reduce the regulatory burden on the food sector and examine those regulations which restrict competition, impose costs or confer benefits on business; and
 - improve the clarity, certainty and efficiency of food regulatory arrangements.

This will require regulations and administrative arrangements to be effective, efficient, practical and impose least cost.

The review's progress to date

Over the last few months, the review has undertaken a number of information gathering exercises, these include:

 public hearings in all capital cities and some regional areas in Queensland, New South Wales and Victoria;

- the release of an issues paper calling for written submissions and to date they have received over 160;
- wide consultation with industry and consumer groups;
- arranged focus groups for consumers and small businesses in most states, with more planned;
- an exercise to comprehensively map the existing regulatory arrangements at state, territory and Commonwealth levels;
- investigations of the benefits of food regulation; and
- case study work with industry to identify the costs of food regulation.

Not surprisingly preliminary analysis provided to the review committee by the review secretariat shows that many of the issues arising in the consultations and submissions are found right across the food supply chain and across the health and primary industry portfolios.

The main concerns include:

- the lack of uniform legislation and regulations across the states and territories;
- the inconsistent approaches in the different jurisdictions to:
 - the enforcement effort and priority setting between jurisdictions;
 - the interpretation of legislation and regulations by inspectors and auditors;
 - agency roles and responsibilities;
 - food business registration and licensing systems;
- overlap and duplication of agency responsibilities and claim that this makes it difficult and costly for them to deal with government;
- claims that there is insufficient enforcement effort to ensure compliance;
- lack of coordination between government agencies, a cause of significant problem to industry;
- multiple audits both industry and government driven — impose costs and could be rationalised: many large processors and retailers are now insisting on their own audits on suppliers and the

review has heard of one supplier having 19 audits from government agencies and industry — very largely the latter;

- there was cautious support for selfregulation and government/industry coregulation, with medium to large businesses confident that they can do this, but with small business operators seeking greater assistance and clearly prescribed requirements;
- the need for improved food safety training and education, for: consumers, food handlers, and inspectors and auditors:
- inappropriate standards and regulations, including several different complaints:
 - industry concerns that there are too many, overly complex standards;
 - consumers concerns that there was is too little regulation in some areas;
- inadequate consultation and representation in government decision making (a common complaint of small business operators);
- inadequate access of small business and consumers to information concerning government programs and activities;
- the need for governments to develop a coherent national policy on food;
- the need for those food hygiene regulations which affect building design and construction that are now in state and territory health regulations (and soon to be part of the Food Standards Code) to be made consistent with the Building Code (this issue was of particular concern to National franchisees);
- complaints about the current level of government charges;
- other issues raised include:
 - environmental and transport regulations:
 - genetically modified organisms;
 - weights and measures.

It is intended that the review committee will take forward a preliminary report to a joint meeting of health and primary industry ministers (the Australia New Zealand Food Standards Council

(ANZFSC) and the Agricultural and Resource Ministers Council of Australia and New Zealand (ARMCANZ)) in late March. This report will set out the concerns and proposed ways in which present arrangements could be modified to create a new, nationally consistent and cost effective food regulatory and co-regulatory framework for Australia.

The preliminary report will be open for public consideration and discussion in April and May this year and the Prime Minister has asked for the final report to go to the Council of Australian Governments (or its equivalent) by June 1998.

ANZFA's view on the way ahead

ANZFA cannot predict or pre-empt what the review report will recommend or what the views of ANZFSC/ARMCANZ will be. However in concluding, I would like to summarise some of the changes that ANZFA proposed to the Blair review in their submission, as to what they consider would be constructive ways forward for the national regulatory framework.

These include:

- build on the strengths of the current arrangements under ANZFA and the combined health portfolios — in particular, its responsiveness, openness and accountability in the process of reviewing food regulation;
- there should be a uniform national approach to food regulation;
- food safety and minimisation of the risk to public health and safety are nonnegotiable and should be provided for adequately across all parts of the food supply chain;
- the food regulatory environment must be open, transparent, publicly accountable and protected against perceptions of inappropriate bias;
- food businesses should be encouraged to take full responsibility for the safety and integrity of their food products;

- codes of practice, guidelines and ancillary documents should be considered as an alternative to regulation where appropriate, to support less prescriptive food regulatory environment and industry compliance industry, through industry codes of practice, may provide a more appropriate and effective mechanism for addressing non safety aspects of quality than would prescriptive regulations;
- government monitoring of compliance will become increasingly important in a less prescriptive food regulatory environment;
- government commitment to consumer education will also become increasingly important in a less prescriptive food regulatory environment; while appropriate labeling is important to enable the community to make informed foods choices (for reasons of public health and safety or for other preferences) labeling is clearly not the only means — for example, education campaigns are also important;
- consumers have a very important role in influencing the integrity and safety of the food in the market place needs to be recognised and fostered;
- a national, coordinated, integrated, system for the delivery of safe and healthy food needs to be established; such a system should:
 - encompass the primary industry and health portfolios to support a uniform and coherent food safety regulatory arrangements from paddock to plate;
 - recognise the partnership between government and industry and the use of industry codes of practice and guidelines to encourage compliance with food regulations in Australia and New Zealand;
 - ensure a coordinated, uniform and adequately resourced surveillance and monitoring system in Australia and New Zealand; and
 - encourage auditing which is contestable and consistent between

- government required and customer required audits to prevent unnecessary duplication of resources;
- one integrated Food Standards Code is needed which brings together:
 - the food product standards for the food commodities;
 - the food product standards for manufactured and processed foods;
 - the hygienic food process standards;
 and,
 - the hygienic food process standards (or equivalent arrangements) for food commodities;
- the combined health ministers (ANZFSC) should be ultimately responsible for what goes into the code, but the combined primary industry ministers (through ARMCANZ) should be responsible for:
 - developing those food product standards,
 - determining what are to be the recognised preventative hygiene measures in the primary industry sectors that should be deemed to be equivalent to the health hygiene standards, and for
 - recommending these to health ministers for their adoption into one national code.
- a national network of integrated food agencies (on the lines of that created by Victoria) is needed; each agency should have the authority to coordinate the administration of food regulations within their state or territory, and in each government the jurisdiction should be the same — preferably health;
- a risk based approach to food safety needs to be recognised as the basis of regulatory approaches for addressing public health and safety concerns; and
- governments have an important role in providing leadership to improve the general nutritional status of the community
 — in particular government need to take into account the long term health costs associated with poor diet, monitor the nutritional intake and health of the

population and consider appropriate action where necessary.

Government's regulatory reform agenda is placing a great emphasis on the need for effective communication and consultation between government and industry, which will greatly assist the process of regulatory reform

The Blair review is still happy to hear from you if you have not already made a submission.

Food safety is a non-negotiable element of food quality and integrity. A seamless

and workable approach along the entire foodchain is essential in achieving this. As a nation and an industry we have what may well be a once in a lifetime opportunity to take a hard look at the arrangements currently in place, and to consider what might be the most cost effective and efficient, food regulatory and co-regulatory system that we can devise — one which is based on global best practice and will serve the interests of both Australian consumers and food industries.

OUTLOOK 98 241

Prospects for Australian Seafood in North East Asia

Will the current Asian Economic Crisis have a major impact?

Compiled and Presented by: Cheryl Stanilewicz, Project Manager - Japan, North East Asia Office, Austrade Sydney

The overall prosperity of the Australian seafood industry depends very much on the state of the economies in North East Asia, as our major export markets are located there (Japan, Taiwan and Hong Kong). Concerns that the Asian economic crisis in South East Asia and South Korea could bring about a major collapse in these markets are not well supported at this stage. Nevertheless, there will be some negative 'flow-on' effects for Australian exporters to these markets, including increased import competition from countries in South East Asia and a contraction in demand for certain species.

Australia's exports to this region are mainly luxury seafood products and this makes them extremely vulnerable to negative economic shifts. It is important however, to examine the situation in each country in the North East Asian region as some will be more directly affected than others. Although the types of seafood exports to this region are very similar (rock lobster, abalone, prawns etc), the factors that are influencing demand and future growth within these markets can vary. These include domestic economic problems (exclusive of the Asia crisis); seasonal issues, other foreign competition, and changing trends in how product enters and is distributed in the market.

This paper will look at the current economic environment, seafood market and prospects for Australia seafood exports in our major markets of Japan, Hong Kong, and Taiwan. It will also look at the smaller, but nevertheless potential markets of China and South Korea.

JAPAN

Current Economic Situation

Japan is the second largest economy in the world after the USA. It accounts for about 18% of the global economy and around 70% of GDP in the Asia region. The Asian economic crisis is unlikely to have a major impact on Japan for a number of reasons.

Japan has no exposure to foreign loans. It is a major global lender of money. Japan also has a large trade and current account surplus (about 3% of GDP) with the rest of the world. Due to the depreciation of the Japanese yen, this has been increasing recently as exports grow. The trade surplus has risen to \$A91 billion during the past twelve months. It's gold and foreign currency reserves are large, about \$A223 billion (Aug 97). Japan also has massive internal savings reserves it can draw on.

Japan's foreign direct investment (FDI) is still mainly into the USA (50%), with only 25% into Asia. Moreover most of Japan's FDI into Asia (70%) is in manufacturing and processing. Unlike many Asian investors, there is only minor investment in real estate, tourism facilities and other more speculative forms of investment. The dependence of Japanese operations in South East Asia upon local markets for demand is also slight. Most products are exported back to Japan or to other developed markets. The fall in local currency values is a benefit as it will make these products more competitive.

Japan does, however, have its own domestic economic problems. Japanese banks are still carrying unresolved bad loans from the 'bubble economy' period. Until recently, the strategy endorsed by the Finance Ministry appears to have been to wait for cyclical growth and a revival in real estate to recover the losses, however these have not occurred. The Japanese government's tacit guarantee to bail out significant institutions which looked like collapsing enabled banks and other institutions to carry bad loans over such a long period of time. Accordingly, there has not be much restructuring by companies during the past 5-6 years and this tacit guarantee encouraged complacency.

Recent financial scandals involving major firms and popular resistance to the use of taxpayers money to prop up bankruptcies have effectively barred the government from bailing out institutions in trouble this time. Major policy initiatives have been required to bring about the necessary changes to the system and Japan is trying to work through these now. Failure to implement reforms will probably just restrict Japan to a very low growth rate for several years (annual growth has averaged around 1% since 1993 so low growth would not be a new phenomenon). Growth for 1997/98 Japanese financial year is currently forecast at 0.3% - 0.5%.

The Japanese Seafood Market

Japan is the largest seafood market in the world and the largest market for Australian seafood exports. The latest available figures (1996) indicate a total market size of about 12 million tonnes including 9 million tonnes of Japanese catch. Overall, imports are

expected to steadily increase as the Japanese catch has been gradually declining for a number of years due to reduced access to foreign waters and reduced resource stock.

The total market for imported seafood into Japan was valued at approximately \$A18 billion in 1996. Crustaceans and molluscs are the most popular imported seafood products with 32.5% of the imports valued at almost \$A6 billion. The top five foreign exporters of seafood into Japan were USA (14.2%), Russia (8.4%), Indonesia (7.4%), China (6.6%), and South Korea (6.2%) in 1996 - Australia ranked 14th with 2.4% market share.

Although the Japanese retail and distribution market for food has been going through much publicised change in recent years, and certainly seafood has not remained totally unaffected by this, it is not anticipated that the current arrangements will change dramatically in the near future. Changes in the economy are, however, producing some growing trends.

Most live and chilled seafood is distributed in Japan via a series of central and local licensed wholesale markets; seafood is handled by approximate 54 central markets. located in the larger cities and over 1,500 markets located nationwide. The bulk of domestic seafood is initially passed to auction consignees at the central and local markets by domestic fisheries and producers. The consignees put the products up for auction on behalf of the owner.

The seafood is then purchased by wholesalers who then break up the shipment into smaller lots for their institutional food service and retail customers - who include national supermarkets, convenience stores and small independent stores. Department stores do not normally procure seafood themselves, whether directly from suppliers or through wholesalers. The seafood products offered at these stores are sold to consumers by concessionaires renting space, typically at basement levels.

Most imported seafood is sold to trading companies or importers. A large amount of this imported product is sold on to seafood processors for repackaging or further processing. Some seafood product is also sold through the central and local markets together with domestic product. Although many regional wholesalers still purchase imported seafood through wholesalers in Tokyo or Osaka after auctioning, significant volumes of Australian seafood is entering the markets via the regional centres, including Fukuoka, Nagoya, Sendai and Sapporo (Austrade has representation in all these regions). This trend is expected to continue to grow, and more Australian seafood exporters should consider taking advantage of this.

Prospects for Australian Seafood Exports

Australia's main seafood exports are rock lobsters, prawns, abalone (blacklip), southern bluefin tuna, and atlantic salmon. In 1996-97, Australia exported more than \$A420 million worth of seafood to Japan.

Australia exported approximately \$A13 million of live rock lobsters to Japan in 1996 which was 54% of the market share and an increase of 4.6% over the previous year. The live market for rock lobster is expected to continue to grow in the medium to longer term. Under ordinary circumstances, the supply of frozen lobster to the Japanese market, contracts around Lunar New Year as Australia experiences a surge in demand from Hong Kong and Taiwan (and increasingly from China in the future). This demand has been dramatically impacted this year by the decreased demand in these countries.

Australia's exports of prawns to Japan continue to be adversely affected by competitors in South East Asia and this will remain of considerable concern given the current problems in South East Asia. However, Australia is starting to export more fresh prawns to Japan and our exports of this product increased by 12.7% in 1996. Australia's current market share of the imported prawn market in Japan is 4.5%. Promotion of the superior quality and flavour of Australia's ocean caught prawns among Japanese consumers is also considered to have both boosted our exports and our image in the market.

Australian dominates the market for live abalone in 1997 exporting almost 62% or \$A15 million of the total imported market - although there are concerns as to how long this will continue. Our competitiveness in the market is now being threatened by South African product, and France is also starting to take considerable market share from us for frozen abalone. Spain, a relatively new market entrant, is also eroding our share of prepared and preserved abalone.

Atlantic salmon and southern bluefin tuna enjoy fairly steady demand (with some temporary price fluctuations for the latter) in the Japanese market and this is expected to continue over the medium to long term. This is mainly due to strong reputation for quality that both these items enjoy in this market.

Overall, it would appear that the Asian economic crisis is having little impact on Australia's seafood prospects in Japan at this stage, and this is not expected to change dramatically. Although the Japanese economy has had relatively slow growth for the

last four years, seafood imports have been increasing steadily (up 1.3% in volume in 1996).

Interestingly, in 1997, variations in wholesale prices for virtually all seafood did not clearly indicate whether it was the slow economy which influenced prices or the lack of supply. For example, in December 1997 lower import volumes of black tiger prawns from Thailand due to disease, together with the depreciation of the Japanese yen, ensured above average wholesale prices for this particular product.

Seasonal factors are also known to influence demand in Japan - for example this winter was warmer than usual and many in the Japanese seafood industry believe that this may have influenced the drop in demand for seafood paste or 'kamaboko' (which is typically used in Japanese traditional winter cuisine), more than the state of the economy.

Recently, imports of new species of Australian fin fish including garfish and flathead for further processing, have been increasing. If Australia is to increase its seafood exports to Japan in the future, it needs to look at developing new 'products' for this market. However the bulk of Australian seafood products into Japan do serve the upper or luxury end of the market, and prices are definitely down on items such as lobster and abalone. Demand is expected to remain sluggish, and prices to fluctuate due, for the most part, to further entertainment expenditure cut backs as the Japanese economy undergoes necessary adjustments.

HONG KONG (SPECIAL ADMINISTRATIVE REGION - SAR)

Current Economic Situation

Despite the financial problems besetting much of Asia in recent months, the Hong Kong economy continues to perform moderately well. In the midst of this uncertainty, the Hong Kong Government expressed its determination to defend the Hong Kong Dollar, leading to an upsurge in local interest rates and in turn causing a slump in the local stock and property markets. The retail sector also remains depressed. Overall growth in 1997 was estimated to be 5.5%, however Government figures for 1998 growth have been revised down to 4%, with some predicting that it could be as low as 2%.

Hong Kong's competitiveness in export markets is under pressure after the depreciation in the currencies of most of its Asian competitors. As a provider of

sophisticated services to China and the region, Hong Kong's competitiveness remains a crucial factor in its continued success. At the APEC Conference in Vancouver last year, the Chief Executive Mr Tung Chee Hwa spoke at length of Hong Kong's strengths, concluding with the suggestion that Hong Kong is uniquely placed to lead the other Asian tigers out of the current economic crisis which besets the region. In the past Hong Kong has shown itself to be able to adjust quickly and successfully to maintain its unique ability to provide highly competitive value added services. There is every indication that this will continue.

The Hong Kong Seafood Market

Hong Kong has a sizeable fishing and aquaculture industry, which supplies the local market with considerable quantities of live and chilled product. This production, however, is only able to meet 38% of the overall demand and substantial imports are necessary. Approximately 70% of Hong Kong's seafood imports are sourced from nearby Asian countries, mainly China, Taiwan, Vietnam, Thailand and Singapore.

In 1996, 286,000 tonnes of seafood was imported into Hong Kong with 40% of this re-exported. Following the rapid economic growth of China, substantial quantities of premium seafood product, including abalone, lobster and scallops and various bulk fin fish items for Chinese catering are being sold into the hinterland through Hong Kong. Various types of Chinese specialties such as prawns, crabs, eels and preserved fish are also exported to Japan and overseas Chinese communities.

The Hong Kong Chinese population has a strong preference for fresh seafood, resulting in unusually high demand for live and chilled products. It is estimated that some 60% of the local requirements for fish and fishery products are obtained in the live or chilled form, sourced both locally and from overseas. However as the cost of live seafood is expected to steadily rise, industry sources believe consumers will purchase increasing amounts of frozen seafood.

Australia is a major source of supply for most premium seafood sold in the Hong Kong market and held a 9.5% share of the market by value (1996). The main products imported from Australia include frozen and canned abalone, frozen scallops, live lobsters, frozen prawns, salmon (mainly frozen plus some smoked product), coral trout, oysters, king crab and selected fin fish for western-style catering (red snapper, john dory etc).

Australia's main competitors by fish type are; fin fish - local industry, the USA, Europe, New Zealand and South Africa; prawns - local industry, Vietnam and Indonesia; rock lobster - New Zealand and South Africa; crabs - China, Vietnam and Canada; abalone - South Africa and New Zealand; and oysters - New Zealand and Canada.

Prospects for Australian Seafood Exports

Although the Asian economic crisis has not impacted heavily at this stage, there remains a great deal of uncertainty in the market as to its potential effects. There is no doubt that a significant downturn in the Hong Kong economy will cause a decrease in demand for Australia's premium seafood products, including rock lobster and abalone. This is because in Hong Kong, as in most Asian countries, seafood of this type is consumed primarily through banqueting (weddings etc) and corporate entertaining. These areas of consumption are the first to contract, even when a downturn is merely 'anticipated'.

Signs of this 'anticipation' are already becoming apparent as some of the major seafood importers and distributors in Hong Kong have said they are beginning to experience considerable downturn in demand for premium seafood items by the food service industry. One of the largest importers of Australian seafood has estimated that since October 1997, imports by that company have been reduced by 10-20%. A slump in the number of tourists visiting Hong Kong since the July 1997 handover is also considered to be influencing current demand but to a lesser degree. Australia's market share for some types of prawns in the Hong Kong market is expected to be negatively impacted in the short term by the currency devaluations in competitor countries.

In the medium to long term, demand for seafood is expected to steadily increase. Overall, Australian exporters of fin fish will continue to find the market extremely competitive, given the abundance of inexpensive product sourced locally and from other Asian countries. Although there should be niche opportunities for suppliers of some fin fish species that are not readily available in the rest of Asia, such a ling, coral trout, atlantic salmon and other species for western-style catering.

Australia should continue to enjoy a strong image as a supplier of top end, premium quality crustaceans and molluscs, and as the Hong Kong economy begins to stabilize, this is where most of the opportunities for Australian exporters will continue to be found.

TAIWAN

Current Economic Situation

The Taiwanese economy has remained relatively stable within the turmoil of Asia's economic crisis. It is anticipated that full year economic growth in 1997 will have reached 6.7%, drawing on strong performances in private investment, consumption and manufacturing activity. However, the original growth rate of 6.8% for 1998 has been revised to 6.5%, in light of the current crisis and its expected impact. The depreciation of the NT Dollar (New Taiwan Dollar) against the US Dollar has stabilised recently due to limited intervention from the Central Bank.

The fundamentals of the Taiwan economy remain strong due to large foreign exchange reserves, and trade surpluses. Key concerns for Taiwan are its falling export competitiveness (particularly against Korean and SE Asian competitors); and possible downward impacts on the mainland Chinese economy to which Taiwan is now inextricably linked. Taiwan companies remain extremely flexible in their ability to change production and markets to meet changing circumstances.

The Taiwanese Seafood Market

Seafood is a very important part of the diet in Taiwan, and most imported seafood is purchased at supermarkets or traditional 'wet' markets as well as consumed in restaurants. Taiwanese consumers have a strong preference for fresh food including seafood and have an intriguing approach to health and safety issues when purchasing seafood, which basically involves their definition of 'freshness' of the seafood. As a result, a large amount of the imported frozen seafood is sold as fresh or chilled products in the retail market.

Taiwan's total seafood imports were valued at US\$360 in 1996, up from US\$356 million in 1995. Overall, it is expected that seafood imports will steadily increase in the coming years as Taiwan's domestic fishery production begins to decline, incomes expand and tastes diversify. The USA, Hong Kong and Norway are Taiwan's major fish suppliers. Thailand, Australia and USA are major suppliers of crustaceans. Japan, Australia and Chile are major suppliers of molluscs.

The overall seafood market in Taiwan is competitive with no one country dominating the market due to its diversification. Norwegian farm-raised salmon dominates the imported fresh fish market, with 44% (value) of the imported fresh salmon market and

62% of the imported frozen salmon imported from Norway in 1996. Australia is the largest supplier of lobsters to Taiwan, maintaining approximately 70% market share, with the USA at 16% and NZ at 6% respectively. Almost 99% of the lobsters consumed in Taiwan are imported.

Australia is also the main supplier of crabs into the Taiwanese market. Australian spanner crabs are popular as they suit local tastes in terms of size (600g preferred size), colour and competitive price. Total imports of crabs in 1996 was valued at US\$18 million of which 12% was frozen and 88% were live. Australia held 40% of the market share for live crabs and 90% of the market for frozen crabs in terms of value. Thailand followed with 23% of the live market (it did not supply frozen). The remaining 36% of live crab imports by value originated from Indonesia, Bangladesh, Hong Kong, Singapore and other Asian countries. Australia is also a strong supplier of canned abalone and coral trout into the Taiwanese market.

Prospects for Australian Seafood Exports

The Asian economic crisis appears to be having some effect on Australian seafood exports into Taiwan. As mentioned previously, lobster, crab and abalone are the major seafood products imported from Australia. These products are most popularly served at banquets such as weddings, birthdays, moving house, graduation and promotions. The colour red is seen by Chinese to be a lucky symbol and is one of the main reasons why Taiwanese prefer these seafood products for special occasions. This tradition should continue in the medium to long term, however it is expected that consumption of these high-priced products will be negatively affected, coinciding with the predicted downturn in the economy.

The crisis had caused a depreciation of the NT Dollar against the AU Dollar and has thus increased the cost of importing Australian seafood into the Taiwanese market. Feedback received from many Taiwanese seafood importers conservatively suggests that the total import volume of seafood in 1997 decreased by 30% over 1996 figures. Some importers believe they have experienced more than a 50% reduction in the number of orders received from their customers in 1997, as a result of the flow-on effect of the Asian crisis.

Given the current situation, many importers are becoming somewhat conservative in their attitude toward expanding imports of seafood in the short term, due mainly to the depreciation of the NT Dollar and slow economic growth in Taiwan. However, the high quality image of Australian seafood remains strong in Taiwan, and many Taiwanese

importers continue to place tremendous value on developing and maintaining long term relationships with Australian suppliers. They also realise that this is the most efficient and effective method of controlling the quality and volume of the seafood they import.

The medium to longer term prospects for Australian seafood into Taiwan still remains unclear. One factor that will have considerable impact (although unrelated to Asia crisis) on our seafood exports is the recently introduced new customs valuation procedure for lobsters. As mentioned previously, Australia is Taiwan's largest supplier of lobsters and the market is work \$A174 million a year to Australia. This additional duty to be collected on all lobster imports to avoid undervaluing by importers will total around \$A40 million/year. This added cost to importers is expected to cause a significant contraction in demand for lobsters and has massive implications for our highest seafood export earner. Our office in Taipei is currently working with other trade offices (USA, NZ and Canada) to ensure maximum pressure is applied to Taiwan on this issue.

SOUTH KOREA

Current Economic Situation

The economic situation in South Korea remains very unstable. With numerous corporate bankruptcies, ongoing problems in the financial sector and a weak currency, prospects for exports to this country would appear somewhat pessimistic.

The Korean people are beginning to experience the full effect of the financial crisis with unemployment climbing as companies freeze recruitment drives. Staff in many companies have yet to receive end of year bonus', and some are yet to receive last month's salary. The Korean people have initiated austerity programs in an effort to overcome the nation's difficulties. Many have donated their gold valuables in order to lift the country's reserves - the total value of this is estimated to be an impressive US\$7 billion. A strong nationalistic campaign against buying imported goods and a dramatic decrease in overseas travel, including students planning to study overseas, continues.

The trade finance system was on the brink of collapse last year, however it has been rapidly restored in January after the US\$57 billion International Monetary Fund (IMF) bailout was initiated. The commercial banks are now in a better position to open letters of credit at this time, principally to larger organisations. The Australian Government's approved A\$300 million in short term credit insurance for Australian exporters to Korea should hopefully add to this growing confidence.

The huge depreciation of the Korean won, while having a positive impact on Korea's current account deficit, will have a major detrimental impact on the competitiveness of foreign goods in Korea. On the upside, the depreciation of the Australian dollar against the US dollar, means Australian goods will be relatively cheaper compared to it's major competitors in the market.

During recent talks convened in New York between South Korean officials and foreign banks, an agreement was reached on the rescheduling of South Korea's foreign debt (estimated to be around A\$225 billion). The Government believes this should bring about some stability to the financial system, whose copious lending contributed to South Korea's current economic woes.

The Korean Seafood Market

Korea has a large seafood market with considerable potential in the medium to long term. Imports are expected to increase over the longer term as Korea's domestic catch is not growing, per capita consumption is increasing (46kg/person in 1995 while meat was approximately 29kg/person) and, as at July 1997, the Korean government liberalised the import of seafood into South Korea. Before 1989, seafood imports were not permitted unless the government granted special permission to overcome shortages.

Seafood products are still subject to import duties. A 10% duty applies to live or frozen fish and frozen fish fillets. A 20% duty applies to fresh/chilled fish, dried, salted or smoked fish and crustaceans and molluscs, and 30% applies to processed seafood items including prepared or preserved fish. In addition, the Korean government employs 'adjustment tariffs' to control imports. In some cases, this results in tariffs which are much higher than the basic tariff rates. For example, at the same time the seafood market was liberalised in July 1997, the government announced higher adjustment tariffs on twenty six items including frozen prawns, whose tariff rose from 35% to 40% in order to protect the local market.

Although the market for live and chilled seafood has opened up, problems have emerged including difficulties in trying to ensure a quick clearance through customs of live product. Administrative red tape still exists in the initial period of full trade liberalisation due to the lack of experience of importers as well as the customs office in dealing with fresh produce. Therefore Australian exporters of these products should try and ensure they are working with an experienced importer of fresh produce who can help them overcome these problems.

Korea has joint fishery agreements with the USA, Canada and Russia and imports considerable quantities of seafood from these partner countries. The Korean government grants priority import approval for shipments from these countries. China and Japan are also major suppliers due to their geographical proximity and availability of similar species.

Korean imports of seafood were worth almost \$A1.2 billion in 1996 with Russia the largest supplier holding 20% of the market share. Korea also processes a large amount of seafood (1.7 million mt in 1995) for both domestic and export sales.

Prospects for Australian Seafood Exports

In 1996, Australian exported \$A5 million worth of seafood to South Korea. Australia has had most of its export success with prawns, lobsters and abalone, with prawn exports the larger and more constant of the three, mainly due to the fact that it is frozen product. Demand for Australian live lobsters and live abalone has been gradually increasing, however, Australian exporters have been experiencing difficulties as these products can often be held up for 2-3 days at Kimpo Airport when trying to clear customs.

With the opening up of the Korean seafood market in July last year, increasing opportunities for Australian seafood exporters were expected to emerge. However with the continuing series of austerity programs, demand is not expected be as strong as anticipated in the short term.

As economic conditions begin to improve, and due to the Korean people's preference of seafood over meat, the import of seafood is expected to recover more quickly as compared with other finished food products.

Austrade's office in Seoul continues to receive local trade enquiries as importers seek to develop new business with Australia largely due to the relative price advantage of the Australian dollar against the won compared to the US dollar exchange rate. Niche opportunities will exist for experienced Australian seafood exporters who can be responsive to these new enquiries and the payment difficulties of Korean companies, without increasing the risk to their own business. Exporters who are considering doing business with South Korea should contact Austrade for up to date clarification on this market as the situation changing all the time.

CHINA

Current Economic Situation

The Asian economic crisis has so far had little impact on the Chinese economy. General consensus is that China is well insulated against a spread of these problems to the mainland economy in the short term. The Chinese currency, the RMB Yuan, is not convertible, so China has not been affected by currency speculation and China still receives high, if slowed, levels of direct foreign investment. China also enjoys a strong surplus in its current account, and hold vast foreign exchange reserves. Inflation is also low. For these reasons there appears little risk of short term problems in the Chinese economy.

However, longer term issues do remain and these are currently receiving serious attention by the highest levels of the Chinese leadership. For example, China's export industries face increased competition from exporters in South East Asia and South Korea whose products are now more competitively priced after massive currency depreciations. Pressures may be brought to bear for a devaluation of the RMB which, in turn, may complicate the Hong Kong Government's determination to maintain the HK dollar peg with the US dollar.

Foreign investment into China has contracted somewhat in 1997 although this slowing was apparent before the financial problems in other countries occurred. When the impact of the financial crisis does begin to be felt, the trend to lower foreign investment in China is expected to worsen in 1998. This in turn is expected to have an adverse effect on domestic growth.

The Chinese Seafood Market

China has a large domestic fishing industry, and an increasingly high consumption of these products. Although the Chinese fishing industry has been developing at a fast pace, local production is unable to meet current domestic demand and a large quantity of seafood products are imported. In 1996, China imported 1.39 million tonnes of seafood worth \$US1.2 billion with an annual growth rate of 23.6% and 33.6% respectively, since 1981. The main reason for this is increased demand due to rising incomes and living standards of both urban and rural Chinese.

Guangdong province in Southern China (capital is Guangzhou and closest province to Hong Kong) is the most important market in China for both domestic and imported

seafood, including Australian seafood. Guangdong's proximity to Hong Kong and its long history of trading with the Hong Kong Cantonese has also made the province a critical gateway for imported seafood to be distributed to the rest of China.

Guangdong province offers a large market for imported live and chilled seafood, with thousands of boxes entering the province daily via Yantian Port (a major live and chilled seafood entry point). About half the landed seafood is purchased by local Chinese distributors or wholesalers and then forwarded on to other regional markets, (including those from Beijing, Shanghai and Fujian province). Most of the remainder is transferred to Huangsha Seafood Market, in Guangzhou City for wholesale and retail.

The most popular live and chilled seafood imports include: rock lobsters, clams, abalone, various crabs and a variety of fish from the coral trout/grouper family. Most of the lobsters come from Australia; clams from USA; crabs from various sources; and prawns and live fish from countries in South East Asia. Most seafood is imported live, because Chinese consumers prefer maximum freshness - salmon is one of the few seafoods that is imported chilled.

Hong Kong companies are heavily involved in the province's live and chilled seafood importation, crustaceans and molluscs in particular. In Guangdong province's Yantian town, approximately 80% of the importers are either Sino-Hong Kong joint ventures or subsidiaries of Hong Kong companies.

Since 1993, some local buyers have approached overseas buyers directly for better control over prices and it appears more and more local importers are looking to operate in this way. Austrade Beijing has been assisting live lobster exporters directly into Beijing market.

Prospects for Australian Seafood Exports

Australia serves the top end of the market in China, with the main exports being southern & western rock lobster, abalone (greenlip and blacklip), king crab and coral trout. Some Australian suppliers of atlantic salmon and tuna and whose traditional market is Japan, have begun to develop markets in China (and Hong Kong). Some frozen prawns are beginning to find a stronger market as a number of retail food outlets have begun selling seafood product.

The current size of Australia's seafood market in China is not entirely clear as a considerable amount of product enters the country via Hong Kong. However, the total

value of Australian seafood into exported directly into China (excluding live seafood) in 1994/95 was approximately \$A6.1 million and in volume 429 tonnes. These figures rose to \$53.1 million and 2,815 tonnes respectively in 1996/97.

In the short term, the Asian economic crisis appears to be having little effect on Australia's seafood exports to China. However, a significant downturn in the economy will no doubt slow demand for the type of luxury seafood that Australian exports to this country. In the medium to longer term, the demand for Australian seafood is expected to grow as Australia has and should continue to enjoy a strong reputation as a supplier of high quality product.

Australian exporters should look for niche opportunities in this growing market, remembering that geographic regions within China have different preferences. As this is still very much a developing market, it is very important for interested Australian exporters to visit China for themselves and become familiar with the needs of the market, including how their product is handled and sold, how restaurants prepare it and what consumers are looking for. It is also crucial that they find the right partner and establish a long term commitment with them. Using the services of Austrade's offices in Beijing, Guangzhou and Shanghai can assist Australian seafood exporters in avoiding the potential pitfalls in this unique and developing market.

In conclusion, the North East Asia region is, and will remain, our most important market for seafood. There is no doubt that the Asian economic crisis will affect countries in this region in the short term - some dramatically, like South Korea, and others more peripherally. It is important to consider the situation in each country as each market is different. Therefore the effects and their ramifications will also be different.

The immediate future of Australian seafood to this important region will remain uncertain due to the unstable business environment there, however, being aware of the major issues in each market should better assist Australian seafood exporters to carefully manage the potential risks and even identify emerging opportunities.

For further details on the situation in any of the countries mentioned in this paper or for any additional information, interested exporters should call Austrade's Hotline on 13 28 78.

