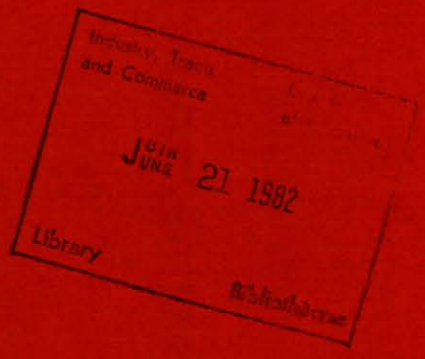
ANNEX TO THE **WORLDWIDE FISHERIES MARKETING STUDY:** PROSPECTS TO 1985

ICELAND



Government of Canada
Gouvernement du Canada

Fisheries and Oceans
Pêches et Océans

(This Report is one of a series of country and species annexes to the main study - entitled the Overview).

D R A F T

Annex to the
Worldwide Fisheries Marketing Study:
Prospects to 1985

ICELAND

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Author submitted: May, 1980
Marketing Directorate release: September, 1981.

ACKNOWLEDGEMENT

The preparation of the Worldwide Fisheries Marketing Study, of which this Report is a part, embodies many hours of work not only by the authors but also and more importantly by those who generously provided us with market information and advice.

Specifically, this Report would not have been possible without the cooperation and assistance of fishermen, processors, brokers, wholesalers, distributors, retailers, consumers and their organizations as well as government officials with whom we visited and interviewed. Though too numerous to mention separately, we would like to extend our sincere gratitude and appreciation.

The views expressed in this Study, however, are ours alone and reflect the Canadian perception of worldwide markets.

With regard to the overall Study, we would like to acknowledge:

- the encouragement and guidance of G.C. Vernon and D.S. Puccini, Department of Fisheries and Oceans (DFO);
- the advice of K. Campbell, Fisheries Council of Canada; and J. Spitz, Fisheries Association of B.C.; and R. Bulmer, Canadian Association of Fish Exporters;
- the liaison work of C. Paquette, DFO;
- the cooperation of the Department of Industry, Trade and Commerce (IT&C);
- the dedication of the participants from various parts of the industry and government including officers at our diplomatic posts who formed the study teams;
- the analytical and editorial assistance of K. Hay and his staff at Economix International;
- the general assistance within DFO provided by the graphical services of the Communications Branch and the support services of A. Letellier and G. Routhier of the Marketing Services Branch.

To all of the above, we extend our thanks.

E. Wong
September, 1981

FOREWORD

As a consequence of global extension of fisheries jurisdictions, a radical shift has taken place in the pattern of worldwide fish supply and demand. This change is still going on and will continue for many years before a new dynamic equilibrium situation is reached. However, in the midst of this re-adjustment, a new trade pattern is emerging -- some net exporting countries are now importing and vice versa. In the longer term, some countries will experience shortages of supply and others will have a surplus. Fortunately, Canada is amongst the latter group.

The implications for the marketing of Canadian fisheries products arising from the worldwide introduction of the 200-mile limit are extensive. With our vastly improved supply position relative to world demand, government and industry are understandably concerned about ensuring that the bright promise of increased market opportunities are real and can be fulfilled. One of the steps in this process is the publication of the Worldwide Fisheries Marketing Study which assesses the global potential on a country and species basis.

Specifically, the purpose of the Study is to identify the longer term market opportunities for selected traditional and non-traditional species in existing and prospective markets and to identify factors which may hinder or help Canadian fisheries trade in world markets. To date, over 40 country markets and 8 species groups have been analyzed. It should be noted that while the information contained in the Reports was up-to-date when collected, some information may now be dated given the speed with which changes are occurring in the marketplace. In this same vein, the market projections should be viewed with caution given the present and still evolving re-alignment in the pattern of international fisheries trade, keeping in mind the variability of key factors such as foreign exchange rates, energy costs, bilateral fisheries arrangements and GATT agreements which have a direct effect on trade flows.

Notwithstanding, the findings contained in these Reports represent an important consolidation of knowledge regarding market potential and implications for improvements in our existing marketing and production practices. The results of the Study should, therefore, usefully serve as a basis for planning fisheries development and marketing activities by both government and industry in order to capitalize on the identified market opportunities.

This draft report is published for discussion purposes and as such we invite your critical comments.

Ed Wong

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Department of Fisheries and Oceans
September 1981
Ottawa

WORLDWIDE FISHERIES MARKETING STUDY

ICELAND

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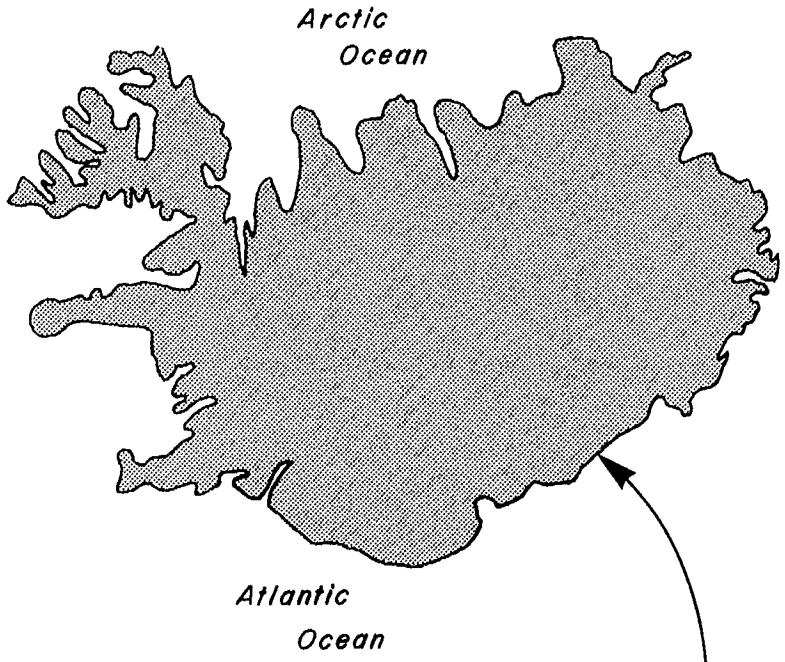
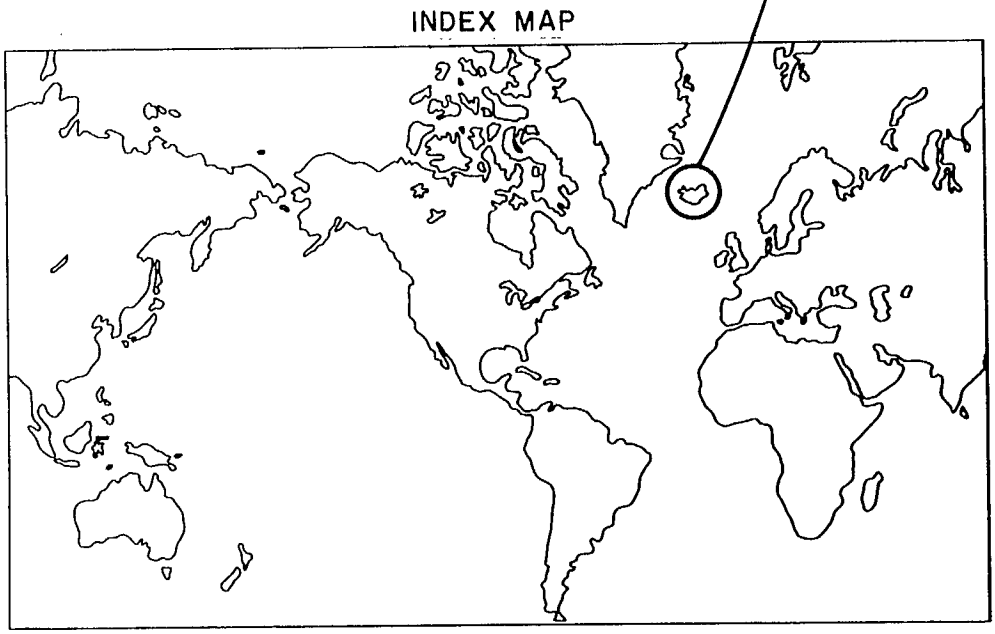


INDEX MAP



A. SUPPLY AND DEMAND

1 The Icelandic Economy

After the worldwide adoption of extended fisheries jurisdiction Iceland emerged as a major exporter of fisheries products. As such, it competes with Canadian fish exports in world markets, particularly in the United States and Europe. Since the Icelandic domestic fish market is relatively small and practically self-sufficient, the country cannot be considered as a significant potential market for Canada.

Iceland was under Danish rule until 1945. After gaining independence, it underwent rapid economic development and today is a prosperous country.

With a total population of 225 000, Iceland is dependent on fishing to a large extent. The rapid rise of fish prices on international markets during the past decade and the extension of fisheries jurisdiction have benefited the country's economy substantially.

The following table shows the comparative growth of the national income of Iceland and Canada between 1960 and 1977. Iceland's per capita national income was substantially lower than that of Canada in 1960, but by 1977 its average approached the Canadian level.

TABLE 1

National Income: Iceland-Canada

	National income (US$ million)		Per capita national income (US$)	
	Iceland	Canada	Iceland	Canada
1960	207	34 195	1 178	1 909
1970	422	71 760	2 068	3 366
1975	1 052	143 701	4 785	6 322
1977	1 628	174 551	7 401	7 485

Source: United Nations, Yearbook of National Accounts

2 Export Trade

The Icelandic economy is highly export oriented. The National Economic Institute had predicted that the value of goods and services exported would amount to 47% of the gross national product (GNP) in 1979, compared with an export ratio of about 25% in Canada.

Fisheries products account for about 70% of Iceland's exports and, therefore, the prosperity of the country depends to a large extend on the state of the fishing industry and on the supply-demand situation of the international fish markets.

TABLE 2

Icelandic exports by industry, 1977 and 1979

(percentage of total export value)

	1977	1979
Marine products	74.9	75.8
(Fish processing)	(72.6)	(70.6)
Agricultural products	2.4	2.6
Manufactured products	20.7	20.5
Other Products	2.0	1.1
Total	100.0	100.0

Source: National Economic Institute

3 Unemployment and Inflation

Iceland's total labour force is about 100 000. The country has maintained a full employment economy during the past decade. The unemployment rate was 2.5% of the labour force in 1969, and gradually declined to 0.3% by 1977. The level was unchanged in 1978, and there was a small increase to about 0.4% in 1979. These figures are very low compared with the unemployment rates of other Western countries.

The main persistent problem is inflation. Since 1974 the value of the Icelandic krona dropped between 30% and 50% per year.

According to official statistics, the 1970-based Icelandic consumer price index rose to 1 228 points by August 1979. That means that the 1970 value of 100 krona dropped to 8.15 krona by August 1979. (During the same time the 1970 Canadian dollar lost only about half of its value).

A new Icelandic currency, based on a krona worth a hundred times more than the old one, is scheduled to be put into circulation on January 1, 1981.

TABLE 3

Iceland: consumer price index

	(1970 = 100)	%
1970	100	-
1971	107	7
1972	123	15
1973	153	24
1974	218	42
1975	327	50
1976	437	34
1977	570	30
1978	822	44
1979 (August)	1 228	49

Source: National Economic Institute

The inflationary pressure has intensified in Iceland in recent years because of the rapid increase of oil prices. Iceland has no oil deposits and thus must import all of its requirements.

4. Fisheries Trade With Canada

In 1979 Canada exported $1.2 million worth of fisheries products to Iceland, most of it classified under the "fishery foods and feeds" category. Fisheries product imports from Iceland to Canada amounted to $18 000 in 1979.

TABLE 4
Canadian trade in fisheries products with Iceland1
(Q-product weight, tonnes, V-value $000)

	1975 Q	1976 Q	1977 Q	1978 Q	1978 V	1979 Q	1979 V
Canadian exports							
Lobster in shell, fresh or frozen	---	---	---	---	---	2	18
Squid whole, fresh or frozen (incl. round)	---	---	---	---	---	300	173
Shellfish, fresh or frozen NES	---	---	---	885	552	---	---
Fishery foods & feeds NES	---	---	---	400	260	1 493	995
				1 285	812	1 795	1 186
Canadian imports							
Halibut, fresh or frozen	3	---	---	---	---	---	---
Seafish, fresh or frozen NES	---	913	1 869	347	20	---	---
Freshwater fish, fresh or frozen	---	---	1 042	---	---	---	---
Fish salted and/or dried	0	3	1	2	5	2	14
Herring, pickled	3	---	---	---	---	---	---
Shrimps & prawns fresh or frozen	0	---	---	---	---	---	---
Fishery foods & feeds NES	4	---	---	---	---	2	4
	10	916	2 912	349	25	4	18

1) Source: Exports By Commodities, Statistics Canada
Imports by Commodities, Statistics Canada

B. COMPETITION WITH CANADA

1 Prospects to 1985

The geographic pattern of Icelandic fish exports is more diversified than that of Canada. In 1978 Iceland shipped 35% of its seafood exports to the US, 28% to the EC, 20% to other European countries and 7% to the USSR.

Competition between Iceland and Canada is mainly in the American groundfish market. The future volume of Icelandic exports to the US will be influenced by the strength of European markets. Higher prices in Europe vis-à-vis the US would obviously have a trade diverting effect. One must keep in mind, however, that Iceland has substantial investments in processing plants in the US and has built up a solid market for its products. It would be safe to assume then, that Iceland will want to safeguard its investments and would not abandon the American market even for higher prices in Europe. The recent expansion in the production capacity of one of the Icelandic plants indicates that Iceland intends to increase its sales volume to the US. One can speculate however, that when markets are buoyant in other parts of the world, Iceland might increase its exports to those countries instead of supplying its US plants fully with Icelandic fish. In such a situation Icelandic companies in the US might buy fish from other sources, including Canada, for further processing.

It is expected that Canada will be able to compete more effectively with Iceland on the US market in the future. Ambitious quality improvement programs are being implemented in Canada, which will narrow the quality gap currently existing between Icelandic and Canadian groundfish products and particularly in respect of fillets. This means that a gradually growing proportion of Canadian fillets will be able to command a higher price on the American market. Competition between Iceland and Canada is expected to intensify as well in sales of frozen blocks. The

improving quality of Canadian blocks will tend to erode the existing differential between the Icelandic and Canadian products.

Competition between Icelandic and Canadian fishery products is also likely to intensify in Europe in the future. Canadian producers are making special efforts to increase exports to Europe and such trade has already expanded considerably. Should Canada be successful in negotiating tariff reductions with the EC its competitive position vis-à-vis Iceland would improve.

2. Marketing Expectations by Species

Cod

The 1979 Icelandic cod catch amounted to 361 000 tonnes as compared to 318 000 tonnes in 1978. It is estimated that by 1985 the Icelandic cod catch will be in the range of 400 000 to 450 000 tonnes, an expansion of 10% to 20% over the 1979 level.

In 1979 the US consumed 173 700 tonnes (product weight) of cod fillets and blocks. Of this total Iceland supplied about 50 000 tonnes and Canada 63 000 tonnes. By 1985 the US market requirements, may reach nearly 200 000 tonnes.

Since US cod landings are expected to increase only moderately, the American import demand may amount to about 180 000 tonnes. And because the cod resource prospects of other Scandinavian countries are not bright, it is likely that the additional US import requirements of about 25 000 tonnes (1985 as compared to 1979) will be supplied mainly by Iceland and Canada in competition with each other.

Expanding Canadian frozen cod exports will also compete with Icelandic cod on European markets. It is likely, however, that Icelandic boats will increasingly land fresh cod in EC countries and particularly in the UK. In respect of salted cod, Iceland and Canada may compete in particular in Portugal and Spain.

Haddock

Iceland landed 52 000 tonnes of haddock (round weight) in 1979 and exported 3 500 tonnes (product weight) of haddock blocks and an unknown quantity (see page 13 for an explanation) of fillets to the US market.

The Icelandic haddock resource has recently been fished to the limit and no further increase in landings is expected between now and 1985. Nor are Canadian haddock landings expected to increase substantially by 1985 and the US domestic haddock catch is relatively small. Strong import demand for haddock is expected by the US in the years ahead and both Iceland and Canada may have difficulties supplying the volume required.

Ocean perch

Between 1978 and 1979 Icelandic ocean perch landings increased from 33 000 tonnes to 62 000 tonnes. It is believed that landings cannot increase further without a depletion of stocks, thus it is presumed that the 1985 Icelandic ocean perch catch will be around 60 000 tonnes.

Recent events in the US demonstrated that increased supplies from Iceland could upset the ocean perch market. (Between 1978 and 1979 Iceland increased its ocean perch fillet exports to the US from 1 800 tonnes to 5 000 tonnes). Difficulties can be foreseen for 1985 because the Canadian ocean perch catch is expected to double by that time and - subject to developments in Alaska - the US catch may also increase substantially. If the US develops further its ocean perch fishery, American import requirements may increase only slightly by 1985. This is likely to induce intense price competition between Icelandic, Canadian and domestic supplies.

Iceland has already developed a market for ocean perch in the USSR and Canadian companies may follow suit. Iceland and Canada may also sell ocean perch to EC countries, particularly West Germany, in competition with each other.

Pollock

In 1979 Iceland landed 57 000 tonnes of pollock (saithe) and the catch fluctuated between 44 000 and 61 000 tonnes, between 1975 and 1979. Icelandic biologists find it difficult to estimate future pollock landings. It can be presumed that the 1985 catch level will be between 80 000 and 100 000 tonnes.

Iceland exported about 5 600 tonnes of pollock blocks and an unknown quantity of pollock fillets to the US in 1979. Other pollock markets for Iceland included the UK, FRG and Eastern Bloc countries. On the Atlantic coast the US has a static pollock resource but Canada is expected to increase its Atlantic pollock catch from 31 000 tonnes in 1979 to about 40 000 tonnes in 1985. Since US import demand for Atlantic pollock is not expected to increase substantially during the next five years, both Iceland and Canada will have to develop additional markets for their larger catches.

Herring

Between 1978 and 1979 Icelandic herring catches grew from 37 000 to 45 000 tonnes. Iceland currently exports herring primarily to the UK, France, Holland and FRG, which also buy Canadian herring products. It is estimated that the Icelandic herring catch will be in the neighbourhood of 50 000 tonnes in 1985 but this modest increase is unlikely to influence the competitive position of Iceland versus Canada on European markets.

3 Competition on the US Market

Between 1971 and 1979 the dollar value of US edible fisheries product imports from Iceland increased fourfold to US $215 million. During the same period imports from Canada tripled to US $591 million.

TABLE 5

US imports of edible fisheries products from Iceland and Canada

(US$ million)

	Iceland	Index	Canada	Index
1971	55	100	206	100
1972	58	106	258	125
1973	73	133	299	145
1974	72	131	235	114
1975	81	147	287	139
1976	112	204	375	182
1977	149	271	418	203
1978	168	306	514	250
1979	215	391	591	287

Source: Fisheris of the United States, NMFS

The composition of the 1979 US fisheries imports from Iceland and Canada is set out in the following table. While 97% of imports from Iceland were groundfish products, only 57% of imports from Canada were groundfish. Canada also supplied substantial amounts of herring, shellfish and other fisheries products to the US. This table demonstrates that Iceland and Canada are competing essentially in groundfish on the American market.

TABLE 6

US imports of fisheries products for human consumption from Iceland and Canada 1979

(tonnes)

	Iceland	Canada
Groundfish:		
Round	87	8 565
Fillets	49 479	73 835
Blocks	32 432	56 427
Sub-total	81 998	138 827
Herring	332	30 558
Shellfish	1 317	22 249
All other	686	52 939
Grand total	84 333	244 573

Source: US Imports for consumption, Bureau of the Census

Cod Fillets

The following table shows the tonnage of cod fillet imports by the US from Iceland and Canada between 1971 and 1979. These figures indicate that during the past nine years both Iceland and Canada increased the volume of their cod fillet sales to the US, but Iceland was more successful in enlarging demand for its products. Iceland sold 16 000 tonnes of cod fillets in 1971 and 33 000 tonnes in 1979, while Canada expanded its exports from 13 000 tonnes to only 23 000 tonnes. Because of the faster growth of demand for the Icelandic products, Iceland's market share grew from 42 to 51%. The market share of Canadian cod fillets dropped from 36% to 24% between 1971 and 1977 and then grew again to 35% by 1979.

TABLE 7

US cod fillets imports

(000 tonnes)

	From Iceland		From Canada		Total imports from all countries)	
	t	% of total	t	% of total	t	
1971	15.5	42.3	13.1	35.8	36.6	100%
1972	13.6	30.3	15.9	35.4	44.9	100%
1973	13.3	35.4	11.6	30.9	37.6	100%
1974	13.6	41.8	8.6	26.5	32.5	100%
1975	18.6	45.0	11.0	26.6	41.3	100%
1976	22.8	42.5	12.8	23.8	53.7	100%
1977	26.7	48.1	13.5	24.3	55.5	100%
1978	30.5	49.8	17.8	29.1	61.2	100%
1979	33.2	50.6	23.0	35.1	65.6	100%

Source: US Imports for Consumption, Bureau of the Census.

It should be noted that Icelandic and Canadian cod fillets only partially compete on the American market. Since the Icelandic fillets are higher priced than the Canadian product, the market in general does not consider them as interchangeable products.

The following tables show the price difference between Scandinavian and Canadian cod fillets in the US. In respect of the 5-lb. boneless pack, Iceland's price advantage was 15 to 18 cents in April 1976 and 42 to 45 cents in April 1980. In April 1977 the Icelandic 5-lb. "jumbo" sold for $1.25 as compared to $1.15 for the Canadian product. By April 1980 Iceland's price advantage increased to 23 to 28 cents.

TABLE 8

Wholesale prices, 5-lb. boneless frozen cod fillets, Boston

(US$ per lb.)

April	Canada	Iceland	Denmark	Norway
1974	0.89-0.90	--	--	--
1975	0.75	--	0.92	0.87-0.89
1976	0.93-0.95	1.10	1.05	1.10[1])
1977	1.05	1.25	1.25	1.25
1978	1.18	1.30	1.30	1.35
1979	1.20	1.45	1.30	1.50
1980	1.15-1.18	1.60	1.60	1.65

1 March 1976

Source: Boston Fishery Market News Report, National Marine Fisheries Service, US Dept. Of Commerce, NOAA.

TABLE 9

Wholsesale prices of 10 and 15-lb. "jumbo" boneless frozen cod fillets, Boston

(US$ per lb)

April	Canada	Iceland	Denmark	Norway
1974	0.95-0.97	--	--	--
1975	0.96-0.98	--	0.98	--
1976	--	1.03-1.15	1.10-1.14	1.10-1.18
1977	1.15	1.25	1.30	1.25-1.30
1978	1.35	1.40	1.40	1.32-1.38
1979	1.35-1.40	1.55-1.60	1.40	1.65
1980	1.42-1.53	1.65-1.70	1.70	1.75-1.80

Source: Boston Fishery Market News Report, National Marine Fisheries Service, US Dept. of Commerce, NOAA.

Since Icelandic companies produce only minor quantities of the 1-lb. cod fillet pack, products of Canadian origin face little competition in this market segment.

Cod Blocks

Between 1971 and 1979 Canada increased its cod block exports to the US from 27 000 to 40 000 tonnes and its share of the total cod block market from 31% to 46%. In contrast, Icelandic cod block exports were 21 000 tonnes in 1971, representing a market share of 24% and 19 000 tonnes in 1979, a market share of 22%.

TABLE 10

US cod block imports

(000 tonnes)

	From Iceland		From Canada		Total imports from all countries)	
	t	% of total	t	% of total	t	% of total
1971	20.7	23.7	26.8	30.6	87.5	100%
1972	17.1	18.2	21.2	22.5	94.1	100%
1973	15.5	22.0	17.3	24.6	70.3	100%
1974	13.6	26.5	9.6	18.7	51.3	100%
1975	14.0	19.2	10.2	14.0	73.0	100%
1976	17.0	20.8	15.3	18.7	81.7	100%
1977	17.7	19.1	26.1	28.1	92.9	100%
1978	17.6	18.9	29.8	32.1	92.9	100%
1979	19.3	22.1	40.3	46.1	87.5	100%

Source: US Imports for Consumption, Bureau of the Census

Iceland and Canada do not compete directly in cod blocks on the US market. Canada primarily supplies US converters with blocks. However, after the recent acquisition of plants in the US, a growing but still relatively minor part of Canadian cod block exports ends up in Canadian-owned plants south of the border. Iceland, on the other hand, exports practically the total volume of cod blocks for the use of its two processing plants in the US. On the rare occasion, when Icelandic cod blocks, all untreated, are sold on the open market, they command a price of two to five cents higher than Canadian blocks. Otherwise competition is confined to the area of processed products derived from blocks, such as sticks and portions.

Sticks and portions are marketed in retail trade, in food service establishments and in the captive institutional markets, such as the school lunch program. Since the Icelandic companies are mainly institutional-trade oriented, they do not compete strongly with products made of Canadian blocks and sold by retailers. Competition takes place much more in the institutional markets. Since breading disguises the quality of the raw material to some extent, these products usually command broadly identical prices on the marketplace. It does happen in a limited number of cases, however, that the client specifies that portions should be made of Icelandic blocks. In such cases, Icelandic companies are able to charge up to about five cents more for the finished products than the ruling market price.

Haddock Fillets

Since US official import statistics combine haddock fillets with pollock, hake and cusk fillets, it is not possible to determine the size of the haddock fillet market as such. Icelandic statistics do not offer help in this regard, but Canadian export figures are available from Statistics Canada. The following table therefore, compares haddock, pollock, hake and cusk fillets imported from Iceland with haddock fillets imported from Canada.

TABLE 11

US haddock fillet imports

(000 tonnes)

	From Iceland1	From Canada
1971	1.8	0.2
1972	3.3	0.3
1973	3.9	1.6
1974	3.0	1.3
1975	6.1	2.1
1976	6.3	2.0
1977	7.7	2.9
1978	8.0	5.8
1979	10.8	5.9

1) Includes pollock, hake and cusk fillets
Source: US Imports for Consumption, Bureau of the Census
Exports by Commodity, Statistics Canada

In the same way as for cod fillets, a two-tier market exists for haddock fillets in the US. The Icelandic 5-lb. pack currently enjoys a price advantage of about 35 to 40 cents over Canadian products. Iceland does not produce skin-on and bone-in haddock fillets like Canada does. Therefore competition is confined to the boneless pack.

TABLE 12
Wholesale prices of 5-lb. boneless frozen haddock fillets, Boston
(US$ per lb.)

	Canada	Iceland	Denmark	Norway
April				
1974	--	--	--	0.95
1975	0.82	--	--	0.87
1976	--	--	--	0.98
1977	--	1.25-1.30	--	1.30
1978	1.25	1.40-1.45	--	1.30-1.35
1979	--	1.55-1.60	--	1.60
1980	1.40-1.45	1.80	--	1.85

Source: Boston Fishery Market News Report, National Marine Fisheries Service, US Dept. of Commerce, NOAA

Haddock Blocks

In 1979 the US market purchased 8 000 tonnes of haddock blocks. Iceland supplied 42% of this, while Canada supplied only 12%.

TABLE 13
US haddock block imports
(000 tonnes)

	From Iceland		From Canada		Total imports (from all countries)	
	t	% of total	t	% of total	t	% of total
1971	4.6	35.1	0.5	3.8	13.1	100%
1972	3.6	30.8	0.2	1.7	11.7	100%
1973	3.8	30.9	0.2	1.6	12.3	100%
1974	2.2	22.9	0.1	1.0	9.6	100%
1975	5.8	34.9	0.2	1.2	16.6	100%
1976	4.6	35.7	0.1	0.8	12.9	100%
1977	2.7	19.3	0.4	2.9	14.0	100%
1978	4.4	35.8	1.0	8.1	12.3	100%
1979	3.5	42.2	1.0	12.1	8.3	100%

Source: US Imports for Consumption, Bureau of the Census

The market does differentiate in price between the Icelandic and the Canadian haddock blocks and Icelandic companies can fetch a price two to five cents higher. At the time of writing Canadian blocks sold at US $1.30 to $1.32 in Boston.

Ocean Perch Fillets

Historically, Iceland has been a minor supplier of ocean perch fillets to the US market, but has stepped up its exports in recent years. In 1979 Canada had 76% of the US ocean perch fillet market, followed by Iceland with 21%.

TABLE 14
US ocean perch fillets imports
(000 tonnes)

	From Iceland		From Canada		Total imports (from all countries)	
	t	% of total	t	% of total	t	% of total
1971	0.6	2.3	24.8	96.5	25.7	100%
1972	0.7	2.2	30.7	94.5	32.5	100%
1973	1.3	3.2	37.2	92.8	40.1	100%
1974	0.6	2.2	25.4	93.7	27.1	100%
1975	0.7	2.4	28.9	94.1	30.7	100%
1976	2.1	7.7	24.4	89.1	27.4	100%
1977	2.6	12.8	16.9	82.4	20.5	100%
1978	1.8	8.3	19.2	88.9	21.6	100%
1979	5.0	20.8	18.2	75.8	24.0	100%

Source: US Imports for Consumption, Bureau of the Census

Most of the Icelandic ocean perch fillets are deboned and skinless while the Canadian product is skin-on and bone-in, with the result that Icelandic fillets attract a higher price.

Ocean Perch Blocks

Iceland dominates the limited market for ocean perch blocks in the US. In 1979 the import market absorbed 2 300 tonnes, and two-thirds of this volume was supplied by Iceland. Canada's share was a mere 200 tonnes.

TABLE 15
US ocean perch block imports
(000 tonnes)

	From Iceland		From Canada		Total imports (from all countries)	
	t	% of total	t	% of total	t	% of total
1975	0.5	50.0	0.2	20.0	1.0	100%
1976	1.9	52.8	0.2	5.6	3.6	100%
1977	0.7	70.0	0.1	10.0	1.0	100%
1978	0.9	64.3	0.2	14.3	1.4	100%
1979	1.5	65.2	0.2	8.7	2.3	100%

Source: US Imports for Consumption, Bureau of the Census

Again, Icelandic companies are able to get a slightly higher price for their skinless ocean perch blocks as against skin-on Canadian blocks.

Pollock Blocks

US import statistics do not discriminate between Atlantic and Alaska pollock. On the total pollock block import market, dominated by South Korea, Iceland had a 15% share in 1979 while Canada supplied only 1% of US requirements.

TABLE 16
US pollock block import
(000 tonnes)

	From Iceland		From Canada		Total imports (from all countries)	
	t	% of total	t	% of total	t	% of total
1971	4.5	34.4	0.8	6.1	13.1	100%
1972	3.6	14.5	0.8	3.2	24.9	100%
1973	6.7	14.2	1.4	3.0	47.1	100%
1974	3.1	8.5	0.5	1.4	36.3	100%
1975	4.9	14.5	1.3	3.8	33.9	100%
1976	4.6	10.6	0.5	1.2	43.4	100%
1977	5.0	13.3	0.4	1.1	37.6	100%
1978	4.4	11.9	0.7	1.9	36.9	100%
1979	5.7	14.5	0.4	1.0	39.3	100%

Source: US Imports for Consumption, Bureau of the Census

Icelandic pollock blocks sell about five cents higher than the Canadian ones.

4 The European Economic Community

The European Community (EC) has offered expanding markets to both Iceland and Canada in recent years. Icelandic fishery exports to EC countries grew from 34 000 tonnes in 1975 to 62 000 tonnes in 1978. During the same years Canadian fishery exports to the EC increased from 43 000 tonnes to 104 000 tonnes, though it declined to 100 000 tonnes in 1979.

According to export statistics the level of Icelandic exports of fresh (chilled) fish was around 23 000 tonnes both in 1975 and 1978. It has been reported, however, that during 1979 Icelandic boats landed increased quantities of fresh cod in UK ports. Iceland also exports fresh fish to FRG and Denmark.

Between 1975 and 1978 Iceland increased its frozen fish sales to the EC from 3 000 to 25 000 tonnes. Icelandic frozen fish exports to the EC consist primarily of groundfish, supplemented by herring and shrimp. Cod, haddock and pollock are mainly marketed in the UK and in FRG. Turbot is mainly sold for smoking purposes to German processors. Frozen herring is exported to UK, FRG, France and Holland. The markets for Icelandic shrimp are chiefly Holland and Denmark within the EC.

Iceland sold 13 000 tonnes of salted/dried fish to the EC in 1978, compared to 8 000 tonnes in 1975. The main buyer of Icelandic saltfish is Italy; other EC countries buy it for the consumption of "guest" workers from Spain, Portugal and Greece.

In 1979 the UK bought from Canada 1 000 tonnes of frozen cod fillets, 800 tonnes of cod blocks and over 6 000 tonnes of herring. France imported 400 tonnes of Canadian cod blocks and 3 600 tonnes of herring and smaller quantities of flounder and turbot fillets. FRG purchased 500 tonnes of Canadian cod blocks and more than 30 000 tonnes of herring. Dutch imports from Canada amounted to about 3 800 tonnes of herring, and 31 tonnes of Canadian shrimp. Denmark imported 370 tonnes of Canadian shrimp.

Iceland has the advantage of proximity to the European markets and also enjoys preferential tariffs in the EC countries.

Iceland's free trade agreement with the EC came into force on April 1, 1973. However, it was not fully implemented until July 1, 1976 when the special provisions on Icelandic fish imported by the community were applied. Implementation of the agreement was delayed by the fishing disputes between Iceland, the UK and FRG. When the agreement did go into force the result, in effect, was an 80% tariff reduction on Icelandic fish imported into the original member countries of the EC.

By July 1, 1977, EC tariffs were reduced to zero on a wide range of Icelandic fisheries products, including frozen fillets and blocks, provided imports met the reference price. On fresh cod, haddock and pollock, tariffs were lowered to 3.7% and on fresh redfish to 2%. Saltfish, stockfish and fresh and frozen herring are not covered by the protocol, but are exempt from tariffs under tariff quotas.

Iceland is a member country of the European Free Trade Agreement (EFTA). Under EFTA regulations, tariffs on most fisheries products were eliminated among member countries on July 1, 1976. This included the UK and Denmark, which by that time had joined the EC.

The following table shows the comparative tariffs Iceland and Canada face when exporting fish products to EC countries. Under the "conventional" tariff item, Canada pays an additional duty of between 6% and 20% in comparison to Iceland. The "temporary" rates are always imposed with a time limit and may not be renewed. While they last, Canada's handicap is mitigated on a number of items and eliminated on some items.

TABLE 17
EC tariffs on fish products, January 1, 1980
(rate of duty %)

	Canada		Iceland
	Conventional	Temporary	
Whole, headless or in pieces			
Cod	14.6	9*1)	3.7
Redfish	8	-	2
Haddock	15	9*1)	3.7
Frozen fillets, blocks			
Cod	15	9*1)	0
Pollock	15	-	0
Haddock	15	9 1)	0
Redfish	14.6	-	0
Mackerel	15	-	0
Other	15	herring 0*	0
Dried, salted smoked			
Cod - whole	13	0	0
Cod - fillets	20	0	0
Prepared or preserved			
Spiced and salted herring	20	5	10
Shrimp	20	-	0

Source: Official Journal of the European Communities

1) As of July 1, 1980 the temporary rates were discontinued.
* For processing only.

C. THE ICELANDIC FISHING INDUSTRY

1 Background

In terms of the quantity of fish landed, Iceland was the 14th largest fishing nation in the world in 1978, with a total catch of 1.6 million tonnes. In that year Canada placed 16th with 1.4 million tonnes.

Iceland, the first country in the North Atlantic to make such a move, extended its fisheries jurisdiction to 200 miles in 1975, after more than 20 years of boundary disputes with other fishing nations.

The first conflict came in 1952 when Iceland's three-mile limit was extended to four miles. Then in 1958 Iceland declared a 12-mile fishing limit, which led to the so-called "first cod war". The UK and FRG objected to the new limit and the British navy moved in to protect UK trawlers operating within the new boundaries. The dispute ended in 1961 when both UK and FRG signed separate agreements with Iceland, recognizing the new limit.

On September 1, 1972, Iceland extended its fishing limits to 50 miles and touched off the "second cod war." The UK once again sent warships into the disputed zone and FRG also strongly opposed the new limit. Previously the UK caught 25% to 30% and FRG 5% to 7% of the total cod catch from Icelandic waters. The dispute held up the implementation of the trade agreement reached between Iceland and the EC. During the dispute, in 1972 and 1973, Icelandic gunboats cut the trawls of UK fishing vessels, and in some instances even shelled them. It ended with a two-year agreement limiting the UK's total annual catch in the region to 130 000 tonnes, a reduction of about 50 000 tonnes. It also provided for a banning of freezer and factory ships, and limited the number of trawlers allowed within the 50 miles to 139.

The Government of Iceland subsequently claimed that the fish stocks could no longer support fishing by foreign fleets and that the Icelandic fishing fleet was capable of fully utilizing the resource. Finally Icelandic fishing limits were extended to 200 miles on July 15, 1975 and the new law went into force on October 15, 1975.

2 Fishing Fleet

After the exclusion of foreign fishing vessels within 200 miles, Iceland added 80 ships in the 400-900 GT range to its fleet. These larger ships now catch over 75% of the cod harvested, each vessel taking about 3 500 tonnes per year.

Nearly all large Icelandic trawlers were built abroad in the past with the help of the Fisheries Investment Fund. However, since the government recently cancelled financial support for the purchase of foreign-built vessels, no new capacity is being added to the existing fleet of larger vessels. The increase of the smaller-boat fleet is also limited.

TABLE 18
Summary of Icelandic ships, January 1, 1980

	Under 100 GRT		100 and over		Total	
Fish.V. Side Trawlers.			2	656	2	556
Fish.V. Stern Trawler.			82	39 613	82	39 613
Fish.V. Purse Seiners.			16	8 537	16	8 537
Fish.V. Whale Catchers			4	1 953	4	1 953
Other Fishing Vessels.	568	16 180	196	37 221	764	53 401
Dry Cargo Ships.....			52	75 892	52	75 892
Passenger Ships.....	1	30	5	2 222	6	2 252
Inspection Ships.....			5	3 763	5	3 763
Research Vessels.....	1	75	3	2 019	4	2 094
Lifesafing Boats.....	1	18	1	139	2	157
Oil Tankers.....	1	81	4	2 971	5	3 052
Oil-Bunkering Boats...	3	67			3	67
Tugboats.....	5	136	1	184	6	320
Custom Launches.....	1	23			1	23
Pilot Boats.....	8	132			8	132
Dredgers, etc.....	4	142	3	1 470	7	1 612
Dredgers.....			2	378	2	378
Barges.....	2	74	1	235	3	309
Pleasure Crafts.....	5	48	1	201	6	249
Other Vessels.....	1	4			1	4
TOTAL	601	17 010	378	177 454	979	194 364
All Decked Fishing Vessels Total	568	16 180	300	87 980	868	104 160

Source: National Economic Institute.

3 Cost of Fishing

The high cost of fishing is a standing complaint in Iceland. Boat owners pay over $3 a gallon for fuel. Insurance rates are very high, and operators pay perhaps twice as much for machinery and equipment as Canadians, because of high tariffs on these items. Bait prices are also high, averaging around $1 per pound. These high costs discourage new entries into the fishing industry, since potential investors do not see profitable opportunities.

4 Fishery Management

Icelandic fishing grounds were overfished by foreign fleets before 1975. After the announcement of the new 200-mile limit, Iceland instituted measures to rebuild its fish stocks, with mesh regulations, area restrictions and closures by gear and boat type, fish size and by-catch rules and periodic fishing closures. When applying these measures, the government tries to be fair to fishermen in every area and to the users of every type of gear. No quotas are in effect for groundfish, although, according to some a quota for cod would be desirable to rebuild stocks faster than is happening at present.

Management regulations are formulated by the Ministry of Fisheries on advice from the Marine Research Institute and after consultations with representatives of vessel owners, processors, unions and local communities. Eight former skippers are employed in Iceland as inspectors to monitor catches at sea. In addition, about 300 part-time controllers weigh, sample and grade every catch landed. The Marine Research Institute operates three research vessels, and six coast guard cutters patrol the fisheries zone.

5 Mesh Size Regulations

Icelandic regulations specify large meshes in order to increase the catch of older and larger fish. It has been reported that since the introduction of this measure, the yield-per-recruit has nearly

doubled. Trawlers fishing for cod are obliged to use a mesh of 155 millimetres in both the cod-end and the wings. The cod-end permitted in the redfish fishery is 135 millimetres. Between February 1 and June 30 the minimum gillnet mesh size is 178 millimetres and in the rest of the year 140 millimetres. The number of gillnets permitted for each boat depends on the crew size. The longline and hook handline fisheries have no hook size restriction.

6 Area Restrictions

Iceland has developed a flexible system of area closures, based upon the proportion of young fish taken over a period of two or three tows. When more than 36% of cod caught are less than 60 centimetres in length, the area is closed for a week, during which further research into stocks is done to determine whether the region should be reopened or remain closed. The size of the closed area is determined by the number of fishing vessels and final decision is made by the Marine Research Institute. This is the only management tool in the hands of the institute, while all other measures need the approval of the ministry.

In order to conserve schools of young cod, Iceland protects the spawning and nursing grounds by a system of area closures. In the south an area is closed to fishing during the cod spawning period and along the north coasts several nursing areas are closed to all trawling, though gillnetting and longlining is permitted.

7 Fish Size and By-Catch Rules

Regulations impose strict minimum size limits on the fish harvested. The prescribed limits are: 50 centimetres (19.7") for cod and pollock, and 45 centimetres (17.7") for haddock. It is also stipulated that 95% of redfish caught should weigh a minimum of 500 grams.

Icelandic regulations do not allow discards; all fish caught must be landed. This way scientists gather important information on by-catch by mesh and area. Small fish and trash fish are processed for meal or pet food. Proceeds from the sale of small fish and undesirable species are not returned to boat operators but go into a fund used for financing research and for a fishermen's welfare program. A 15% cod by-catch limit has been imposed on vessels fishing for redfish, herring, capelin, shrimp, etc. In fact, small fish account for between 5% and 15% of actual landings. In small-mesh fisheries, such as the shrimp fisheries, the by-catch regulations for the protection of young codfish are based on a formula representing the economic value concept.

Any infringement of the regulations carries heavy penalties. Illegal catch is confiscated and the vessel owner must also pay a fine. If a skipper makes false entries into logbooks he may face a fine of up to a month's gross earnings.

D. GROWTH, DEVELOPMENT AND MARKETING

1 Landings

Between 1975 and 1979 total Icelandic fish landings expanded from about 1 million tonnes to 1.6 million tonnes.

TABLE 19
Icelandic landings 1975-1979
(live weight, '000' tonnes)

	1975	1976	1977	1978	1979
Cod	266	282	330	318	362
Haddock, whiting	37	34	35	40	52
Saithe	61	57	47	44	57
Norway pout	4	27	24	34	14
Redfish	38	41	28	33	62
Greenland halibut	2	3	12	13	18
Herring	33	31	29	37	45
Lobster	2	3	3	2	1
Capelin	501	457	813	953	964
Shrimp	5	7	7	7	9
Iceland scallop	3	4	4	9	8
Other species	42	34	42	58	52
Total	994	982	1 374	1 548	1 644

Source: AEGIR and Icelandic Statistical Bulletin

The by species breakdown shown in Table 19 indicates that nearly 60% of the Icelandic fish catch is made up of capelin, a species primarily utilized for reduction.

TABLE 20
Growth rate of Icelandic fish landings, 1975 and 1979
(live weight, '000' tonnes)

	1975	1979	% growth
Capelin	501	964	92
Other Species	493	680	37
Total	994	1 644	65

Source: AEGIR and Icelandic Statistical Bulletin

These figures demonstrate that though the total Icelandic catch increased by 65% between 1975 and 1979, the growth rate for food fish species was only 37%. The capelin catch, on the other hand, expanded by 92% during the past five years.

TABLE 21
Landings of Icelandic food fish, 1975 and 1979
(live weight, '000' tonnes)

	1975	1979	Change	
			Tonnes	Percentage
Cod	266	362	96	36
Haddock, whiting	36	52	16	44
Saithe (pollock)	61	57	- 4	- 7
Norway pout	4	14	10	250
Redfish	38	62	24	63
Greenland halibut	2	18	16	800
Herring	33	45	12	36
Lobster	2	1	- 1	- 50
Shrimp	5	9	4	80
Scallop	3	8	5	166
Other	42	52	10	24
Total	492	680	188	37

Source: AEGIR and Icelandic Statistical Bulletin

Between 1975 and 1979, in terms of tonnage, the Icelandic cod catch increased most, by 96 000 tonnes to 362 000 tonnes. Since cod fishing is the backbone of the Icelandic economy, particular attention is devoted to the conservation of this resource. The Icelandic cod fishery is subdivided into two segments: the spring fishery for spawning cod off the southwest coast and the year-round fishery around the island for non-spawning cod. The cod spawning stock is depleted, under 200 000 tonnes. The objective of cod management is to increase it to its historical level of between 500 000 and 1 million tonnes. However, a difference of opinion exists between the Marine Research Institute and the Ministry of Fisheries concerning the speed of restoration. The Institute would like to see a more rapid increase in cod spawning stocks and a full restoration by 1983. The ministry, on the other hand, is in favour of a more gradual rebuilding of stocks in the light of economic realities.

Between 1975 and 1979 the second largest growth species was redfish, with a total landing of 62 000 tonnes last year, 24 000 tonnes more than in 1975. Important gains were also registered for haddock/whiting, greenland halibut and herring. Only two of the specified species, saithe (pollock) and lobster showed a decline.

2 Disposition of Landings

In 1979, 65% of the Icelandic catch was processed into frozen products, 23% was salted, 5% dried and 7% sold as fresh fish. Between 1975 and 1979 the proportion of frozen, dried and fresh fish increased in the processed mix while the ratio of fish put to salt dropped from 31% to 23%.

TABLE 22
Disposition of Icelandic food fish catch, 1975-1979
(live weight, '000' tonnes)

	Frozen	Salted	Dried	On ice	Canned	Total
1975	285	141	9	27	--	462
1976	299	142	28	34	--	503
1977	322	161	31	20	1	535
1978	344	142	8	28	1	523
1979	422	151	32	46	2	653

(percentages)

	Frozen	Salted	Dried	On ice	Canned	Total
1975	62	31	2	5	--	100%
1976	59	28	6	7	--	100%
1977	60	30	6	4	--	100%
1978	66	27	2	5	--	100%
1979	65	23	5	7	--	100%

Source: AEGIR and Icelandic Statistical Bulletin

The disposition patterns of cod, saithe (pollock) and herring are shown in Appendix I.

3 Fish Processing

About 14% of the entire labour force is employed in the fisheries sector in Iceland. The average number of fishermen was about 5 300 in 1978 while about 9 000 persons were employed in the fish processing industry. Except for one shrimp-freezing trawler, all fish processing takes place in shore-based plants.

With exception of a small number of individual companies, the export of fisheries products is conducted jointly by processors through a number of export organizations. The most important of these are:

1. Icelandic Freezing Plant Corporation
2. Samband of Iceland
3. Cannery Industry's Marketing Board
4. Icelandic Stockfish Association
5. Union of Icelandic Fish Producers
6. Icelandic Herring Board

The Icelandic Freezing Plant Corporation operates as the marketing agency for about 65 privately-owned frozen fish processing factories. It markets under the brand name Icelandic and handles about three-quarters of the country's frozen fish exports. In 1979 the company exported more than 100 000 tonnes of fisheries products, mainly to the US. With this volume, Icelandic is the largest West European concern in the field (Frionor of Norway exported an estimated 80 000 to 90 000 tonnes of frozen fish in 1979). Coldwater Seafood is the US subsidary of the Icelandic Freezing Plant Corporation. The value of Coldwater's sales in the US was between US $230 million and US $240 million in 1979. The company owns a large, modern processing plant in Scarsdale, New York.

Samband of Iceland was established in 1902 as a federation of Icelandic co-operatives. It is the exporting arm of some 30 fish freezing plants and other processing units, such as those producing fish meal and oil. Samband exports primarily frozen fillets and blocks, but also markets capelin, shrimp, lobster, stockfish and fish meal and oil. Domestically, Samband also trades in nets, other fishing gear and packaging material for frozen fish.

Samband and a number of freezing plants jointly established Iceland Seafood Corporation, at Camp Hill, Pennsylvania, in 1951, for the distribution of fish in the US. It accounts for about 25% of Icelandic frozen fish exports. In 1959 the company acquired fish processing factories and a completely new plant was established in 1966. The plant now turns out, including variations in style and sizes, almost 600 different fish and seafood items. The total sales of the company amounted to more than US $84 million in 1979. The company has a national network of 52 brokers with a field staff of 200 to 300 covering the US, Puerto Rico and Canada. The company markets most of its products under the Samband label, but for whiting and Alaskan pollock, the Seaside label is used.

In addition to the US operation, Samband also has sales offices in Hamburg, Copenhagen, and London, England.

The Cannery Industry's Marketing Board was set up in 1972. Since that year the Board has promoted canned Icelandic seafood abroad, has sought to upgrade quality and has had an overall co-ordinating role in the industry.

Membership in the marketing board is voluntary. One company, which accounts for about 20% of canned fish production, has withdrawn from the national marketing system and does export business individually.

The Icelandic Cannery Industry's Marketing Board has established an American affiliate known as the Iceland Waters Industries for the importation and distribution of canned products. The affiliated company uses Iceland Waters as its own label.

In 1979, Icelandic canned fish production amounted to 1 876 tonnes live weight (1 588 tonnes of herring, 279 tonnes of shrimp and 9 tonnes of haddock).

The Icelandic Stockfish Association represents 50 to 60 stockfish producers processing cod, haddock, saithe, cusk and ling and carries out co-operative marketing. These producers have also experimented with catfish. Samband is also a major exporter of stockfish and there are a few minor exporters. In 1979 Iceland utilized 32 000 tonnes of fish for drying.

The Union of Icelandic Fish Producers takes care of the export marketing of saltfish. In 1979 the volume of fish put to salt was 151 000 tonnes round weight.

The Icelandic Herring Board, an organization with about 250 members, is the country's sole exporter of salted herring.

4 Quality Control

Icelandic fish processors pride themselves as producers of highest quality fish, and this applies particularly to the frozen groundfish industry. (Where canned products are concerned, the industry is beset by some quality problems).

According to Icelandic regulations all fish should be gutted and bled on board the fishing vessel.

Responsibility for quality control is divided between government and industry. Every catch landed is sampled and weighed. Three grades are distinguished and third grade fish can only be reduced for meal and oil. Every freezing plant is subject to government inspection.

The Samband system is an example of quality control by the industry itself. Samband employs 13 quality controllers, 9 of whom are on the road regularly visiting the organizations, 35 plants. Every day's production is inspected. Frozen blocks are cut into three-inch strips and thawed. If more than one worm or bone is found in a sample of five pounds, the firm pays a fine. (The same applies to fillets). A bonus system is in operation, incorporating three elements: speed, yield and quality. Continuous internal check on the production line by the supervisor ensure quality. Faulty pieces are given back for reworking. This slows down production and brings down the sum of bonus paid. (A sample copy of Samband quality control sheet is attached as Appendix IV).

The quality of Icelandic canned products has not reached the level established in other parts of the industry. Sizeable deliveries of canned herring to the USSR were in part defective last year, and Iceland had to pay compensation to the importing agency. Recently a West German buyer complained of deliveries of defective canned shrimp from Iceland, but the validity of this complaint is dubious. The improvement of quality is now a central question in the canning industry and new state regulations on quality control are expected to be issued in the near future.

5 Prices

The Icelandic Fisheries Prices Board is composed of representatives of fish buyers and sellers. They meet three times

a year to establish minimum prices to be paid to vessel owners over four months. In case the two parties cannot agree on the price level, arbitration takes the final decision. Prices are shaded by size and quality and buyers are free to offer prices above the minimum level. Since every landing of fish is inspected and graded, the reference prices established by the board are major determinants of the income of vessel owners.

The Icelandic Fisheries Price Equalization Fund was established in 1969 as an instrument for evening out the economic impact of fluctuating fish export prices. By reducing the fluctuations of prices received by processors, a major source of financial instability in the economy is put under some control. At the beginning of each production period the board sets a reference price. In case prices increase on the market, a certain proportion of the differences between the reference price and actual price is paid into the fund. In periods of falling prices, payments are made at the expense of the fund. Originally, in-payments amounted to 50% of price differentials; since 1974 this ratio has been 75%. The impact of the fund's operations has so far been rather limited. Reference prices generally have been raised too quickly in response to improved market conditions, thus payments into the fund have been rather small.

6 Fisheries Exports

Fisheries products were responsible for nearly 71% of total Icelandic exports in 1979, increasing from 369 000 tonnes in 1975 to 566 000 tonnes in 1979, a growth of 53%. The major part of this growth, however, was in sales of fish oil and meal, which more than doubled within the past five years, while the quantity of food fish exported increased by 18%.

TABLE 23

Icelandic exports, 1975 and 1979

(product weight, tonnes)

	1975	1979	Percentage growth
Food fish	227	268	18
Oil and meal	142	298	109
Total	369	566	53

Source: National Economic Institute

The total value of Icelandic fisheries exports grew from about C$443 million in 1977 to C$572 million in 1978 and to C$776 million in 1979. Of the 1979 total, the value of exported oil and meal was about C$150 million. (Average annual exchange rates used: 1 Canadian dollar equalled 167 krona in 1977, 227 krona in 1978 and 253 krona in 1979).

The following table sets out Icelandic fisheries exports by main product types.

TABLE 24

Icelandic exports of fisheries products, 1975-1979

(000 tonnes, net weight)

	1975	1976	1977	1978	1979
Chilled	77.7	32.2	15.9	25.8	44.5
Frozen fillets and blocks	80.6	78.0	84.5	98.7	107.2
Salted fish	47.3	53.9	41.9	44.8	49.9
Stockfish	1.8	2.0	3.1	6.9	3.3
Frozen herring	--	0.7	1.6	3.7	8.3
Salted herring	1.8	10.4	10.5	15.4	20.0
Frozen capelin	1.2	5.0	4.3	0.1	8.9
Frozen shrimps	1.1	1.6	1.4	1.6	1.6
Frozen lobster	0.6	0.7	0.8	0.7	0.4
Frozen scallops	0.4	0.2	1.0	1.1	0.9
Fish & fish products, canned	1.1	1.0	1.7	1.8	1.8
Oil and meal	142.3	131.1	219.0	269.8	298.1
All other products	12.9	12.6	14.3	18.6	21.1
Total	368.8	329.4	400.0	489.0	566.0

Source: Icelandic Statistical Bulletin

Among the food fish items frozen fillets and blocks stand out as the most important export category. Their volume expanded by one-third to 107 000 tonnes between 1975 and 1979. During the same years the quantity of salted and dried (stockfish) groundfish increased only slightly from 49 000 to 53 000 tonnes. The third most important export category is chilled fish, which amounted to 45 000 tonnes in 1979. Herring and frozen capelin exports expanded substantially between 1975 and 1979.

The following table sets out Icelandic food fisheries exports by country, between 1975 and July 1979. (For detailed figures, see Appendix II). Between 1975 and 1978 the total volume of Icelandic food fish exports declined marginally. The direction of exports, on the other hand, changed substantially. Exports to the US increased by 36% and those to the EC by 80%. Trade has also been building up with African countries. Europe outside the EC and the Eastern Bloc diminished in importance as export markets for Iceland.

TABLE 25

Icelandic fisheries exports by country, 1975-1979

(product weight, 000 tonnes)

				January-July	
	1975	1977	1978	1978	1979
United States	58.7	70.0	77.5	43.5	44.1
European Community	34.2	29.5	61.8	32.4	38.9
Other Western European countries	90.7	45.0	42.8	17.4	25.8
USSR	23.7	18.1	15.7	9.6	11.8
Other Eastern Bloc countries	---	0.3	3.3	---	1.5
Africa	---	3.4	7.6	3.2	1.0
Other countries	19.2	14.5	8.3	3.7	14.1
Grand total	226.5	180.8	217.0	109.8	137.2

Source: AEGIR

7 Export Levy

The Icelandic government places a 5.5% duty on the export price of all fishery products shipped abroad. The duty is payable by the exporter into a publicly managed fund, the purpose of which is twofold: to provide loans for financing vessels and plants, and to secure a minimum income for people employed on fishing boats. The vessel owner contracts to pay a certain minimum total to his employees within the season. If the catch remains below expectations, the vessel owner receives payment from the fund in order to bring up the income of his men to the contracted minimum.

E. SUMMARY AND CONCLUSION

1. In terms of quantity, Iceland was the 14th largest fishing nation in the world in 1978, with a total catch of 1.6 million tonnes, while in the same year Canada placed 16th with 1.4 million tonnes. With a population of only 225 000, the country has a relatively small domestic market and it is practically self-sufficient in fish products. Thus Iceland should not be considered a potentially significant market for Canadian products, but in fact is a major competitor, especially in sales to the US and the EC. Canadian sales of fish products to Iceland in 1979 were valued at $1.2 million, while Canadian fish imports from Iceland were worth only $18 000.

2. Since gaining independence from Denmark in 1945, Iceland has developed into a prosperous country, with virtually no unemployment and an economy that relies heavily on export trade. Exports accounted for an estimated 47% of the nation's gross national product in 1979 (compared to about 25% for Canada). Fisheries products in turn account for about 70% of Iceland's exports. The country's main persistent problem is inflation, which has seen the value of the krona drop by between 30% and 50% a year since 1974. Also, the fishing industry is beset by very high costs for equipment, bait and imported fuel.

3. Competition between Iceland and Canada is mainly in the American market for groundfish. Between 1971 and 1979, US imports of edible fisheries products from Iceland increased fourfold to US $215 million. In the same period, American imports from Canada tripled to US $591 million.

4. In recent years, both Iceland and Canada have expanded their sales to EC countries. Icelandic exports to the EC grew from 34 000 tonnes in 1975 to 62 000 tonnes in 1978. Over the same period, Canadian sales to EC nations increased from 43 000 tonnes to 104 000 tonnes, but declined to 100 000 tonnes in 1979.

5. Future volume of Icelandic sales to the US could be influenced by the strength of European markets, in the event that Iceland might divert some trade to take advantage of higher prices in Europe. It should be noted, however, that Iceland has substantial investments in processing plants in the US, and would not want to abandon its well-established market there, even for better prices elsewhere.

In fact, Iceland has recently increased the production capacity of one of its US plants, which would seem to signal an intention to expand sales. One can speculate, however, that when markets are buoyant elsewhere in the world, Iceland might concentrate more on exports to those other countries instead of supplying its US plants fully with Icelandic fish. In such a situation Iceland might buy fish from other suppliers, including Canada, for processing and marketing in the US.

6. Indications are that Canada will be able to compete more effectively with Iceland on the US market in the future. Programs to improve the quality of Canadian products, particularly fillets and frozen blocks, will narrow the gap that now exists, and produce better prices for Canadian suppliers.

7. Competition between Icelandic and Canadian fisheries products is also likely to intensify in Europe in the future. Canadian fish sales to Europe have already increased significantly, and should Canada be successful in negotiating tariff reductions with EC countries, its competitive position would improve. Nonetheless, Iceland still has the advantage of proximity to European markets, and enjoys preferential tariffs in EC nations.

8. Statistics on exports underline the growth and development of the Icelandic fishery. Exports increased by 53% from 369 000 tonnes in 1975 to 566 000 in 1979. The major part of this growth was in sales of fish oil and meal, which more than doubled in the

past five years, while the quantity of food fish exported increased by 18%.

In terms of value, Icelandic fish exports grew from about C$443 million in 1977, to C$572 million in 1978 and to C$776 million in 1979. Of the total for 1979, oil and meal accounted for about C$150 million.

APPENDICES

APPENDIX I

DISPOSITION OF ICELANDIC COD CATCH, 1975 - 1979

(live weight - 000 tonnes)

	Frozen	Salted	Dried	On ice	Total
1975	137	118	7	2	264
1976	149	106	21	4	280
1977	180	120	24	5	329
1978	194	104	6	14	318
1979	203	115	22	19	359
		(percentages)			
1975	52	45	3	0	100%
1976	53	38	8	1	100%
1977	55	36	7	2	100%
1978	61	33	2	4	100%
1979	57	32	6	5	100%

DISPOSITION OF ICELANDIC SAITHE CATCH, 1975 - 1979

(000 tonnes)

	Frozen	Salted	Dried	On ice	Reduction
1975	45	14	0.7	1	0
1976	36	13	4	4	0
1977	28	11	4	3	0
1978	29	9	1	5	0
1979	36	9	5	5	0

DISPOSITION OF ICELANDIC HERRING CATCH, 1975 - 1979

(000 tonnes)

	Frozen	Salted	Dried	On ice	Reduction	Canned, Smoked
1975	2	8	--	20	0	--
1976	2	15	--	13	0.2	0.2
1977	6	22	--	--	0.3	0.3
1978	8	28	--	--	0.6	1
1979	14	24	--	--	0.4	1

Source: AEGIR and Icelandic Statistical Bulletin

APPENDIX II

ICELANDIC EXPORTS OF FISHERY PRODUCTS FOR HUMAN CONSUMPTION BY COUNTRY OF DESTINATION 1975, 1977-1979.

(product weight, tonnes)

	1975	1977	1978	January-July 1978	January-July 1979
Chilled					
United States	--	255	174	127	140
European Community	23 243	6 757	23 606	6 314	18 088
Other Western European Countries	51 206	5 291	1 657	1 192	455
USSR	--	--	--	--	--
Other Eastern Bloc Countries	--	--	--	--	--
Africa	--	--	--	--	--
Other countries	3 227	3 617	364	5	51
Total	77 676	15 920	25 801	7 638	18 734
Frozen					
United States	58 606	69 395	79 136	43 273	43 545
European Community	2 638	12 112	24 883	12 244	10 402
Other Western European Countries	1 035	7 295	3 312	1 499	970
USSR	23 370	12 778	9 274	5 671	7 712
Other Eastern Bloc Countries	--	116	252	--	499
Africa	--	--	--	--	--
Other countries	11 080	9 854	6 438	2 935	13 005[1]
Total	96 729	111 550	123 295	65 622	76 133
Salted or Dried					
United States	--	226	126	55	167
European Community	7 984	9 746	12 620	13 614	9 947
Other Western European Countries	38 426	32 330	37 660	14 486	24 271
USSR	--	4 225	5 416	3 417	4 000
Other Eastern Bloc Countries	--	--	2 973	--	1 013
Africa	--	2 969	6 800	2 698	770
Other Countries	4 484	1 025	1 457	747	1 040
Total	50 894	50 521	67 052	35 017	41 208

1 Asia 13 002

APPENDIX II (Cont'd)

ICELANDIC EXPORTS OF FISHERY PRODUCTS (Cont'd)

	1975	1977	1978	January-July 1978	January-July 1979
Canned					
United States	75	168	118	83	222
European Community	294	164	506	214	324
Other Western European Countries	--	67	40	19	72
USSR	372	1 126	1 040	483	69
Other Eastern Bloc Countries	--	163	51	24	26
Africa	--	0	29	14	--
Other countries	333	14	32	9	19
Total	1 074	1 702	1 816	846	732
Other					
United States	--	--	0	--	--
European Community	--	750	210	--	225
Other Western European Countries	47	52	115	8	13
USSR	--	--	--	--	--
Other Eastern Bloc Countries	--	--	--	--	--
Africa	--	427	829	524	208
Other countries	46	--	11	--	--
Total	93	1 229	1 165	532	446
Total					
United States	58 701	70 044	79 554	43 538	44 074
European Community	34 159	29 529	61 825	32 386	38 986
Other Western European Countries	90 714	45 035	42 784	17 204	25 781
USSR	23 742	18 129	15 730	9 571	11 781
Other Eastern Bloc Countries	--	279	3 276	24	1 538
Africa	--	3 396	7 658	3 236	978
Other countries	19 170	14 510	8 302	3 696	14 115
Total	226 486	180 922	219 129	109 655	137 253

Source: AEGIR

APPENDIX III

ICELANDIC FISH PRODUCT EXPORTS, 1979

Destination	Tonnes	1Kr'000	Destination	Tonnes	1Kr'000
East Germany	1 806	214 900	France (cont'd)		
- Meal & Oil	1 806	214 900	- Preserved	42	99 200
USA	84 164	74 631 100	- Other	6	8 300
- Frozen	83 060	73 726 400	Faroes	2 959	135 800
- Salted	173	128 100	- Frozen	16	3 400
- Chilled	167	123 300	- Chilled	2 941	121 700
- Dried	42	77 500	- Dried	2	10 600
- Meal & Oil	413	161 000	- Other	0	100
- Preserved	309	414 800	Greece	5 401	3 425 700
Belgium	4 146	1 306 100	- Salted	5 385	3 401 300
- Frozen	1 785	915 800	- Preserved	9	15 800
- Salted	76	72 200	- Other	7	8 600
- Chilled	9	6 700	Netherlands	28 527	3 918 100
- Dried	0	200	- Frozen	531	250 700
- Meal & Oil	2 272	301 500	- Meal & Oil	27 764	3 627 200
- Preserved	4	9 700	- Preserved	13	15 100
UK	162 861	39 104 300	- Other	219	25 100
- Frozen	20 257	15 154 700	Ireland	2 101	731 800
- Salted	733	347 000	- Frozen	35	27 800
- Chilled	23 648	8 234 000	- Salted	1 045	563 200
- Dried	5	8 100	- Meal & Oil	1 021	140 800
- Meal & Oil	117 996	15 247 000	Italy	13 503	8 291 800
- Preserved	70	88 400	- Frozen	100	225 300
- Other	152	25 100	- Salted	7 513	5 885 800
Denmark	11 584	2 610 900	- Dried	786	1 533 600
- Frozen	1 348	1 268 300	- Meal & Oil	5 102	642 700
- Salted	1 167	873 300	- Preserved	2	4 400
- Chilled	7 284	191 300	Yugoslavia	14 874	1 920 900
- Dried	5	3 900	- Meal & Oil	14 874	1 920 900
- Meal & Oil	1 742	225 300	Norway	4 705	2 227 400
- Preserved	38	48 800	- Frozen	147	143 700
Finland	32 766	4 841 000	- Salted	776	366 000
- Frozen	2 169	176 700	- Dried	851	1 148 200
- Salted	1 745	720 000	- Meal & Oil	2 794	415 600
- Meal & Oil	28 829	3 905 900	- Preserved	92	130 400
- Preserved	6	11 200	- Other	45	23 500
- Other	17	27 200	Poland	18 574	2 932 100
France	8 624	2 597 900	- Salted	2 365	743 600
- Frozen	3 083	1 430 000	- Meal & Oil	16 198	2 173 500
- Salted	460	363 000	- Preserved	11	15 000
- Chilled	2	300	Portugal	22 470	9 806 800
- Meal & Oil	5 031	697 100	- Salted	16 864	9 080 000

APPENDIX III (Cont'd)
ICELANDIC FISH PRODUCT EXPORTS, 1979 (Cont'd)

Destination	Tonnes	1Kr'000
Portugal (cont'd)		
- Meal & Oil	5 606	726 800
Rumania	18 674	2 349 200
- Meal & Oil	18 674	2 349 200
USSR	17 498	8 200 900
- Frozen	12 041	5 617 000
- Salted	4 832	1 617 700
- Preserved	625	966 200
Spain	11 392	8 802 300
- Frozen	30	23 100
- Salted	11 354	8 765 900
- Preserved	8	12 900
- Other	0	400
Switzerland	402	684 300
- Frozen	65	296 400
- Dried	198	333 000
- Meal & Oil	94	29 600
- Other	45	25 300
Sweden	11 872	4 473 700
- Frozen	980	933 600
- Dried	0	100
- Meal & Oil	1 932	253 800
- Preserved	1	1 100
- Salted	8 956	3 283 200
- Chilled	3	1 800
- Other	0	100
Czechoslovakia	16 691	2 586 800
- Frozen	1 097	353 600
- Meal & Oil	15 548	2 173 800
- Preserved	46	59 400
Hungary	5 029	630 600
- Meal & Oil	5 029	630 600
West Germany	33 267	10 793 200
- Frozen	2 479	1 752 700
- Salted	4 343	2 955 000
- Chilled	10 371	2 904 600
- Dried	53	80 100
- Meal & Oil	15 393	1 962 900
- Preserved	528	1 126 500
- Other	100	11 400
Americas/ excl. USA)	2 196	1 224 300
- Salted	1 702	1 043 200
Americas (excl. USA) (cont'd)		
- Dried	2	4 300
- Meal & Oil	485	166 100
- Preserved	7	10 700
Africa	5 199	3 170 000
- Salted	348	211 400
- Dried	1 336	1 863 300
- Meal & Oil	2 100	324 200
- Preserved	1	2 100
- Other	1 414	769 000
Asia	24 125	9 190 800
- Frozen	17 030	8 096 300
- Salted	39	20 900
- Meal & Oil	7 040	1 058 100
- Preserved	16	15 500
Australia	83	42 300
- Salted	30	17 400
- Meal & Oil	50	21 900
- Preserved	3	3 000
Other countries	452	217 000
- Frozen	52	41 000
- Chilled	97	61 000
- Meal & Oil	302	112 800
- Preserved	1	2 200
TOTAL 1979	565 945	211 062 000
- Frozen	146 305	110 436 500
- Salted	69 906	40 458 200
- Chilled	44 522	11 644 700
- Dried	3 280	5 062 900
- Meal & Oil	298 095	39 483 200
- Preserved	1 832	3 052 400
- Other	2 005	924 100
TOTAL 1978	488 970	136 657 600
- Frozen	123 295	67 597 600
- Salted	60 153	23 568 300
- Chilled	25 801	5 618 000
- Dried	6 899	7 412 800
- Meal & Oil	269 841	30 133 500
- Preserved	1 816	2 000 000
- Other	1 165	327 400

Source: Informationen uber die Fischwirtschaft des Auslandes
Eurofish Report, May 28, 1980.

APPENDIX IV

SAMPLE OF SAMBAND (ICELAND) QUALITY CONTROL SHEET

For Production Manager

Report on Inspection of Fish and Equipment

Producer (plant): _____

Date: Date Code of boxes examined: Report # /of

Day of Work _____

Worms _____

Large bones _____

Bones, larger than ¼", hard _____

Other bones _____

Worms & bones, total: _____

Pin bones _____

Loose flesh - gaping _____

Blood vessels in napes _____

Membranes _____

Gall-spots _____

Skin pieces _____

Scales _____

Ragged nape cut _____

Overweight Packages _____

Other faults, total: _____

Grand Total: _____

T° in fillets after freezing _____ T° in cold storage _____

Chlorination in water? _____ Chlorination in clean up water? _____

Master cases, marking; labels, date code? _____

Is the packaging storage & housekeeping in order? _____

Are the toilets clean, soap, towels? _____

Are workers dressed according to regulations? _____

Are freezing plates, frames and spacers clean? _____

Is the cleanup after a work shift in order? _____

Are all scales correct? _____

Other comments: _____

_____

_____

_____ _____

Chief Supervisor Inspector (Company)