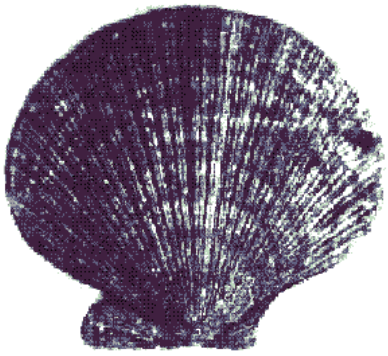
ECONOMIC SURVEY RESULTS OF MINGANIE SCALLOP FISHERMEN EXPLOITATION 2000-2001

QUEBEC REGION



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SUMMARY

The financial situation of the Minganie scallop fishermen was uneven in the years 2000 and 2001. Group B, whose revenues and costs were significantly higher than those of Group A earned a cash flow amounting to $75,085 in 2000, that is a relatively high amount. In 2001, Group B's cash flow dropped to $21,831, a diminution mainly attributable to a 20% in the scallop landing price but also to a 12 % decrease in the volume of the landings. Group A fishermen also underwent a 20 % drop in the scallop landing price in 2001, however they took a higher amount of molluscs (+13%) and have succeeded in lowering down their operating costs by 20% (6% for Group B). With the result that their cash flow sent up from $21,628 in 2000 to $27,464 in 2001.

ACKNOWLEDGEMENTS

We would like to thank all the fishers who agreed to take part in this study. Without their co-operation, such a study would not have been possible. In addition, we would like to underscore that all the Minganie scallop fishers selected to be part of the sample voluntarily agreed to participate in the study. Moreover, we want to underscore the co-operation of the representatives of the Upper and Lower North Shore Inc., the Havre St-Pierre Fishermen's Association and the Mingan Band Council who greatly facilitated our work.

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INTRODUCTION

The Policy and Economics Branch, Department of Fisheries and Oceans, Quebec Region, carried out this Costs and Revenues Study of the Minganie scallop fishermen in the years 2000 and 2001. The average cash flow and revenues, the structures of landings and the main characteristics are described herein.

Such a study carries special significance inasmuch as it leads to better understanding of the high socio-economic stakes as well as the financial characteristics of the scallop fishing fleets

1. Methodology

This study is the result of a survey carried out with Minganie scallop fishermen in 2002. Areas 18a, 16d, 16e, 16f and 16g where these scallop fishermen operate their fishery are illustrated in Annex 1. The methodology used to carry out this study is described in the following section.

1.1 Data Collection

Minganie has nine fishing licence holders. For the purpose of this study, all licence holders were interviewed on their fishing seasons for the years 2000 and 2001. Seven licences were in operation during the two years and were considered for this study. These interviews were carried out by a researcher in September and October of 2002. An explanatory letter was sent to randomly selected businesses in order to facilitate the work of the researcher in collecting data and generate a high response rate..

The survey was carried out using a questionnaire developed by the Department. This questionnaire contains all the information needed for the study. It is important to underscore that the nature of this information is confidential and that results discussed in the current report merely display averages. The main data collected with the help of this questionnaire are described in Annex 2.

1.2 Data Validation

Data validation was conducted through comparison of some variances with the fleet average, and by « cross-checking » with the researcher so as to detect inconsistencies which may have found their way in. Fishermen were also contacted to provide some specifics. Minor adjustments were also made..

2. Results and Analysis

2.1 Cash Flow

Table 1 shows the averages of gross revenues and the 2000 and 2001 operating costs for the overall sample. These data are used to calculate the average cash flow for each year. The cash flow is the result of a financial calculation which takes into account the revenues and outlays made during the year by the fishing business. It does not take into account the depreciation of assets (which is not an expenditure) but rather takes into account any loan repayment made during the year. Thus, it corresponds to the amount available for the proprietor as payment of his work and as profits for his business, after all expenses have been paid.

The cash flow may sometimes be overestimated. Indeed, some expenses, such as maintenance costs, may be financed through loans or funds from previous years, which does not generate any capital outflow from the current exercise. The calculation of the cash flow that follows takes into account the hypothesis which holds that all the owner's obligations must have been met during the year (with the exception of the financial charges for which actual payment are considered). The cash flow is therefore calculated as follows :

OVERALL INCOME *minus* - Variable operating costs *(details in Annex 2)*
- Workforce expenses *(details in Annex 2)*
- Fixed operating costs *(details in Annex 2)*

The **total revenues** correspond to the sum of revenues from the sale of fish and other revenues related to the operations of fishing businesses. In this study, some fishermen fished other specie. Given the considerable revenue from the sale of this species, we have not taken this into account for the calculation of the cash flow but we are showing the structure of the total landings for these fishermen in Table 2. Also, the operating costs of these species have not been considered.

Variable operating costs represent expenses with direct links to fishing activities as well as variable costs related to the use of assets other than the vessel, such as vehicles, facilities and equipment.

> **Gear costs** include the net acquisition of fishing gears (purchase minus sales) as well as maintenance costs and gear repairs.
>
> **Maintenance costs** include all costs incurred to maintain business assets in fine working condition, which includes vehicles, facilities and equipment used on land. However, they do not include costs associated with the maintenance and repair of fishing gear.

Labour costs include the salaries and social fringe benefits paid on behalf of crew members.

Fixed operating costs include annual fixed expenses associated with equipment and facilities such as finance charges, insurance and licences..

For purposes of analysis, Minganie scallop fishermen are divided into two groups; Group A and Group B. Due to different fishing operations, a separate analysis is carried out for each of these groups. Thus, one finds two licences in Group A and seven licences in Group B, among them five were considered for this study. For reasons related to confidentiality, the Department had to obtain the written authorization of Group A fishermen to publish their operating results.

Group A

Gross Fisheries Revenues and Cash Flow Revenues

Results on Table 1 show gross fisheries revenues amounting to $146,629 in 2000 for Group A. En 2001, the gross fisheries revenue of this group decreased by 13% reaching $127,879. Note that the gross revenue displayed on the table does not take into account the revenues from the landings of other species.

Considering this, the cash flow average amounted to $21,626 in 2000 and it increased in 2001, reaching 27 463 $. The average cash flow for the two years settled down at $24,545.

Operating Costs

When reviewing the structure of the operating costs, it should be noted that the main costs are labour costs. For Group A, labour costs totalled $57,599 in 2000 and $41,508 in 2001. For the years 2000 and 2001, this represented, respectively 46% and 41% of the overall operating charges. One notices that these charges decreased by 28% in value in 2001 compared with 2000.

Secondly, one records the costs of fuel, oil and grease which represented 10% of the overall charges in 2000 and 11% for the year 2001. These expenses underwent a 9% decrease by in 2001 compared with 2000. There were other significant charges, maintenance costs and vessel repairs which included respectively 9% and 10% of the overall charges in 2000 and 2001. One should also add operating costs, legal and administrative costs which represented 5% of the overall charges in 2000 and 2001.

Group B

Gross Fishing Revenues and Cash Flow Revenues

Group B fishermen generated average gross revenues of $263,999 in 2000 and of $197,631 in 2001, which represented a 25% drop. The average cash flow amounted to $75,085 in 2000 and à $21,831 in 2001. The average cash flow for the two years amounted to $48,458.

Operating Costs

Just as for Group A, labour costs were the most significant part of the operating costs in Group B. They amounted to $96,882 in 2000 and to $89,800 in 2001, which represented a 7% drop. In 2000 just as in 2001, labour costs represented 51% of the overall operating charges in Group B, that is proportionally more than for Group A.

After labour costs, the financial charges represented the higher costs in Group B with respectively 17% and 16% of the operating costs in 2000 and 2001. Moreover, the costs of fuel, oil and grease have, lowered to 10% in 2001. They represented 7% of the overall operating charges for the two years.

Table 1

Cash Flow and Structure of Operating Costs

Minganie Scallop Fishermen

	Group A					Group B				
	2000		2001		Average 00 et 01	2000		2001		Average 00 et 01
	($)	Part %	($)	Part %	($)	($)	Part %	($)	Part %	($)
REVENUES										
Gross Revenues										
Revenus bruts de pêche	146 629	-	127 879	-	137 254	263 999	-	197 631	-	230 815
Total revenues	**146 629**	**-**	**127 879**	**-**	**137 254**	**263 999**	**-**	**197 631**	**-**	**230 815**
OPERATING COSTS										
Variable costs										
Fuel, oil and grease	11 952	10	10 842	11	11 397	12 761	7	11 443	7	12 102
Fishing gear	3 117	2	1 743	2	2 430	3 944	2	3 395	2	3 670
Maintenance	11 259	9	9 914	10	10 587	8 535	5	9 499	5	9 017
Others	16 922	13	15 545	15	16 234	15 740	8	16 745	10	16 243
Subtotal	**43 250**	**35**	**38 044**	**38**	**40 647**	**40 980**	**22**	**41 082**	**23**	**41 031**
Labour costs										
Labour	57 599	46	41 508	41	49 554	96 882	51	89 800	51	93 341
Subtotal	**57 599**	**46**	**41 508**	**41**	**49 554**	**96 882**	**51**	**89 800**	**51**	**93 341**
Fixed costs										
Finance charges	3 775	3	1 377	1	2 576	32 841	17	27 789	16	30 315
Insurance	3 335	3	3 467	3	3 401	3 380	2	3 398	2	3 389
Legal and management fees	6 812	5	5 294	5	6 053	2 113	1	2 307	1	2 210
Others (registration, licence, association, etc.)	10 232	8	10 726	11	10 479	12 718	7	11 424	6	12 071
Subtotal	**24 154**	**19**	**20 864**	**21**	**22 509**	**51 052**	**27**	**44 918**	**26**	**47 985**
Total operating costs	**125 003**	**100**	**100 416**	**100**	**112 710**	**188 914**	**100**	**175 800**	**100**	**182 357**
CASH FLOW	**21 626**		**27 463**		**24 545**	**75 085**		**21 831**		**48 458**

***Source**s : Survey of a fisher sample and DFO data (gross revenues from fishing)*

Cash flow does not take into account other revenues such as employment insurance incomes. On the other hand, for the two years under consideration in this document, none of the owners received any employment insurance benefits.

2.2 Structure of Landings

Table 2

Structure of Average Landings

Minganie Scallop Fishermen

	Group A			Group B		
	Average landings ($)	Average landings (kg)	Average landing price ($/kg)	Average landings ($)	Average landings (kg)	Average landing price ($/kg)
2000						
Scallop	146 629	84 985	1.73	263 999	155 096	1.70
Others	0	0	-	109 185	20 636	-
Total	**146 629**	**84 985**	**-**	**373 184**	**175 732**	**-**
2001						
Scallop	127 879	96 024	1.33	197 361	145 758	1.35
Others	0	0	-	85 263	20 365	-
Total	**127 879**	**96 024**	**-**	**282 624**	**166 123**	**-**

Sources : *Survey of a fisher sample and DFO data (gross revenues from fishing)*

For Group A, revenues from the total scallop landings amounted to $146,629 in 2000 and of $127,879 in 2001. These landings represented an average volume per fishing business of around 85 tonnes in 2000. An increase of 13% of the landed volume was observed in 2001. It amounted to 96 tonnes. As for the average landing price, it decreased by 23% in 2001 compared with 2000 to settle at $1.33/kg.

The total scallop landings amounted to $263,999, which represented 71% of the overall landings in 2000 since beside scallop, some Group B businesses also landed surf clams and snow crab. In 2001, this proportion was 70%, which means that $197,361 of the overall landings came from scallop. In volume, these landings were 155 tonnes in 2000

and of 146 tonnes in 2001. The scallop volume landed declined by more than one tonne in average by business in Group B in 2001, whereas the landing price decreased by 21% to reach $1.35/kg.

2.3 Technico-Economic Characteristics of Minganie Scallop Fishermen

Table 3

Technico-Economic Characteristics of Minganie Scallop Fishermen

	Group A		Group B	
Description	**2000**	**2001**	**2000**	**2001**
Average age of the fleet	22	23	10	11
Average length of the vessel	47'	47'	46'5"	46'5"
Duration of fishing season	18	19	14	14
Crew size	6	6	7	7
Initial purchase price of the vessel	136 000 $	136 000 $	325 800 $	325 800 $
Purchase price of land assets	10 100 $	10 100 $	43 400 $	43 400 $
Major additions or modifications	37 850 $	57 850 $	67 160 $	73 160 $
Amortizations *	128 493 $	130 648 $	196 857 $	195 038 $
Value of amortized assets on 31 December	55 457 $	73 302 $	239 503 $	247 322 $
Balance of loans	1 954 $	10 420 $	134 795 $	104 985 $
Debts/Assets ratio	0.04	0.14	0.56	0.42

Source : Survey of fishermen's sample.

*Annex 3

The fishing season in Group A spread over a period of 19 weeks in 2001, that is five weeks more than in Group B. Excluding the captain-owner, the size of the crew was 6 employees for Group A and 7 employees for Group B. As for the age of the fleet, in 2001, the vessels in Group A were twice as old as in Group B, that is 23 years compared with 11 years.

The average purchase price of the vessels in Group B were twice as high as those of Group A. As for significant additions and modifications made to the vessels, they were higher for Group B and an increase could be noted in 2001 compared with 2000 for the two groups. The value of amortized assets as well as the balance of loans were higher for Group B compared with Group A.

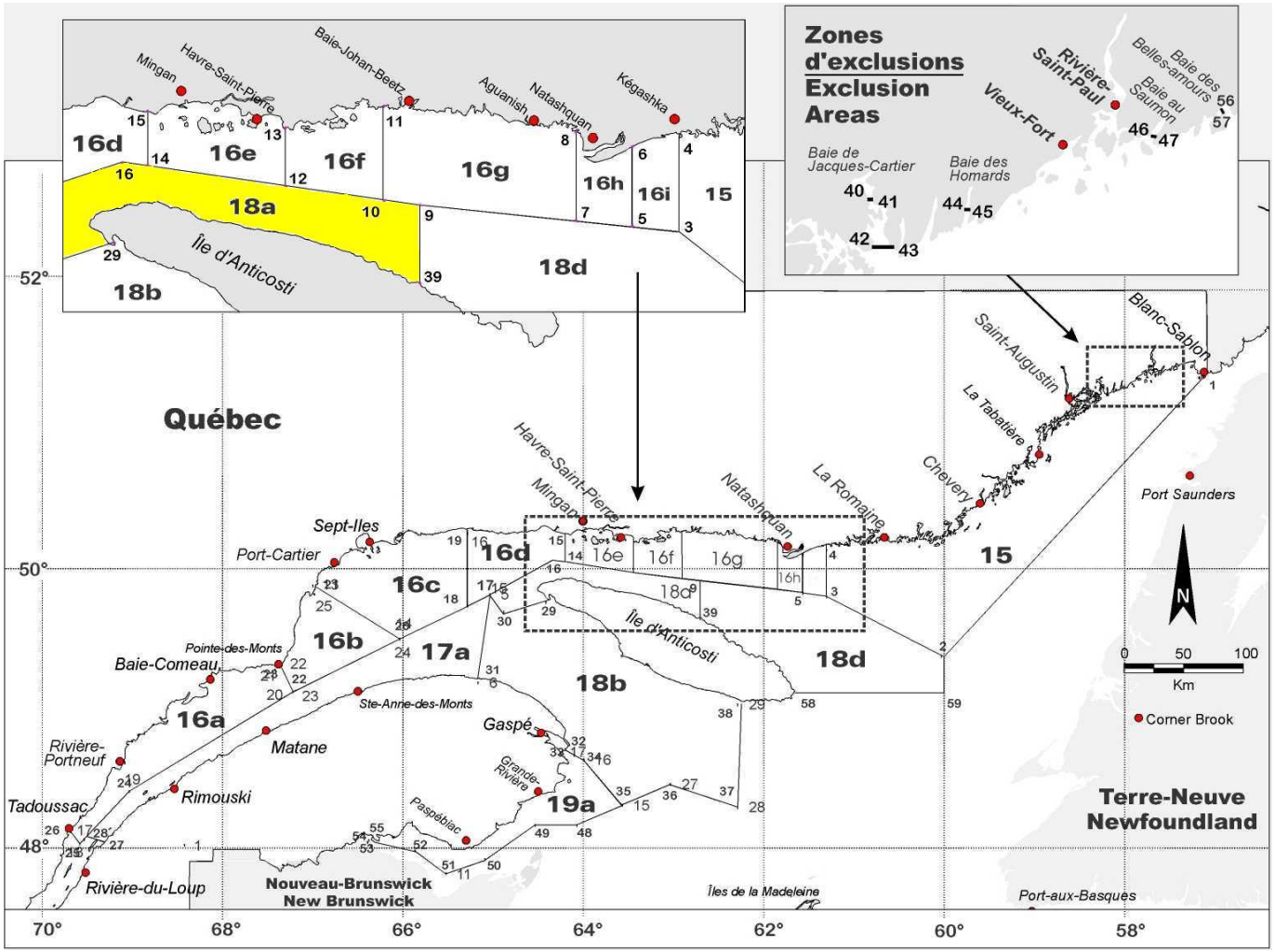
In calculating the **debt/asset** ratio, it is possible to determine the proportion the debts represent compared with the business assets. Thus, the average ratio for Group A was about 0.04 in 2000 and of 0.14 in 2001, which means that the debt represented 4% of the value of the business assets in 2000 and 14% in 2001. For Group B, the debt represented 56% of the value of the business assets in 2000 and 42% in 2001.

CONCLUSION

Operating results of the Minganie scallop fishing businesses allowed fishermen to earn a positive cash flow for the years 2000 and 2001. It was slightly higher for Group A while it underwent a slump for Group B.

ANNEXES

Annex 1
Chart of Scallop Fishing Areas



Annex 2
Key Information Gathered During the Survey

- Business general characteristics (main and secondary vessels)
  - NBPC
  - Length
  - Type of hull
  - Gross tonnage
  - Braking power
  - Year of end of construction
  - Year of purchase
- Capital
  - Breakdown of initial purchase price according to vessel components
  - Major additions or modifications made after purchase
- Fishing effort
  - Number of sea-days and number of weeks per species
  - Number of trips
  - Crew size per species
- Variable costs
  - Salaries and social charges
  - Fuel, oil and grease
  - Food
  - Bait service, ice and salt
  - Vessel maintenance and repairs
  - Repairs, replacement and acquisition of fishing gear
  - Dockside monitoring
  - At-sea Observers
  - Vehicle expenses
  - Joint planning
  - Co-management
- Fixed costs
  - Registration, licence and plate number fees
  - Wharf charges
  - Vessel storage
  - Association
  - Insurance
  - Management and legal and fees
  - Leasing of quotas
  - Vessel leasing
  - Interest charges
  - Loan repayment
- Loans
  - Balance
- Various types of revenues
  - Gross fishing revenues
  - Quota rental revenues
  - Others

Annex 3
Amortization Period Used For Each Vessel Components

	Description	Number of years
Hull	**Fiberglass or wood covered with fiberglass**	
	Less than 35 feet	**15**
	35 feet and over	**25**
	Wood	
	Less than 35 feet	**10**
	35 to 64 feet 11 inches	**15**
	65 feet and over	**20**
	Steel	**25**
Engine	**Diesel**	**15**
Deck equipment	**Deck equipment**	**15**
Electronic equipment	**Electronic equipment**	**5**
Land assets	**Vehicles**	**7**
	Others	**15**

The amortization period used for the hulls of vessels measuring 35 feet and over in fiberglass, or in wood covered with fiber glass was increased from 20 to 25 years to better reflect reality respecting the useful life cycle of the hull. The same applies to vehicles: their amortization period went up from 5 to 7 years..