

Comparison of economic and social self-reported data by industry with at- sea observer program to characterize the Argentinean fleet.

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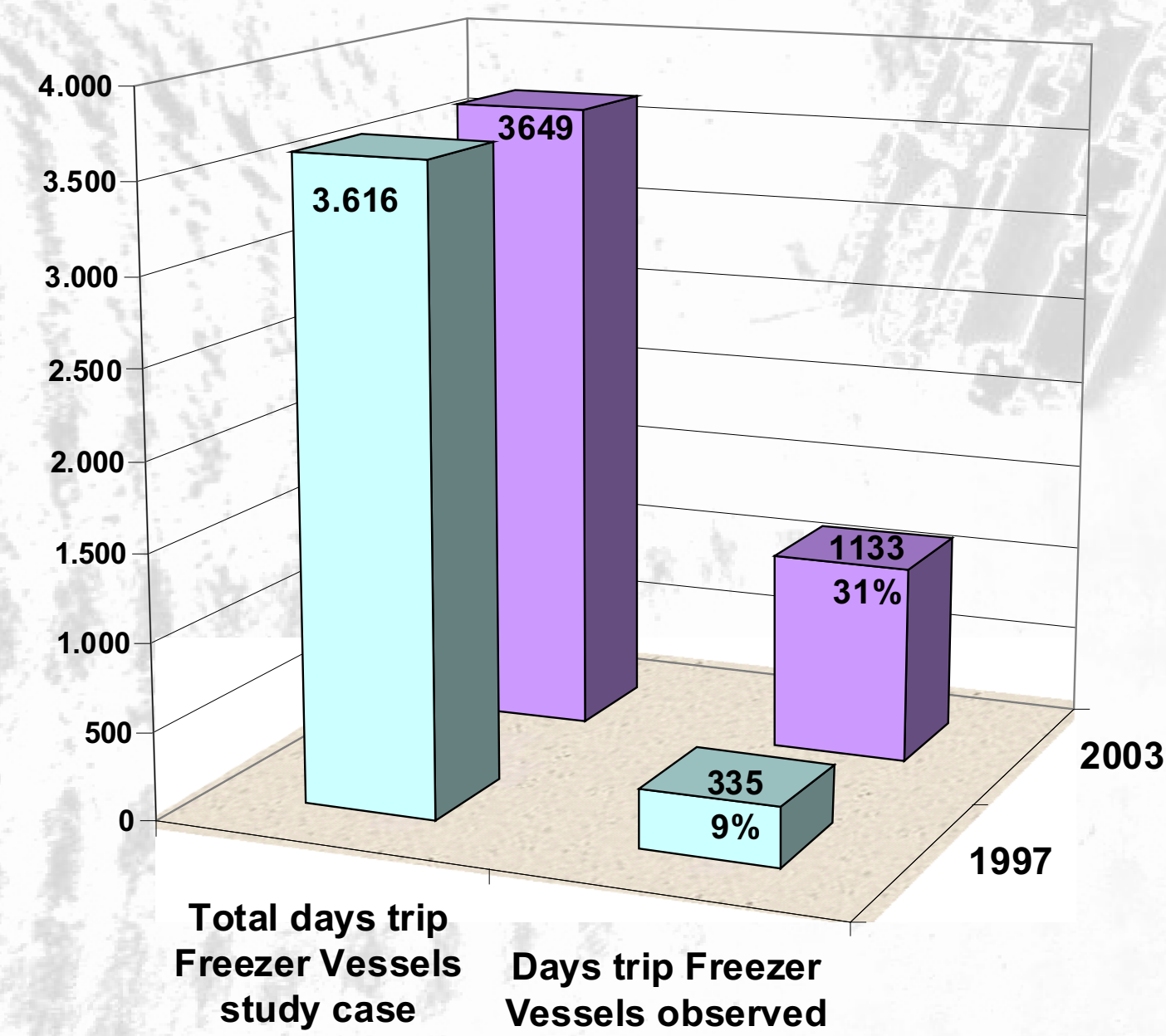
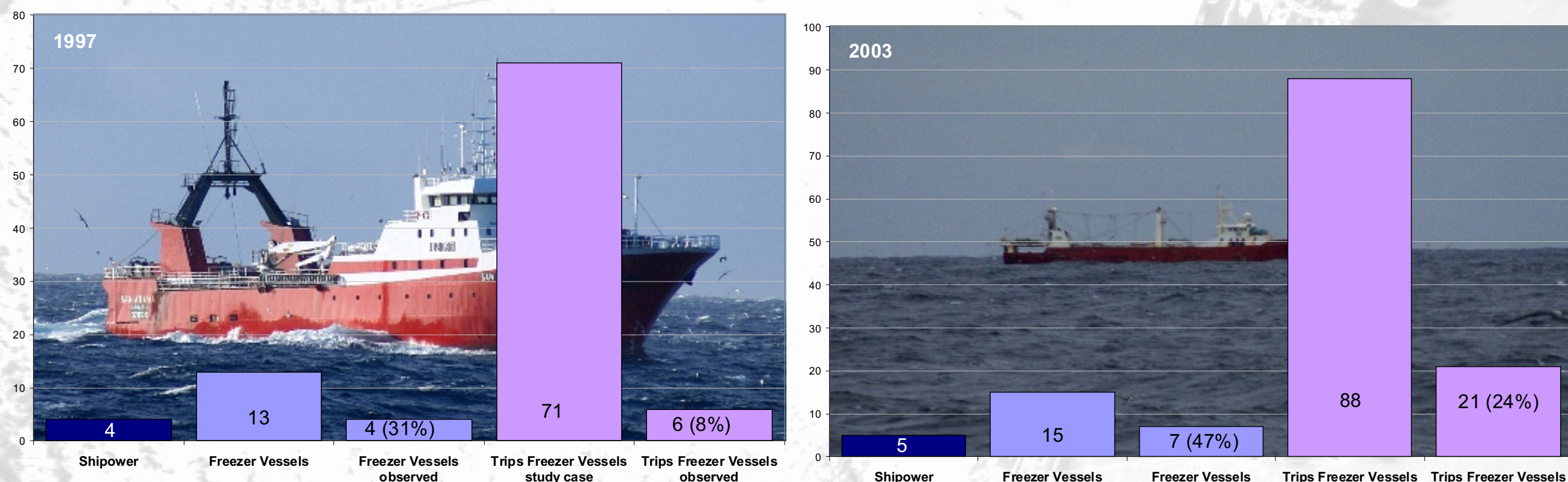
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The Argentine fishing system is complex considering the different methods of fishing, target species diversity and different business strategies of integration of production stages, so their study is presented as a challenge for researchers to provide the best advice to the Authority of Acts and Regulations for Responsible Fisheries.
The fishing fleet characterization is a key tool to understanding the dynamics of this sector, in complex landscapes of access to information. One source of available information is the INIDEP Observer Program, in addition to biological data collection may constitute an important element in the social, economic and technological data update.
Within the Argentine Republic, which exports over 85 % of its fishery production in value, the importance of preserving fisheries lies in the added value generated by them in each stage.
The aim of this study is to determine whether the information collected by observers is compatible or complementary with socioeconomic fishing industry data reported by the statistical system of the National Institute of Statistics and Census, INDEC- in special operations performed in 1997 and 2004 and consequently to analyze the contribution by observers on board for the social, economic and technological data collection developments for the characterization of the Argentinean fishing fleet.

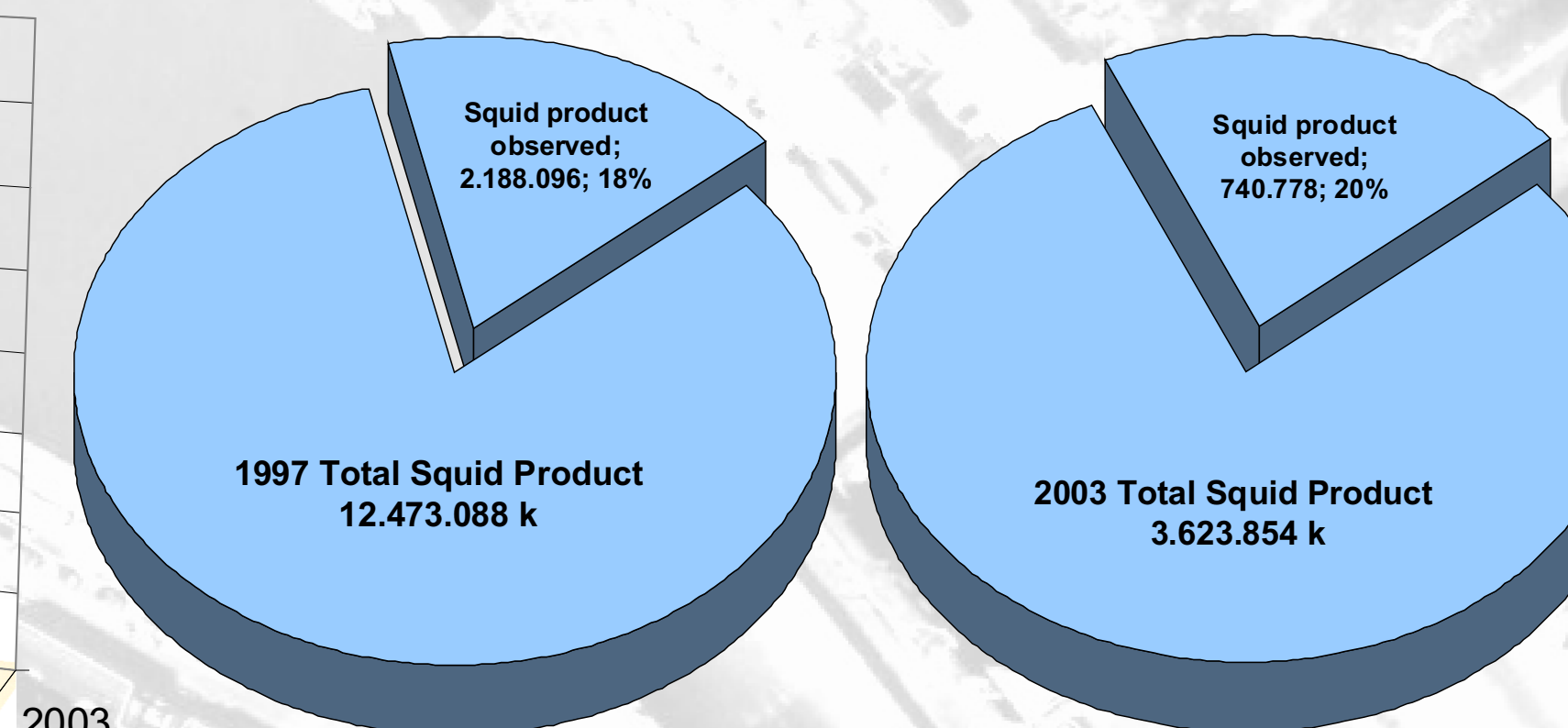
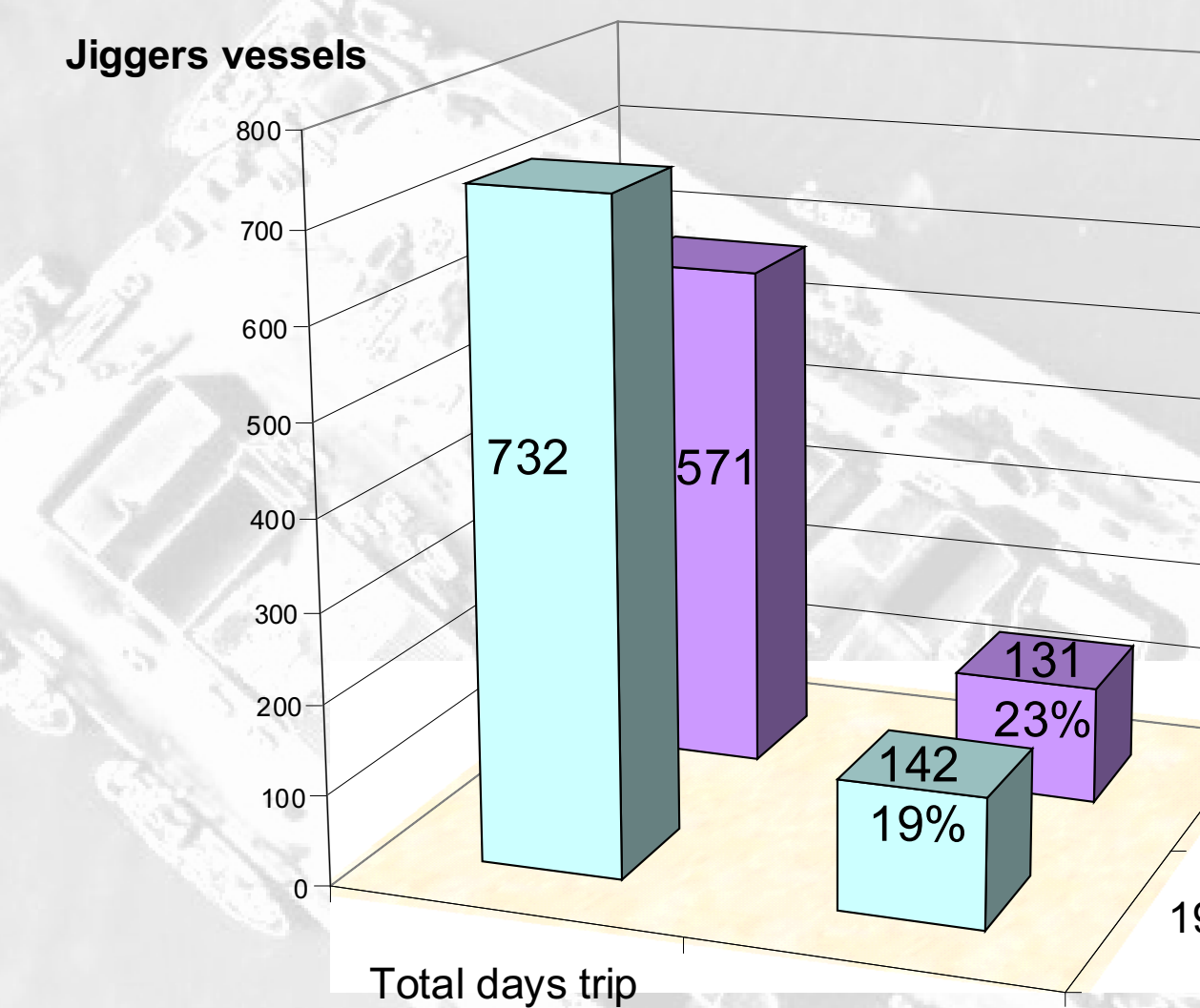
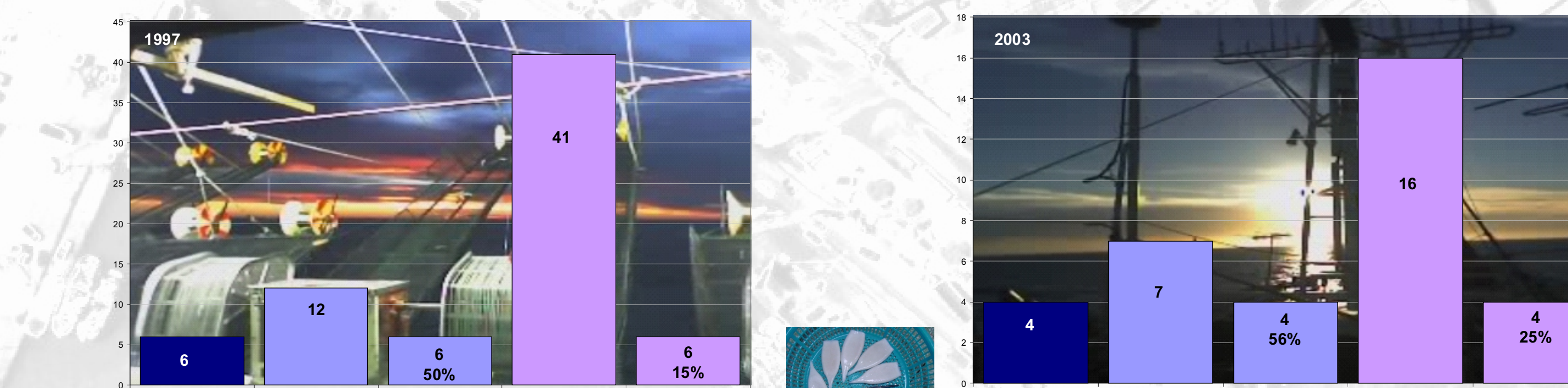
Freezer Vessels



Freezer Vessels	Products observed 1997 (k)	Products 1997 (k)	%	Products observed 2003 (k)	Products 2003 (k)	%
Kingklip H&G (<i>Genypterus blacodes</i>)	117.278	877.793	13,4%	192.695	505.506	38,1%
Kingklip Fillets (<i>Genypterus blacodes</i>)	-	7.420	-	-	465	-
Kingklip Other (<i>Genypterus blacodes</i>)	6.768	20.277	33,4%	4.457	17.258	25,8%
Hake Fillets (<i>Merluccius Hubbsi</i>)	637.744	4.750.687	13,4%	11.516	686.771	1,7%
Hake H&G (<i>Merluccius Hubbsi</i>)	1.829.649	14.527.356	12,6%	444.072	5.496.079	8,1%
Hake Other (<i>Merluccius Hubbsi</i>)	11.273	117.416	9,6%	2.623	18.162	14,4%
Hoki Surimi (<i>Macrurus magellanicus</i>)	-	864.730	0,0%	51.112	-	-
Hoki H&G (<i>Macrurus magellanicus</i>)	228.534	5.337.329	4,3%	1.559.796	4.518.956	34,5%
Hoki Fillets (<i>Macrurus magellanicus</i>)	635.056	4.250.547	14,9%	2.244.489	4.515.296	49,7%
Hoki Other (<i>Macrurus magellanicus</i>)	371	2.828	13,1%	358.117	145.375	76,5%
Southern blue whiting H&G (<i>Micromesistius australis</i>)	375.442	1.679.967	22,3%	387.264	590.696	65,6%
Southern blue whiting Surimi (<i>Micromesistius australis</i>)	-	861.650	0,0%	-	-	-
Southern blue whiting Other (<i>Micromesistius australis</i>)	1.480	359.421	0,4%	45.909	53.444	85,9%
Other Fish Fillets	109.775	1.062.963	10,3%	255.049	922.531	27,6%
Other Fish H&G	885.139	3.778.397	23,4%	3.469.393	4.533.113	76,5%
Other Fish Products	73.250	535.550	13,7%	422.976	623.829	67,8%
Argentine Red Shrimp products (<i>Pleoticus muelleri</i>)	-	34.957	-	-	2.835.316	-
Squid products (<i>Illex Argentinus</i>)	51.993	7.905.931	0,7%	198.116	1.820.877	10,9%
Fish meal	147.210	1.632.300	9,0%	243.270	374.580	64,9%
Total Products	5.110.961	48.607.519	10,5%	9.890.854	27.658.255	35,8%
Products Stock	-	7.301.231	-	-	22.429.625	-

Results of the analysis are shown discriminated by fleet type, taking into account links between ship owners and different entrepreneurial groups and fleet stratification by size.
The cost structure, added value, inputs, outputs and total product of the Argentine Fishery Sector are analyzed for 1997 and 2003 in observed Jigging Vessels, Surimi Factory Vessels and Freezer Vessels fleet.
We worked with the total (100%) of the information provided by the observer program: Ship owner, Ship, Trips, days at sea, species and on board processed product, compared with the same economic information provided by Censuses conducted by the Statistics and Census National Institute (INDEC) only for those companies owning. Also was calculated the added value and intermediate consumption associated with economic activity of those companies owning.
Crew Share participation in added value varies between 39.8% and 78.7%, this variability is associated with the other components of added value, particularly profits and taxes.
Crew Share participation in Fishing Income varies between 23% and 43% depending on crew share negotiation of production rates.
As for intermediate consumption of the main item of Fishing Expenses is Fuel & oil, which varied between 17% and 36%, this variation is associated with increasing prices and the rising sea days.

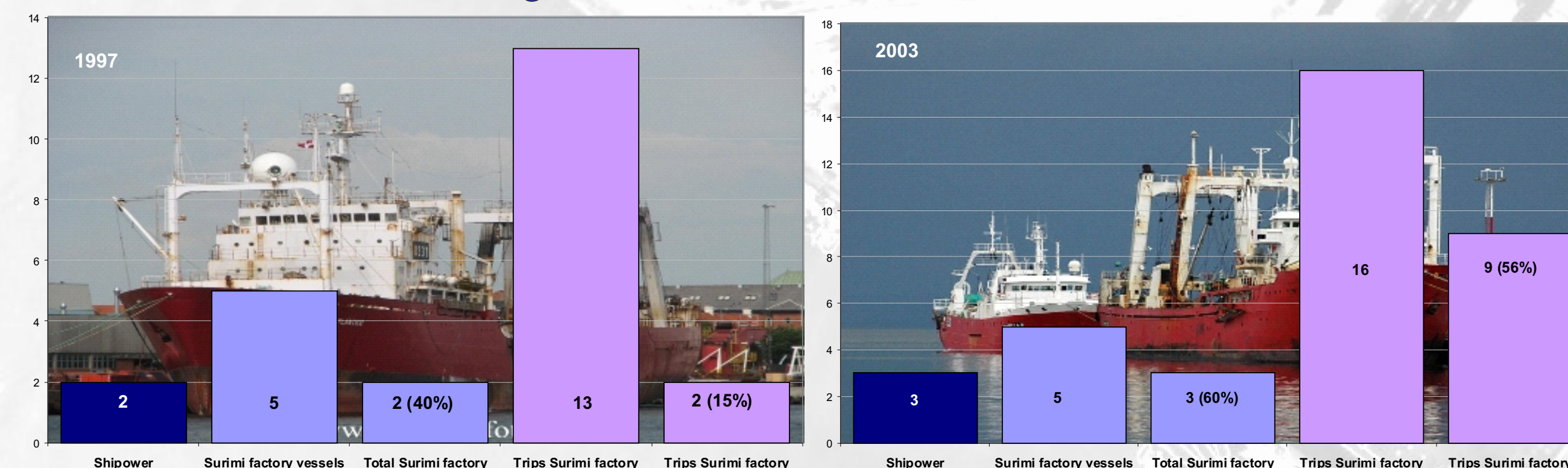
Jiggers vessels



Jigger vessels	1997 u\$s	%	2003 u\$s	%
Fishing income	122.857.361	24%	10.943.201	23%
non-Fishing income	12.759.195	-	138.161	-
Refund of tax	14.315.738	-	-	-
Total Earnings	149.932.294		11.081.362	
Total Expenses	100.240.675		10.038.615	
Profit (before deducting Amortization and interest)	49.691.619	-	1.042.747	-

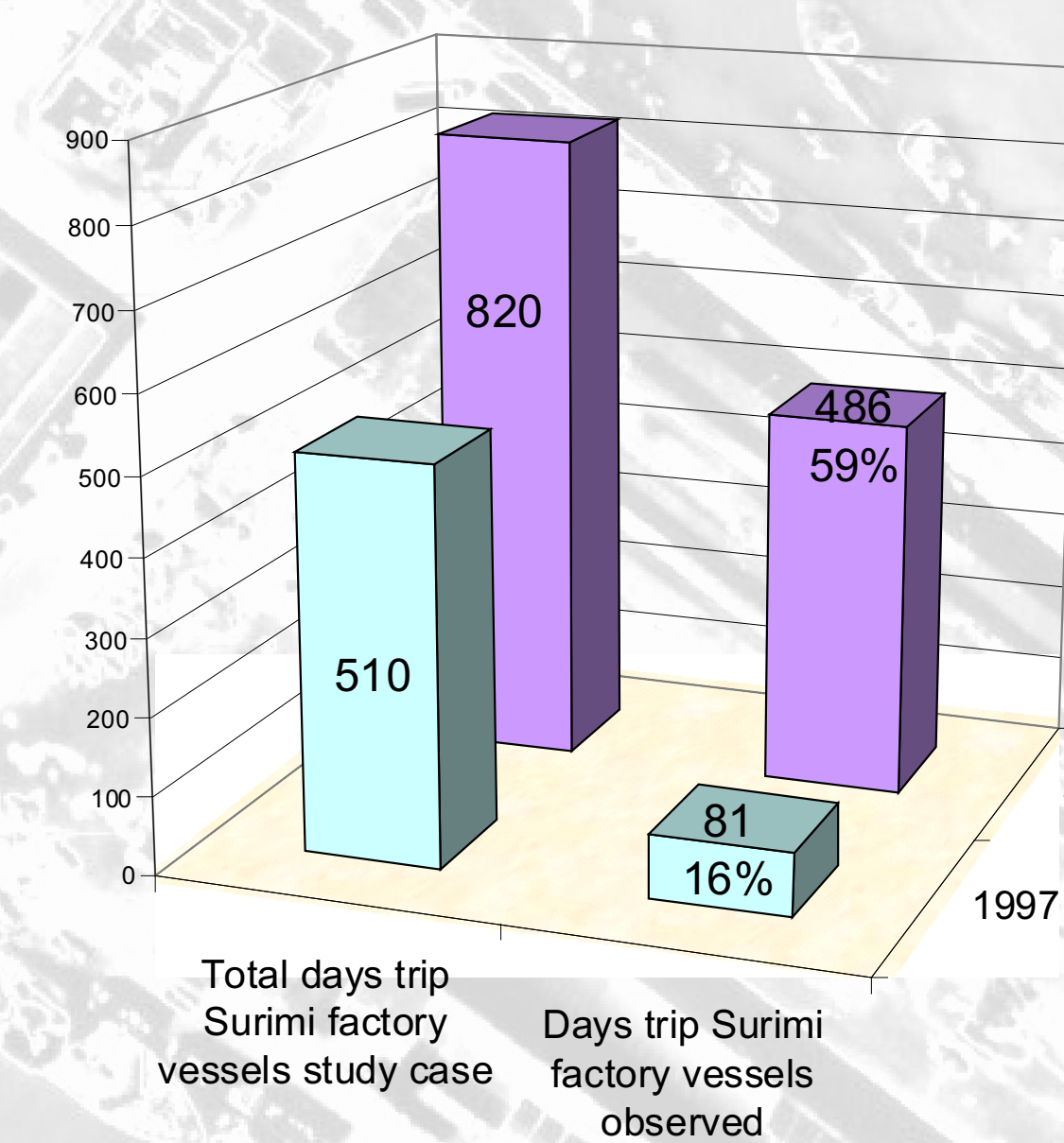
Category	1997 u\$s	%	2003 u\$s	%
Crew Share	29.525.038	44,5%	2.538.268	57,1%
Taxes & Canon	1.458.842	2,2%	1.092.629	24,6%
-Refund of tax	-14.315.738	-21,6%	-503.233	-11,3%
Profit (before deducting Amortization and interest)	8.777.355	13,4%	252.516	5,7%
Amortization	7.022.941	10,6%	24.420	0,5%
Interest	3.227.345	4,7%	719.183	1,9%
ADDED VALUE	66.359.761	100,0%	4.447.348	100,0%
Fish Products value	3.227.345	4,9%	719.183	1,6%
INTERMEDIATE CONSUMPTION	66.029.450	100,0%	5.688.535	100,0%
Fishing Expenses				
Fuel & Oil	11.391.723	17,3%	1.512.645	26,6%
Crew Travel	4.067.698	6,2%	176.570	3,9%
Commission	1.251.346	1,9%	34.335	0,8%
Packaging	1.335.904	2,0%	122.879	2,2%
Harbour Dues & H. Facilities & H. Pilot	4.718.104	7,1%	297.114	5,2%
Freight	1.576.556	2,4%	390.319	6,9%
Other Expenses	2.509.161	3,8%	84.120	1,5%
Vessel Owner Expenses				
Maintenance and repair	17.099.693	25,9%	1.271.774	22,4%
Insurance	2.028.428	3,1%	203.701	3,6%
Hire & Maintenance	1.117.185	1,7%	714.375	12,6%
Other Vessel Owner Expenses	18.933.652	28,7%	880.703	15%

Surimi factory vessels



Surimi factory vessels	1997 u\$s	%	2003 u\$s	%
Fishing income	66.427.950	30%	34.628.913	26%
non-Fishing income	740.712	-	3.871.296	-
Refund of tax	11.026.739	-	-	-
Total Earnings	78.195.401		41.665.264	
Total Expenses	60.688.081		34.682.017	
Profit (before deducting Amortization and interest)	17.507.320	-	6.983.247	-

Category	1997 u\$s	%	2003 u\$s	%
Crew Share	20.131.447	66,9%	9.050.222	40,8%
Taxes & Canon	1.075.162	3,6%	3.070.428	13,8%
-Refund of tax	-11.026.739	-36,6%	-3.165.055	-14,3%
Profit (before deducting Amortization and interest)	17.507.320	58,2%	6.983.247	31,5%
Amortization	2.290.395	7,6%	4.342.620	19,6%
Interest	114.150	0,4%	1.906.526	8,6%
ADDED VALUE	30.091.735	100,0%	22.187.988	100,0%
Fish Products value	28.389	0,1%	0	0,0%
INTERMEDIATE CONSUMPTION	39.481.472	100,0%	22.561.366	100,0%
Fishing Expenses				
Fuel & Oil	7.657.490	19,4%	8.204.446	36,4%
Crew Travel	1.813.070	4,6%	861.649	3,8%
Commission	155.848	0,4%	220.970	1,0%
Packaging	1.089.834	2,8%	856.282	3,8%
Harbour Dues & H. Facilities & H. Pilot	543.714	1,4%	1.335.733	5,9%
Freight	1.443.336	3,7%	693.222	3,1%
Other Expenses	3.347.182	8,5%	700.939	3,1%
Vessel Owner Expenses				
Maintenance and repair	9.862.575	25,0%	4.926.280	21,8%
Insurance	1.779.724	4,5%	938.176	4,2%
Hire & Maintenance	8.502.563	21,5%	92.909	0,4%
Other Vessel Owner Expenses	3.286.136	8,3%	3.730.758	16,5%



Surimi factory vessels	Products observed 1997 (k)	Products 1997 (k)	%	Products observed 2003 (k)	Products 2003 (k)	%
Hoki Surimi (<i>Macrurus magellanicus</i>)	409.440	2.668.320	15,3%	2.006.663	2.157.340	93,0%
Hoki H&G (<i>Macrurus magellanicus</i>)	540	52.220	1,0%	6.340	2.245.979	0,3%
Hoki Fillets (<i>Macrurus magellanicus</i>)	-	-	-	-	389.949	-
Southern blue whiting H&G (<i>Micromesistius australis</i>)	-	-	-	-	-	-
Southern blue whiting Surimi (<i>Micromesistius australis</i>)	1.225.980	15.036.820	8,2%	10.410.556	10.588.760	98,3%
Southern blue whiting Other (<i>Micromesistius australis</i>)	-	4.020	-	45.840	51.369	99,2%
Other Fish Fillets	-	3.368.485	-	25	9.074	0,3%
Other Fish H&G	-	-	-	-	-	-
Other Fish Products	1.963.660	3.354.905	58,5%	340.382	3.212.192	10,6%
Other Products	100	489.954	0,0%	54.720	131.953	41,5%
Fish meal	316.620	4.068.940	7,8%	2.565.629	4.402.650	58,3%
Total Products	3.916.340	29.043.664	13,5%	15.430.155	25.952.100	59,5%
Products Stock	-	10.657.858	-	-	29.557.719	-

The Observer program can make an important contribution to the construction of socio-economic indicators to estimate the added value in periods between censuses.

- Collect detail information of the crew and their functions (crew role) during each trip. This information is collated with labor agreements and trip production valued at market prices, will be a good estimate of value added.
- Collect information of fuel costs. The fuel costs valued by price will be a good estimate of fishing expenses.