



## SPECIFIC CONTRACT N° 10 "IMPROVED KNOWLEDGE OF THE MAIN SOCIO-ECONOMIC ASPECTS RELATED TO THE MOST IMPORTANT FISHERIES IN THE ADRIATIC SEA (SEDAF)"



### DELIVERABLE D6

Report with a detailed economic and structural overview of the fishing fleets and a qualitative economic performance assessments (for each country and for the whole Adriatic Region)

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#### ***WP2. Collation and review on the main socio-economic information on the main fisheries***

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*Task 2.2 - Collection and review of data in Montenegro (responsible Olivera Marković IMB)*

*Task 2.3 - Collection and review of data in Albania (responsible Jerina Kolitari, LAP)*

*Task 2.4 - Calculation of economic indicators and data presentation (responsible Evelina Sabatella, CoNISMa).*

*Task 2.5 Collation and review of the information on marketing of fish products in the Adriatic Sea (responsible R. Sabatella, CoNISMa)*

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## **Index**

<b>Executive summary.....</b>	<b>4</b>
<b>Adriatic overview.....</b>	<b>7</b>
Fishing Fleet Structure.....	7
Fleet Socio-Economic Structure .....	8
Fishing Activity and Output .....	10
Fleet Economic Performance Indicators .....	11
Income and Expenditure.....	11
Economic Performance Indicators.....	13
<b>Country chapters .....</b>	<b>15</b>
<b>Italy.....</b>	<b>15</b>
ITA GSA 18 all segments .....	15
ITA GSA 18 pelagic trawlers 24-40 m .....	17
ITA GSA 18 demersal trawlers 12-18 m.....	19
ITA GSA 18 demersal trawlers 18-24 m.....	21
ITA GSA 18 polyvalent passive gears 06-12 m.....	23
<b>ITA GSA 17 all fleet segments.....</b>	<b>25</b>
ITA GSA 17 pelagic trawlers 24-40 m .....	27
ITA GSA 17 pelagic trawlers 18-24 m .....	29
ITA GSA 17 pelagic trawlers 12-18 m .....	31
ITA GSA 17 dredgers -12-18 m .....	33
ITA GSA 17 demersal trawlers 18-24 m.....	35
ITA GSA 17 demersal trawlers 12-18 m.....	37
ITA GSA 17 demersal trawlers 24-40 m.....	39
ITA GSA 17 beam trawlers ("rapido") 24-40 m .....	41
ITA GSA 17 polyvalent passive gears 06-12 m.....	43
ITA GSA 17 purse seiners 24-40 m.....	45
<b>Croatia.....</b>	<b>47</b>
National fleet .....	47
HRV - Demersal trawlers 06-12 m .....	49
HRV - Demersal trawlers 12-18 m .....	51

HRV - Demersal trawlers 18-24 m .....	53
HRV - Demersal trawlers 24-40 m .....	55
HRV - Drift and fixed nets 06-12 m.....	57
HRV - Purse seiners 18-24 m .....	59
HRV - Purse seiners 24-40 m .....	61
HRV - Purse seiners 12-18 m .....	63
<b>Slovenia.....</b>	<b>65</b>
National fleet .....	65
SVN - Purse seiners 12-18 m.....	68
SVN - Demersal trawlers 12-18 m .....	70
SVN - Drift and fixed nets 06-12 m .....	72
<b>Montenegro .....</b>	<b>74</b>
National fleet .....	74
MNE - Demersal trawlers 12-18 m .....	78
MNE - Demersal trawlers 06-12 m .....	80
MNE - Drift and fixed nets < 6 m .....	82
MNE - Drift and fixed nets 06-12 m.....	84
MNE - Purse seiners 06-12 m .....	86
MNE - Polyvalent active vessels 6-12 m .....	88
MNE - Polyvalent active vessels<6 m .....	90
<b>Albania .....</b>	<b>92</b>
National fleet .....	92
<b>Methodology and data issues .....</b>	<b>94</b>
Italy .....	94
Croatia .....	94
Slovenia.....	95
Montenegro.....	95
Albania .....	96
<b>Glossary of terms.....</b>	<b>97</b>
<b>Fleet segment codification .....</b>	<b>101</b>

## Executive summary

The present report represents the deliverable no. 6 of the SEDAF project and it is aimed at presenting a detailed economic and structural overview of the fishing fleets and a qualitative economic performance assessments (for each country and for the whole Adriatic Region).

A preliminary work to the preparation of the report has been the collection and revision of the most updated economic information for each Adriatic country and GSA. Economic data cover a period of 5 years.

The source of data is different according to the country. Italian data are presented separately for GSA 17 and GSA 18 and the source is the Italian National Program for data collection within the EU Reg. 199/08.

Slovenian data have been extracted from the STECF/JRC data dissemination tool.

Croatian data were made available by the national authorities and they have been integrated when necessary through ad hoc estimations. Croatian official data are under revision and therefore their interpretation should be carefully considered.

Regarding Montenegro and Albania, very poor economic information was available before the project. Economic and social data for 2013, as well as data on production volume and value, have been collected through a specific survey that has been implemented in the period April-June with the support of Adriamed. For Albania, some economic data were also available for the years 2011 and 2012. Montenegrin economic data for the years 2009 and 2012 were estimated on the basis of a set of explanatory variables (number of vessels, days-at-sea, total revenue).

The quality of data is not homogenous; methodologies and data issues are reported in the last section of the report.

The variables and indicators presented in the report have been identified considering the following criteria:

- consistency with the informative needs of the SEDAF project in relation to deliverables of WP2 and data input for bio-economic modelling under WP4
- homogeneity with already established procedures adopted in EU DCF (for instance for the preparation of the STECF Annual Economic Report)
- calculation of socio-economic indicators used by STECF for assessing the economic performance of the fleets and the balance between fishing capacity and fishing opportunities

A glossary of the economic variables and indicators was prepared in order to help each partner in the collection and review of economic data.

Parallel with the collection and revision of available information, a common protocol to systematise the information collected and reviewed in the project was implemented. This tool allowed to:

- present the data in a common format
- calculate economic and social indicators, reducing possible errors in the interpretation of the definitions
- generate some graphs for a visual presentation of the main trends.

Data are presented for the fleet segments identified under WP1. In addition to those identified in WP1, other few segments were added because of their relevance in socio-economic terms.

The final list of fleet segments included in the report is reported in the following table:

*Table 1 – List of segments for which the economic analysis is reported*

1	<i>ITA GSA 18 all fleet segments</i>
2	ITA GSA 18 pelagic trawlers 24-40 m
3	ITA GSA 18 demersal trawlers 12-18 m
4	ITA GSA 18 demersal trawlers 18-24 m
5	ITA GSA 18 polyvalent passive gears 06-12 m
6	<i>ITA GSA 17 all fleet segments</i>
7	ITA GSA 17 pelagic trawlers 24-40 m
8	ITA GSA 17 pelagic trawlers 18-24 m
9	ITA GSA 17 pelagic trawlers 12-18 m
10	ITA GSA 17 dredgers -12-18 m
11	ITA GSA 17 demersal trawlers 18-24 m
12	ITA GSA 17 demersal trawlers 12-18 m
13	ITA GSA 17 demersal trawlers 24-40 m
14	ITA GSA 17 beam trawlers ("rapido") 24-40 m
15	ITA GSA 17 polyvalent passive gears 06-12 m
16	ITA GSA 17 purse seiners 24-40 m
17	<i>Croatia National fleet</i>
18	HRV - Demersal trawlers 06-12 m
19	HRV - Demersal trawlers 12-18 m
20	HRV - Demersal trawlers 18-24 m
21	HRV - Demersal trawlers 24-40 m
22	HRV - Drift and fixed nets 06-12 m
23	HRV - Purse seiners 18-24 m
24	HRV - Purse seiners 24-40 m
25	HRV - Purse seiners 12-18 m
26	<i>Slovenia National fleet</i>
27	SVN - Purse seiners 12-18 m
28	SVN - Demersal trawlers 12-18 m
29	SVN - Drift and fixed nets 06-12 m
30	<i>Montenegro National fleet</i>
31	MNE - Demersal trawlers 12-18 m
32	MNE - Demersal trawlers 06-12 m
33	MNE - Drift and fixed nets < 6 m
34	MNE - Drift and fixed nets 06-12 m
35	MNE - Purse seiners 06-12 m
36	MNE - Polyvalent active vessels 6-12 m
37	MNE - Polyvalent active vessels < 6 m
38	<i>Albania National Fleet</i>

According to the data collected and reviewed by the SEDAF project, the total number of vessels in the Adriatic fishing fleet in 2013 was 9,411, with a combined gross tonnage (GT) of 124.8 thousand tons and engine power of 870 thousand kilowatts (kW). Overall, capacity of the Adriatic fleet increased between

2009 and 2013 by 2% both in terms of vessels that in terms of GT 2%. Croatia had the highest number of vessels in 2013, accounting for 46.4% of the Adriatic total. The Italian fleet was the second largest in number, accounting for 44.5% of the Adriatic total (operating in GSA 17 and 18), followed by Albania at 6%. Italian's fishing fleet was the largest in terms of GT, with almost 54% of the Adriatic total, followed by Croatia at 37% and Albania at 8.8%.

According to the available data, the total number of fishers employed in the Adriatic fleet in 2013 was 13.118, 3.5% increase when compared to 2012. Data on crew costs and employment levels show that average wages in the Adriatic fish catching sector oscillated between 2009 and 2013, and appear to fluctuate in line with landings value and fuel costs. Average wage per employee in 2013 was €6,331, a 23% decrease compared to 2012 levels.

The Adriatic fishing fleet spent just over 663 thousand days at sea in 2013. Italian and Croatian fleets together accounted for almost all the registered days at sea.

The overall fuel consumption decreased by 10.6% from 2013 to 2012 and it coincides with the decrease in the average price of fuel for the Adriatic fleet (a decrease of 5% compared to 2012) and a decrease in days at sea (-13% compared to 2012). In 2013, the average price of fuel decreased in all countries except Croatia where fuel consumption actually increased.

According to available data, 196 thousand tones of seafood were landed by the Adriatic fleet in 2013, amounting to an estimated €588 million in value. The leading Adriatic fishing countries were Italy and Croatia which together accounted for over 90% of the landings weight in 2013. The Adriatic fishing fleet generated an income of €417 million in 2013, while operating costs amounted to €262 million. Total costs, including capital costs, amounted to €340 million in 2013, equating to around 88% of income.

Total costs increased around 2.7% in 2013 compared to 2012. The main cost items included labour costs (€107 million) amounting to 41% of total operating costs, and energy costs (€101 million), totaling 38% of total costs.

Analysis of economic performance in 2013 by country revealed a mixed picture. The data suggests that 3 out of 4 countries generated a net profit in 2013 and 1 country (Slovenia) generated net losses in 2013.

The Italian fleet in GSA 17 generated the highest GVA in absolute terms (51% of the Adriatic total), followed by the Italian fleets in GSA 18 and the Croatian fleet, with 33% and 13% of the Adriatic total, respectively (Figure 3). In relative terms, the Croatian fleet generated the highest level of GVA in relation to income (79%), followed by the Italian fleet in GSA 18 (69%) and Italian fleet in GSA 17 (60%).

## Adriatic overview

### Fishing Fleet Structure

According to the data collected and reviewed by the SEDAF project, the total number of vessels in the Adriatic fishing fleet in 2013 was 9,411, with a combined gross tonnage (GT) of 124.8 thousand tons and engine power of 870 thousand kilowatts (kW). Overall, capacity of the Adriatic fleet increased between 2009 and 2013 by 2% both in terms of vessels that in terms of GT 2%. Croatia had the highest number of vessels in 2013, accounting for 46.4% of the Adriatic total. The Italian fleet was the second largest in number, accounting for 44.5% of the Adriatic total (operating in GSA 17 and 18), followed by Albania at 6%. Italian's fishing fleet was the largest in terms of GT, with almost 54% of the Adriatic total, followed by Croatia at 37% and Albania at 8.8%. (Table 2).

Table 1 - Capacity data for the Adriatic fishing fleet in 2013

Country	Number of vessels		GT		kW	
	2013	Δ 2012	2013	Δ 2012	2013	Δ 2012
ALB GSA 18*	562.0	*	10,961.2	*	84,714.2	*
HRV GSA 17	4,368.0	3.1%	45,792.2	2.0%	347,544.0	6.5%
ITA GSA 17	3,210.8	-3.8%	50,230.0	-5.9%	319,729.4	-3.7%
ITA GSA 18	981.5	-4.9%	16,094.3	-3.3%	102,285.2	0.1%
MNE GSA 18	118.0	15.7%	1,148.4	4.2%	7,975.6	7.4%
SVN GSA 17	171.0	-5.5%	598.7	-28.8%	8,454.7	-16.3%
Adriatic total	9,411.3	-0.4%	124,824.8	-2.3%	870,703.1	-50.0%

\* Data for Albania refer to 2012

Table 2 - Capacity data for the Adriatic fishing fleet in 2013

Country	NoVes	% of Adriatic fleet	GT	% of Adriatic fleet	kW	% of Adriatic fleet
ALB GSA 18*	562.0	6.0%	10,961.2	8.8%	84,714.2	9.7%
HRV GSA 17	4,368.0	46.4%	45,792.2	36.7%	347,544.0	39.9%
ITA GSA 17	3,210.8	34.1%	50,230.0	40.2%	319,729.4	36.7%
ITA GSA 18	981.5	10.4%	16,094.3	12.9%	102,285.2	11.7%
MNE GSA 18	118.0	1.3%	1,148.4	0.9%	7,975.6	0.9%
SVN GSA 17	171.0	1.8%	598.7	0.5%	8,454.7	1.0%
Adriatic total	9,411.3	100.0%	124,824.8	100.0%	870,703.1	100.0%

\* Data for Albania refer to 2012

Figure 1 contains trends in fleet capacity by country over the period 2009-2013, and highlights that changes in capacity have diverged across countries. The change in the number of vessels fluctuated

between +17% for Montenegro and -11.8% for Italy, GSA 18 (-7.6% for the Adriatic total) and in gross tonnage between -40% for Slovenia and +17% for Montenegro (-2% at Adriatic level).

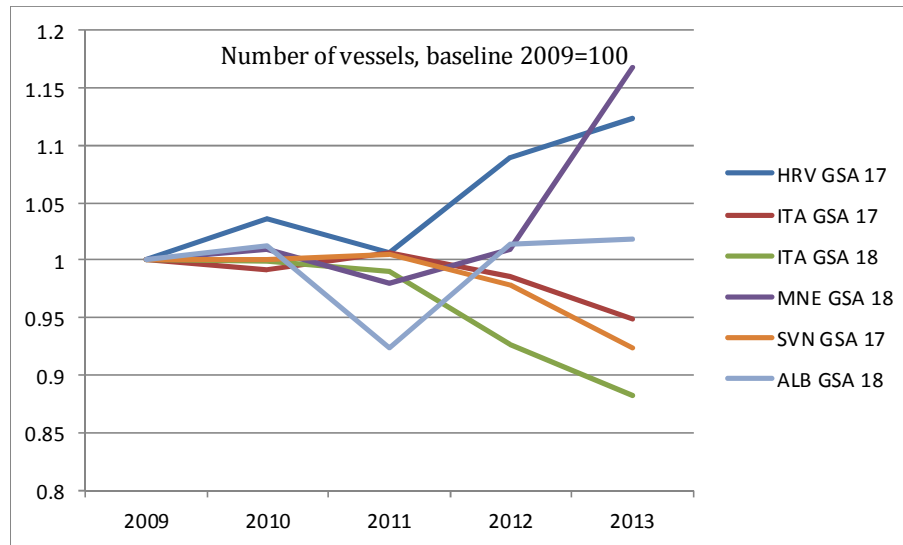


Figure 1 - trends in number of vessels, baseline 2009=100

## Fleet Socio-Economic Structure

According to the available data, the total number of fishers employed in the Adriatic fleet in 2013 was 13.118, 3.5% increase when compared to 2012. This increase of on-board employment is due to the trend of employment in Albanian fleet (+58%) and in Montenegro (+24%). In the rest of the countries, employment decreased. The country with the highest employment level, Italy, accounted for 70% of the total Adriatic employment in 2013 (Table 3)<sup>1</sup>.

Data on crew costs and employment levels show that average wages in the Adriatic fish catching sector oscillated between 2009 and 2013, and appear to fluctuate in line with landings value and fuel costs. Average wage per employee in 2013 was €6,331, a 23% decrease compared to 2012 levels. At €12.2 thousand, Italian fishers in GSA 17 earned the highest wages on average over the period 2009-2013; on the other hand, the data suggests that Albania fishers received the lowest wages in the Adriatic, earning on average €550 in the period 2009-2013 while the Montenegrin fishers received the second lowest average wages at €1.9 (Figure 2).

<sup>1</sup> Data on employment for Albania refer to 2012. Croatian data on employment are not always consistent with the fleet capacity; official Croatian data are under revision.



Table 3 - Data on employment and average wage by Country for 2013

Country	GSA	Employment	% of Adriatic fleet
ALB*	18	2,264	17.3%
HRV	17	1,149	8.8%
ITA	17	6,847	52.2%
ITA	18	2,471	18.8%
MNE	18	273	2.1%
SVN	17	114	0.9%
		13,118	100.0%

\* Data for Albania refer to 2012

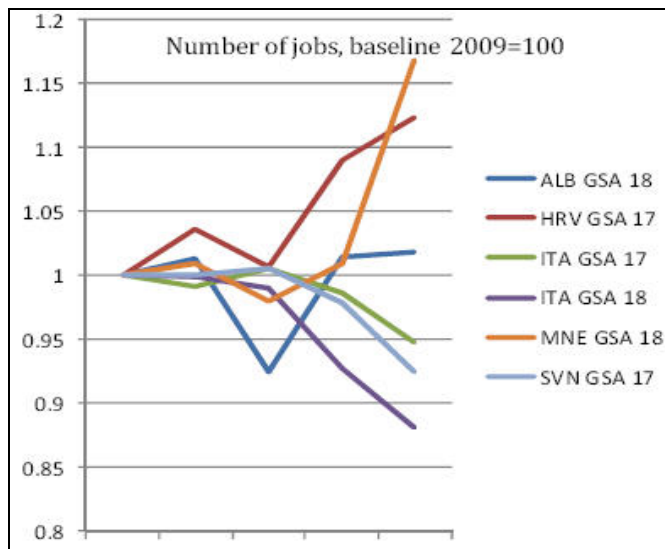


Figure 2 – Average wage per employment, period 2009-2013

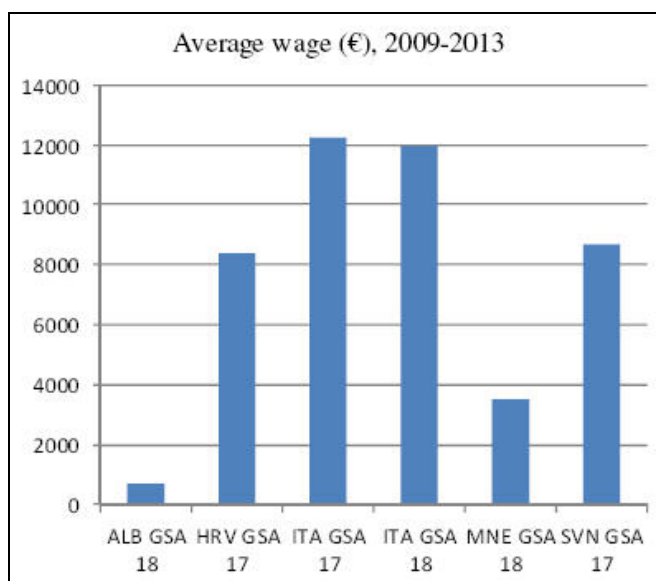


Figure 3 – Trend in employment, period 2009-2013

## Fishing Activity and Output<sup>2</sup>

The Adriatic fishing fleet spent just over 663 thousand days at sea in 2013. Italian and Croatian fleets together accounted for almost all the registered days at sea. The Italian fleet alone, at 66%, accounted for 2/3 of the Adriatic fleet's sea-days.

Total fuel consumed by the Adriatic fleet in 2013 was 134 million liters, a 10% decrease compared to consumption in 2012. The Italian fleet consumed the most fuel, at 82% of total consumption, followed by the Croatian fleet (6.6%) (Table 4).

In terms of fuel consumption per day at sea (DAS), the data indicate that on average the Adriatic fleet consumed around 153 liters of fuel per day at sea. Average energy consumption per day at sea in 2013 increased by 1.2% compared to 2012. The Italian fleet consumed by far the most amount of fuel at 280 liters per day at sea, followed by the Croatian fleet at 50 liters.

The overall fuel consumption decreased by 10.6% from 2013 to 2012 and it coincides with a decrease in the average price of fuel for the Adriatic fleet (a decrease of 5% compared to 2012) and a decrease in days at sea (-13% compared to 2012). In 2013, the average price of fuel decreased in all countries except Croatia where fuel consumption actually increased. Fuel consumed per kilogram of fish landed, averaged 0.8 liters in 2013, a decrease of 12% compared to 2012, that reflects the decrease in landing volume.

According to available data, 196 thousand tonnes of seafood were landed by the Adriatic fleet in 2013, amounting to an estimated €588 million in value. The leading Adriatic fishing countries were Italy and Croatia which together accounted for over 90% of the landings weight in 2013. Italian fleet in GSA 17 landed the most, totaling 43% of the total landed weight, followed by the Croatian fleet (41%) (Table 6). In terms of landed value, in 2013 the Italian fleet generated the highest value for their catch (85% of the total), followed by Croatia (12%) (Table 5).

Table 4 - Effort and fuel consumption by country for 2013

Country	GSA	Days at sea	% of Adriatic fleet	Δ to 2012	Energy consumption (thousand litres)	% of Adriatic fleet	Δ to 2012	Energy consumed per day at sea (litre/day)	Δ to 2012	Fuel consumed per kg landed	Δ to 2012	Average fuel price (€/kg)	Δ to 2012
HRV	17	197,955	29.9%	-10.6%	9,959	6.6%	-9.6%	50.0	0.5%	0.1	-24.2%	0.82	21%
ITA	17	291,825	44.0%	-21.2%	81,466	54.7%	-11.9%	279.2	11.8%	1.0	0.2%	0.75	-7%
ITA	18	152,615	23.0%	5.8%	41,642	28.0%	-12.0%	272.9	-16.8%	1.7	-22.4%	0.75	-7%
MNE	18	12,686	1.9%	25.3%	629	0.4%	37.9%	49.6	10.0%	1.0	4.7%	1.17	-1%
SVN	17	7,647	1.2%	0.4%	279	0.4%	0.4%	36.5	0.0%	1.2	39.0%	1.02	0%
Total Adriatic fleet		662,728	100.0%	-13.0%	133,975	100.0%	-10.6%	153.4	1.2%	0.8	-12.5%	0.74	-5%

*Albanian data for 2013 not included in the analysis*

<sup>2</sup> The analysis does not include data for Albania for the year 2013. Please refer to the paragraph on data issues (page 93)

Table 5 - Landings in value (thousand €) by Country: 2009-2013

Country	GSA	2009	% of Adriatic fleet	2010	% of Adriatic fleet	2011	% of Adriatic fleet	2012	% of Adriatic fleet	2013	% of Adriatic fleet
ALB	18	20,587	3.5%	21,765	4.0%	20,383	4.0%	21,600	4.9%		
HRV	17	45,835	7.8%	47,687	8.8%	46,298	9.1%	41,586	9.4%	52,245	12.5%
ITA	17	361,399	61.4%	322,518	59.5%	307,426	60.4%	275,621	62.0%	226,927	54.1%
ITA	18	153,543	26.1%	143,089	26.4%	128,799	25.3%	99,706	22.4%	133,378	31.8%
MNE	18	2,631	0.4%	2,693	0.5%	2,248	0.4%	2,406	0.5%	3,292	0.8%
SVN	17	2,178	0.4%	1,993	0.4%	2,051	0.4%	1,464	0.3%	1,231	0.3%
		588,182	100.0%	541,756	100.0%	509,216	100.0%	444,396	100.0%	419,085	100.0%

Albanian data for 2013 not included in the analysis

Table 6 - Landings in weight (tonnes) by Country: 2009-2013

Country	GSA	2009	% of Adriatic fleet	2010	% of Adriatic fleet	2011	% of Adriatic fleet	2012	% of Adriatic fleet	2013
ALB	18	2,782	1.4%	2,864	1.5%	2,682	1.5%	2,880	1.6%	
HRV	17	68,536	34.9%	71,305	36.2%	69,228	38.4%	62,286	35.4%	73,815
ITA	17	91,809	46.7%	91,968	46.7%	79,945	44.3%	88,402	50.3%	77,665
ITA	18	31,827	16.2%	29,648	15.0%	27,329	15.2%	21,524	12.2%	24,406
MNE	18	572	0.3%	576	0.3%	443	0.2%	467	0.3%	615
SVN	17	867	0.4%	764	0.4%	719	0.4%	329	0.2%	238
		196,393	100.0%	197,124	100.0%	180,346	100.0%	175,887	100.0%	176,738

Albanian data for 2013 not included in the analysis

## Fleet Economic Performance Indicators<sup>3</sup>

### Income and Expenditure

According to available data, the Adriatic fishing fleet generated an income of €417 million in 2013, while operating costs amounted to €262 million. Total costs, including capital costs, amounted to €340 million in 2013, equating to around 88% of income.

Total costs increased around 2.7% in 2013 compared to 2012. The main cost items included labour costs (€107 million) amounting to 41% of total operating costs, and energy costs (€101 million), totaling 38% of total costs. Capital costs were estimated at €78 million (€62 million in depreciation costs and €16 million in opportunity costs of capital). Labour costs increased by 2.8%, while repair and maintenance decreased by 10%. Expenditure on fuel decreased by a further 16% in 2013 compared to 2012 and this trend is expected to continue as fuel prices continued to decrease in 2014 (Table 7).

<sup>3</sup> The analysis does not include data for Albania for the year 2013. Please refer to paragraph on data issues (page 93)

Table 7 - Adriatic fleet cost structure by country for 2013 (thousand €)

Country	GSA	Wages and salary of the crew	% of Adriatic fleet	Δ to 2012	Energy costs	% of Adriatic fleet	Δ to 2012	Repair costs	% of Adriatic fleet	Δ to 2012
HRV	17	9,617	9.0%	4.1%	8,090	8.0%	8.4%	2,481	13.6%	-4.1%
ITA	17	65,198	60.9%	-7.5%	61,096	60.1%	-17.8%	10,924	60.0%	-15.1%
ITA	18	29,875	27.9%	37.1%	31,229	30.7%	-17.8%	4,143	22.7%	3.3%
MNE	18	955	0.9%	29.1%	736	0.7%	36.9%	408	2.2%	4.4%
SVN	17	712	0.7%	-24.6%	285	0.3%	0.4%	132	0.7%	-28.8%
		107,069	100.0%	2.8%	101,722	100.0%	-15.9%	18,221	100.0%	-9.9%

Country	GSA	Other variable costs	% of Adriatic fleet	Δ to 2012	Non-variable costs	% of Adriatic fleet	Δ to 2012	Annual depreciation costs	% of Adriatic fleet	Δ to 2012
HRV	17	3,672	17.9%	10.6%	2,673	18.4%	1.2%	2,753	4.4%	-44.4%
ITA	17	10,468	50.9%	-60.5%	8,429	57.9%	-26.7%	42,724	68.8%	-9.2%
ITA	18	5,732	27.9%	-46.6%	3,318	22.8%	-7.8%	16,328	26.3%	-12.4%
MNE	18	235	1.1%	40.9%	111	0.8%	-1.9%	60	0.1%	6.5%
SVN	17	224	1.1%	0.4%	12	0.1%	-28.8%	138	0.2%	-28.8%
		20,555	100.0%	-50.1%	14,554	100.0%	-18.6%	62,141	100.0%	-12.6%

Albanian data for 2013 not included in the analysis

### Economic Performance Indicators

The profitability indicators estimated - Gross Value Added (GVA), gross profit and net profit generated by the Adriatic fishing fleet in 2013 - showed improvements from 2012 results (Table 8).

The amount of GVA generated by the Adriatic fishing fleet in 2013 was €263 million, a 18% increase from 2012. As a proportion of income, GVA increased from 59% in 2012 to 63% in 2013.

Gross profit, calculated as income minus operating costs, generated by the Adriatic fleet in 2013 was almost €156 million, a 33% increase from 2012. Gross profit as a proportion of total income increased from 15% in 2008 to 37% in 2013.

Net profit, calculated as income minus operating costs and capital costs, generated by the Adriatic fleet in 2013 was €78 million, with a strong increase compared to 2012. Net profit as a proportion of income increased from 15% in 2012 to 19% in 2013.

Table 8 - Economic performance indicators for Adriatic fishing fleet: 2013 (thousand €)

Country	GSA	Fleet income	% of Adriatic fleet	Δ to 2012	GVA	% of Adriatic fleet	Δ to 2012
HRV	17	52,245	12.5%	12.2%	35,328	13.4%	15.6%
ITA	17	226,927	54.4%	-17.7%	136,010	51.8%	-9.6%
ITA	18	133,378	32.0%	33.8%	88,956	33.9%	105.2%
MNE	18	3,303	0.8%	36.8%	1,813	0.7%	51.3%
SVN	17	1,231	0.3%	-46.8%	577	0.2%	-64.0%
		417,083	100.0%	-1.2%	262,684	100.0%	18.3%

Country	GSA	Gross profit	% of Adriatic fleet	Δ to 2012	Net profit	% of Adriatic fleet	Δ to 2012
HRV	17	25,710	16.4%	20.6%	18,392	23.5%	54.7%
ITA	17	70,812	45.3%	-11.4%	20,060	25.7%	-29.3%
ITA	18	59,081	37.8%	174.0%	39,533	50.6%	
MNE	18	858	0.5%	87.1%	721	0.9%	121.5%
SVN	17	-134	-0.1%	-120.3%	-512	-0.7%	-339.1%
		156,327	100.0%	32.6%	78,193	100.0%	119.5%

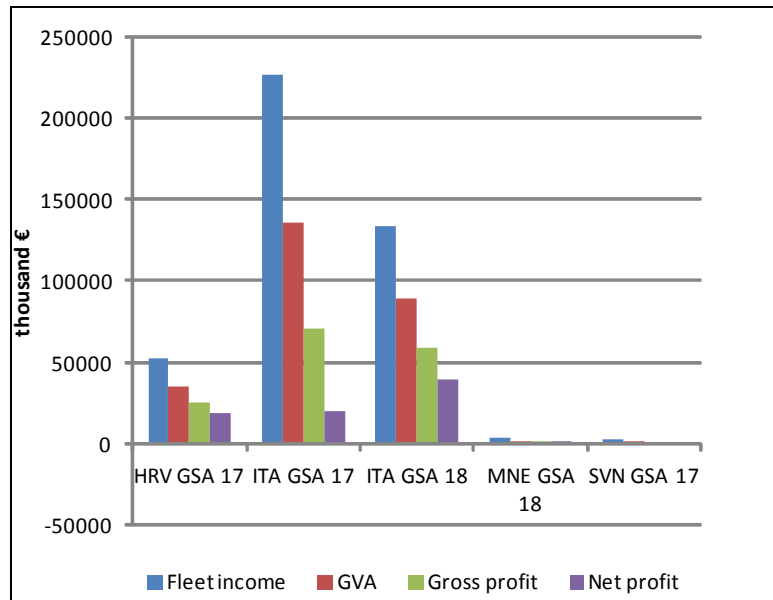
Albanian data for 2013 not included in the analysis

Analysis of economic performance in 2013 by country revealed a mixed picture. The data suggests that 3 out of 4 countries generated a net profit in 2013 and 1 country (Slovenia) generated net losses in 2013.

The Italian fleet in GSA 17 generated the highest GVA in absolute terms (51% of the Adriatic total), followed by the Italian fleets in GSA 18 and the Croatian fleet, with 33% and 13% of the Adriatic total, respectively (Figure 3). In relative terms, the Croatian fleet generated the highest level of GVA in relation to income (79%), followed by the Italian fleet in GSA 18 (69%) and Italian fleet in GSA 17 (60%) (Figure 3).

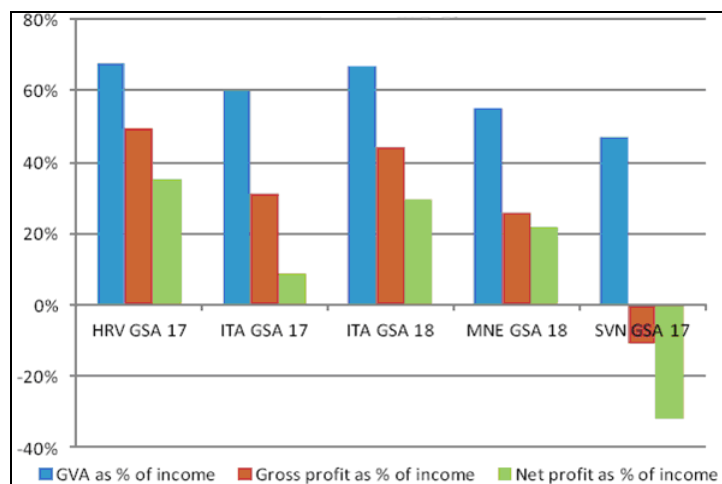
The Italian fleet in GSA 17 generated the highest gross profit in absolute terms in 2013 (45% of the Adriatic total) followed the Italian fleet in GSA 18 (38%) and by the Croatian fleet (20% of the total). In relative terms, the Croatian fleet generated the highest level of gross profit in relation to income (68%), followed by the Italian fleet in GSA 18 (53%) and Italian fleet in GSA 17 (36%) (Figure 3).

The Italian fleet in GSA 18 generated the highest net profit in absolute terms in 2013 (50% of the Adriatic total) followed by the Italian fleet in GSA 17 (26% of the total) and the Croatian fleet (23% of the total). In relative terms, the Croatian fleet generated the highest level of gross profit in relation to income (59%), followed by the Italian fleet in GSA 18 (38%) and Italian fleet in GSA 17 (14%) (Figure 4a).



*Albanian data for 2013 not included in the analysis*

Figure 4a - Economic performance indicators per country, year 2013



*Albanian data for 2013 not included in the analysis*

Figure 4b - Economic performance indicators as percentage of total income in 2013

## Country chapters

### Italy

#### ITA GSA 18 all segments

982 Italian vessels operated in GSA 18 in 2013. They account for a total GT of 16 thousand tons and 102 thousand kW. Fishing capacity of the fleet in 2013 continued to decrease, with a 5% drop in number and 3.3% on capacity (GT).

The largest segment within the fleet is still represented by small-scale fishing, which is composed of 480 vessels, followed by trawlers (381 vessels) and then the other segments (dredgers, purse seiners, long liners, pelagic trawlers).

Trawlers account for most (71%) of the domestic tonnage; small-scale fishing vessels, though representing the largest number of units, only make up for 5% of the total tonnage.

The GSA18 fishing fleet activity amounted to 153 thousand days in 2013, with an average of 156 days per vessel. The two factors that define fishing effort, capacity and activity, followed opposing trends: a fishing capacity reduction in number and GT, and an increase in the activity level. The overall effort, calculated by multiplying tonnage and average fishing activity, declined by 21% in the period 2009-2013.

Between 2009 and 2013 the activity in terms of days at sea fell by an average of 16%. This trend can only be partly due to an increase in fuel price, though this surely had an impact on the trend over the last years. But more generally, the decline in fishing activity can be explained by a different organization of the sector, where operators spontaneously adopted strategies to optimize time spent at sea, both for commercial reasons and in order to cut back on operation costs associated to fishing and landing activities.

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	1,113	1,113	1,103	1,032	982	-4.9%
Average vessel age	24.9	25.7	23.5	28.1	27.9	-0.6%
GT (thousand tonnes)	19.4	19.5	18.9	16.6	16.1	-3.3%
Engine power (thousand kW)	118.2	117.8	114.9	102.3	102.3	0.1%
<b>Employment</b>						
Total fishers employed	2,844	2,870	2,774	2,543	2,471	-2.8%
Full Time Equivalent	2,188.8	2,205.3	2,365.0	2,053.1	2,137.0	4.1%
Average wage per fisherman (thousand €)	16.7	14.6	11.6	8.6	12.1	41.0%
<b>Fishing effort</b>						
Days at sea	183,327	173,301	167,122	144,297	152,615	5.8%
Energy consumption (million litres)	64.7	57.9	55.1	47.3	41.6	-12.0%
Fuel consumption per kg landed (litre/kg)	2.0	2.0	2.0	2.2	1.7	-22.4%
<b>Production</b>						
Landings weight (thousand tonnes)	31.8	29.6	27.3	21.5	24.4	13.4%
Landings value (million €)	153.5	143.1	128.8	99.7	133.4	33.8%

Source: Mipaaf - Italian National Program for Data Collection

Comparing data from 2009 to 2013, the socio-economic impact of the decline in fishing activities is considerable; the number of employees fell last year below 2,500. Since 2009, jobs lost in maritime fisheries amount to 400 units (16% of the total employment in GSA 18).

In 2013 the fleet produced 24 thousand tonnes of seafood generating 133 million euro. Results are up 13% in quantity and 34% in value compared to 2012. Contrary to the trend in previous years, the increase of productivity took place in spite of a lower capacity of the fleet. The average catch per vessel and revenue decreased, and particularly the annual average catch per vessel, which fell by 13% in the period 2009-2013.

On the commercial and economic side, the contraction in offer was matched by a rise in prices, which grew + 13% in the period 2009-2013. This illustrates how seafood demand and consumption have been little affected by the economic crisis.

The fishing sector in 2013 continued to record positive gross value added and gross profit. In particular, the added value produced by marine fishing in the last year was 89 million euro, of which 30 millions were allocated in salaries and the rest (59 mill euro) represented the gross profits of the sector.

Intermediate costs sustained by vessels amount to 74 million euro, divided into variable and fixed costs. Variable costs amounts to 67 million euro and 71% of the overall consumption of the national fleet. Besides fuel, variable costs also include commercial expenses and other costs directly linked to production.

Fixed costs, connected to the management and maintenance of the vessel, fell by 8%, in line with the reduced fishing capacity.

The economic efficiency of the fishing sector, calculated as ROFTA (net profit on invested capital), confirm the profitability of Italian fishing enterprises in GSA 18. The gross value added per employee also increased over the period 2009-2013 from 33.8 thousand € to 36 thousand €.

#### National Fleet Economic performance

VARIABLE (million €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	153.5	143.1	128.8	99.7	133.4	33.8%
Direct subsidies	2.2	4.0	4.0	3.1		
<b>Costs</b>						
Crew wages	47.5	41.8	32.3	21.8	29.9	37.1%
Energy costs	30.1	34.1	40.8	38.0	31.2	-17.8%
Repair and maintenance costs	4.9	4.9	4.6	4.0	4.1	3.3%
Other variable costs	17.2	15.9	14.5	10.7	5.7	-46.6%
Other fixed costs	5.1	5.1	4.8	3.6	3.3	-7.8%
Opportunity costs of capital	3.0	2.5	2.6	1.9	3.2	72.7%
Depreciation costs	19.0	23.9	23.9	18.6	16.3	-12.4%
<b>Economic indicators</b>						
GVA	96.2	83.1	64.1	43.4	89.0	105.2%
Gross profit	48.7	41.3	31.8	21.6	59.1	174.0%
Net profit	26.7	15.0	5.4	1.1	39.5	
<b>Capital value</b>						
Fleet depreciated replacement value	85.4	105.2	104.9	84.5	74.5	-11.8%
<b>Profitability</b>						
Net profit margin (%)	17%	10%	4%	1%	30%	
RoFTA (%)	35%	17%	8%	3%	57%	
GVA per fisherman (thousand €)	33.8	29.0	23.1	17.1	36.0	

Source: Mipaaf - Italian National Program for Data Collection



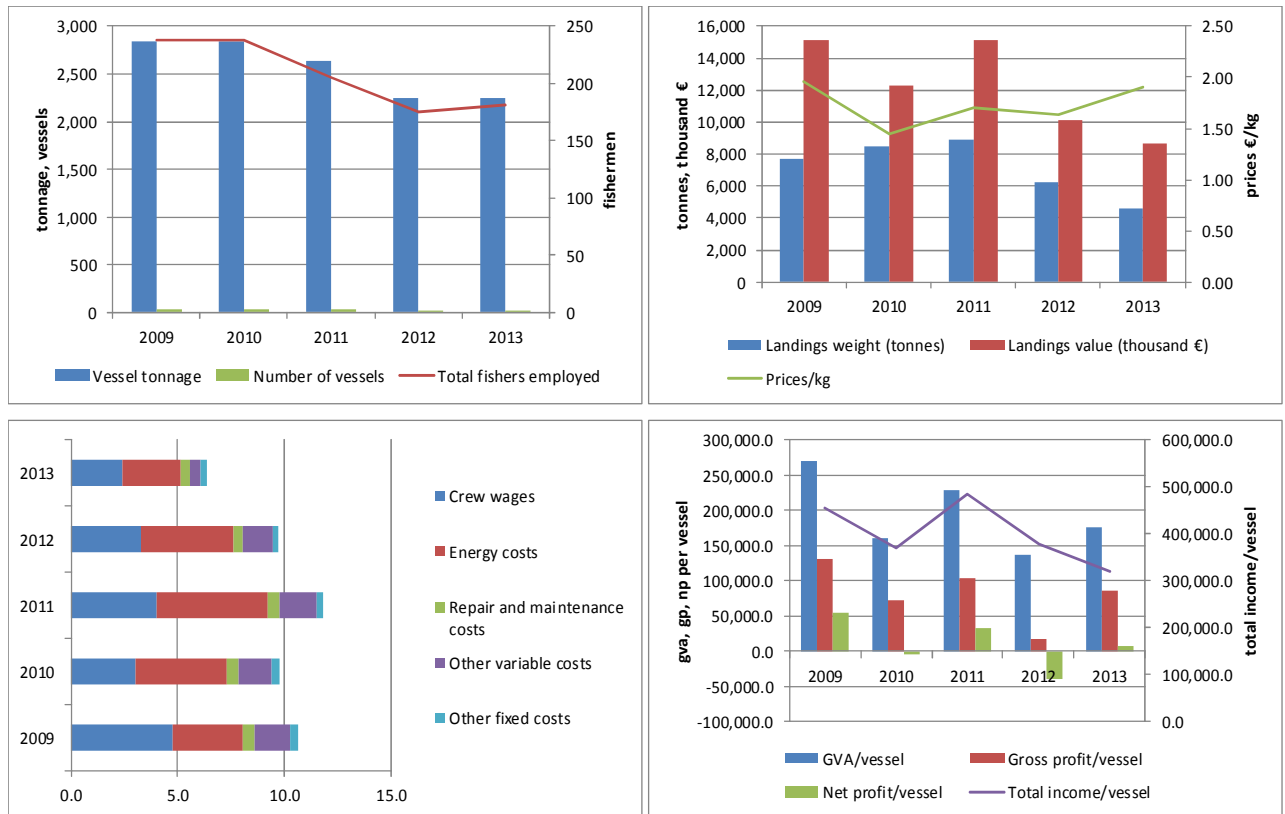
## ITA GSA 18 pelagic trawlers 24-40 m

<b>COUNTRY</b>	ITA
<b>GSA</b>	18
<b>FLEET SEGMENT</b>	TM_VL2440

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	34	34	32	27	27	-0.9%
Average vessel age	20.0	21.0	21.4	22.3	23.0	3.1%
GT (thousand tonnes)	2.8	2.8	2.6	2.2	2.2	-0.2%
Engine power (thousand kW)	14.7	14.7	13.4	11.7	11.7	-0.5%
<b>Employment</b>						
Total fishers employed	238	238	205	175	181	3.4%
Full Time Equivalent	118.8	131.9	152.0	112.3	122.0	8.6%
Average wage per fisherman (thousand €)	20.0	12.7	19.5	18.8	13.4	-28.7%
<b>Fishing effort</b>						
Days at sea	4,644	4,923	4,744	3,618	3,038	-16.0%
Energy consumption (million litres)	7.0	7.3	7.1	5.4	3.6	-32.7%
Fuel consumption per kg landed (litre/kg)	0.9	0.9	0.8	0.9	0.8	-8.1%
<b>Production</b>						
Landings weight (thousand tonnes)	7.7	8.5	8.9	6.2	4.6	-26.7%
Landings value (million €)	15.1	12.2	15.2	10.1	8.7	-14.5%

VARIABLE (million €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	15.1	12.2	15.2	10.1	8.7	-14.5%
Direct subsidies	0.4	0.4	0.4	0.2		
<b>Costs</b>						
Crew wages	4.8	3.0	4.0	3.3	2.4	-26.3%
Energy costs	3.3	4.3	5.2	4.3	2.7	-37.1%
Repair and maintenance costs	0.5	0.5	0.5	0.4	0.4	0.4%
Other variable costs	1.7	1.6	1.8	1.4	0.5	-65.2%
Other fixed costs	0.4	0.4	0.3	0.3	0.3	17.5%
Opportunity costs of capital	0.4	0.2	0.2	0.1	0.3	126.0%
Depreciation costs	2.2	2.4	2.1	1.4	1.8	28.4%
<b>Economic indicators</b>						
GVA	9.2	5.5	7.3	3.7	4.8	26.8%
Gross profit	4.4	2.5	3.3	0.5	2.3	406.8%
Net profit	1.9	-0.1	1.0	-1.1	0.2	-117.1%
<b>Capital value</b>						
Fleet depreciated replacement value	10.2	10.4	9.5	6.7	7.7	15.5%
<b>Profitability</b>						
Net profit margin (%)	12%	-1%	7%	-11%	2%	
RoFTA (%)	22%	1%	13%	-14%	7%	
GVA per fisherman (thousand €)	38.7	23.0	35.7	21.4	26.2	22.6%

Source: Mipaaf - Italian National Program for Data Collection



Source: Mipaaf - Italian National Program for Data Collection

In 2013, 27 pelagic trawlers 24-40m operated in GSA 18. The total production amounted to 4.6 thousand tons, corresponding to a landing value of around 8.7 million euro.

The total value of landings in 2013 decreased with respect to 2012 by 14%. The reduction in value was lower than the reduction in volume (-26%) due to the increase in the average production price that was equal 1.6 €/kg in 2012 and to 1.9 €/kg in 2013.

The pelagic trawlers 24-40m fleet in GSA 18 registered a gross profit of 2.3 million € but was unprofitable if considering the net profit, amounted to around minus 0.2 million €. The main drivers behind this net loss were the high opportunity cost of capital and depreciation costs.

Gross value added per fisherman was equal to 26 thousand € in 2013, while the revenue per vessel is estimated in 322 thousand euro.

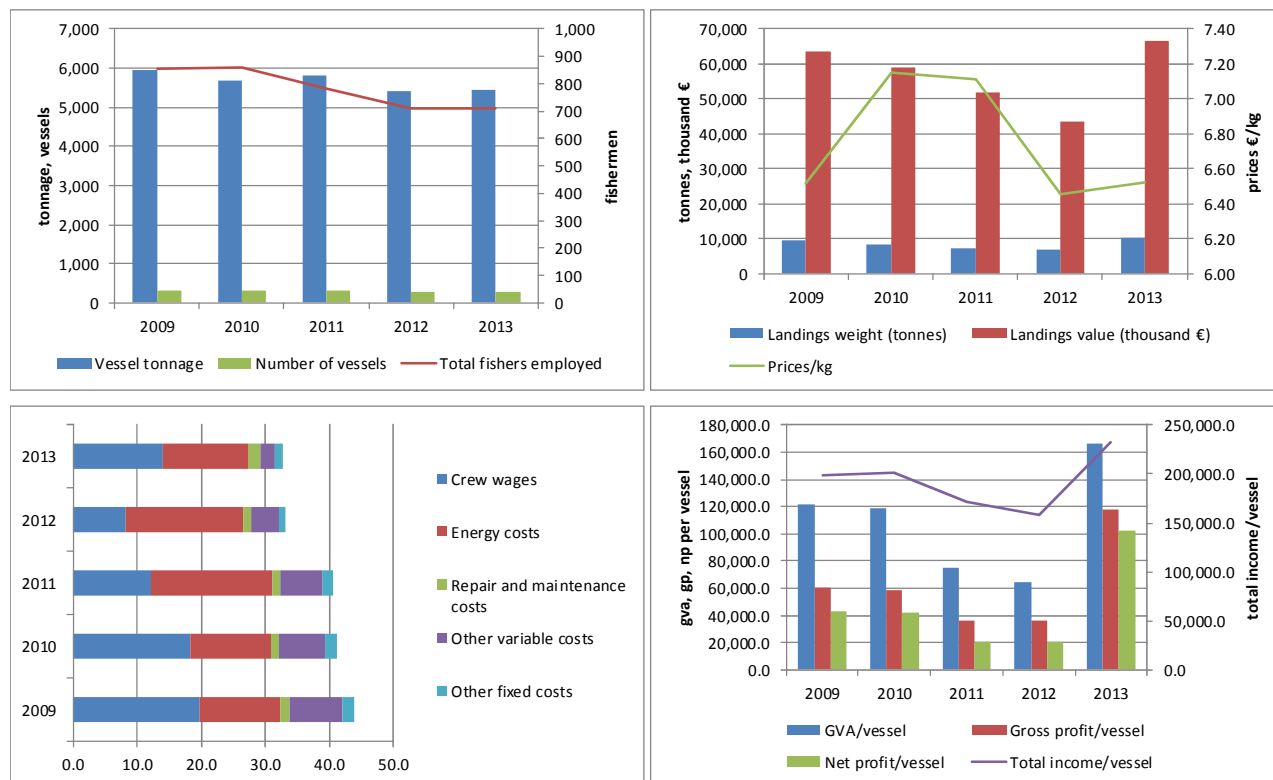
## ITA GSA 18 demersal trawlers 12-18 m

<b>COUNTRY</b>	ITA
<b>GSA</b>	18
<b>FLEET SEGMENT</b>	DTS_VL1218

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	324	305	314	287	287	-0.1%
Average vessel age	20.0	21.0	19.5	20.8	22.0	5.8%
GT (thousand tonnes)	6.0	5.7	5.8	5.4	5.5	0.5%
Engine power (thousand kW)	42.0	39.8	40.8	37.4	37.3	-0.4%
<b>Employment</b>						
Total fishers employed	853	857	785	708	708	0.0%
Full Time Equivalent	799.3	753.1	785.0	708.3	682.0	-3.7%
Average wage per fisherman (thousand €)	23.2	21.4	15.6	11.6	19.7	70.8%
<b>Fishing effort</b>						
Days at sea	59,716	48,363	47,119	44,405	49,031	10.4%
Energy consumption (million litres)	26.7	21.3	25.5	23.0	17.9	-22.1%
Fuel consumption per kg landed (litre/kg)	2.8	2.6	3.5	3.4	1.8	-48.5%
<b>Production</b>						
Landings weight (thousand tonnes)	9.7	8.3	7.3	6.7	10.2	51.1%
Landings value (million €)	63.3	59.1	51.9	43.5	66.5	52.7%

VARIABLE (million €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	63.3	59.1	51.9	43.5	66.5	52.7%
Direct subsidies	1.1	2.2	1.9	1.8		
<b>Costs</b>						
Crew wages	19.8	18.3	12.2	8.2	14.0	70.8%
Energy costs	12.5	12.5	18.9	18.5	13.4	-27.3%
Repair and maintenance costs	1.5	1.4	1.3	1.3	1.9	53.1%
Other variable costs	8.2	7.2	6.5	4.3	2.2	-47.3%
Other fixed costs	1.9	1.8	1.7	1.1	1.2	10.5%
Opportunity costs of capital	0.8	0.5	0.5	0.4	0.8	78.1%
Depreciation costs	4.9	4.6	4.3	3.9	3.6	-7.5%
<b>Economic indicators</b>						
GVA	39.3	36.3	23.5	18.5	47.7	
Gross profit	19.5	18.0	11.3	10.3	33.7	
Net profit	13.8	12.8	6.5	5.9	29.3	
<b>Capital value</b>						
Fleet depreciated replacement value	23.1	22.0	20.5	19.2	17.4	-9.0%
<b>Profitability</b>						
Net profit margin (%)	21%	21%	12%	13%	44%	
RoFTA (%)	63%	61%	34%	33%	172%	
GVA per fisherman (thousand €)	46.1	42.3	30.0	26.1	67.3	

Source: Mipaaf - Italian National Program for Data Collection



Source: Mipaaf - Italian National Program for Data Collection

In 2013 the overall fleet of demersal trawlers 12-18 m operating in GSA 18 consisted of 287 registered vessels, with a combined gross tonnage of 5.5 thousand tons and an installed engine power of 37.3 thousand kW.

The size of this fleet segment remained stable over the last two years. In 2013, average days at sea per vessel have been around 171, reporting an increase if compared with the activity level of previous year (10%). Total employment in 2013 was estimated at 708 fishermen.

Total production was equal to 10.2 thousand tons, while in 2012 it was equal to 6.7 thousand tons.

Total landing income in 2013 was equal to 66.5 million €, with an increase of 52% compared to 2012, mainly due to the increase in volume of production.

In 2013, this fleet segment was profitable, with a reported gross profit of around €33.7 million and net profit of €29.3 million in 2012. Profitability increased between 2012 and 2013 because of the increase in the value of landings.

Labour costs and energy costs are the most important intermediated cost incurred by this fleet in 2013, representing 83% of total costs. Gross value added per fisherman was equal to 67 thousand €.

## ITA GSA 18 demersal trawlers 18-24 m

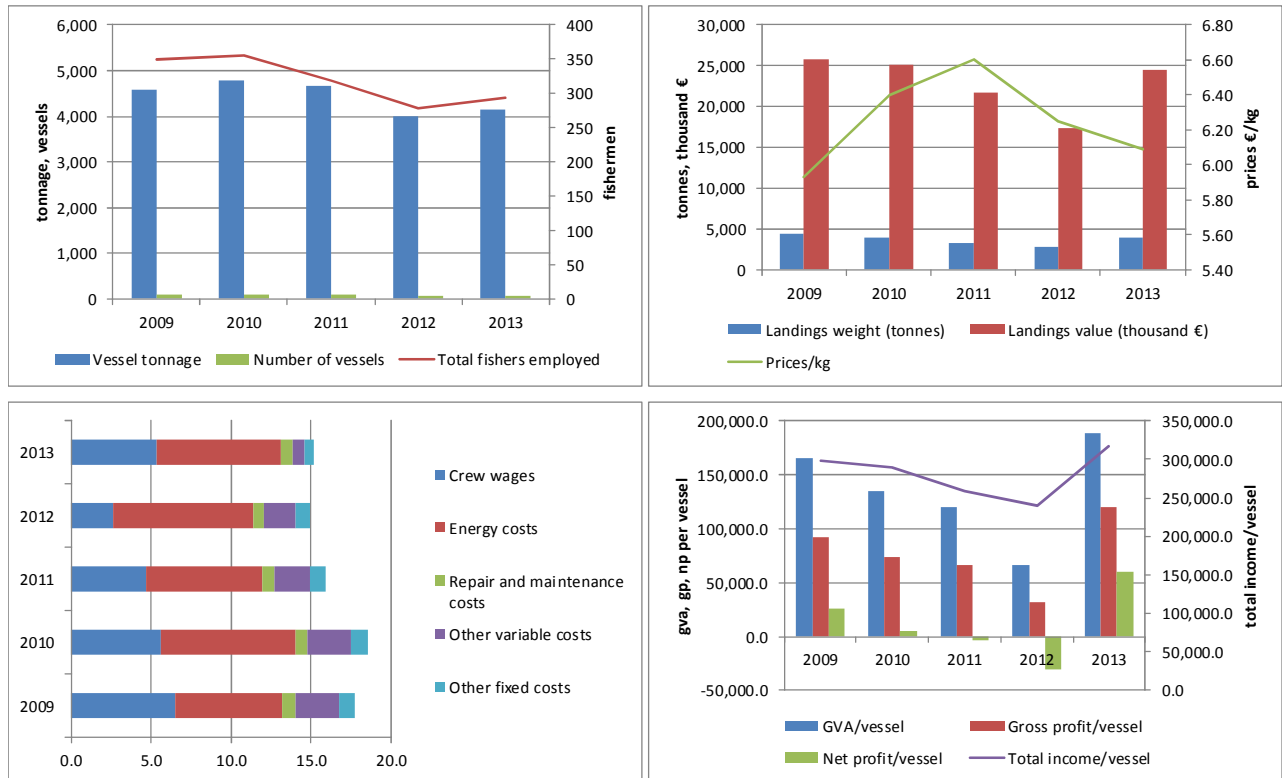
<b>COUNTRY</b>	ITA
<b>GSA</b>	18
<b>FLEET SEGMENT</b>	DTS_VL1824

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	88	90	88	75	77	2.7%
Average vessel age	22.0	22.0	18.6	22.0	23.0	4.5%
GT (thousand tonnes)	4.6	4.8	4.7	4.0	4.1	3.1%
Engine power (thousand kW)	23.8	24.6	24.1	20.3	20.8	2.1%
<b>Employment</b>						
Total fishers employed	349	355	319	278	294	5.8%
Full Time Equivalent	336.8	333.1	319.0	278.4	283.0	1.6%
Average wage per fisherman (thousand €)	18.6	15.7	14.8	9.4	18.1	92.0%
<b>Fishing effort</b>						
Days at sea	14,984	15,105	13,131	11,502	12,512	8.8%
Energy consumption (million litres)	14.5	14.3	9.7	10.9	10.3	-4.8%
Fuel consumption per kg landed (litre/kg)	3.3	3.6	3.0	3.9	2.6	-34.4%
<b>Production</b>						
Landings weight (thousand tonnes)	4.4	3.9	3.3	2.8	4.0	45.1%
Landings value (million €)	25.8	25.2	21.8	17.3	24.5	41.4%

VARIABLE (million €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	25.8	25.2	21.8	17.3	24.5	41.4%
Direct subsidies	0.4	1.0	0.9	0.7		
<b>Costs</b>						
Crew wages	6.5	5.6	4.7	2.6	5.3	103.1%
Energy costs	6.7	8.4	7.2	8.7	7.8	-11.1%
Repair and maintenance costs	0.8	0.8	0.8	0.7	0.8	7.4%
Other variable costs	2.7	2.7	2.2	1.9	0.8	-59.6%
Other fixed costs	1.0	1.0	1.0	0.9	0.6	-36.3%
Opportunity costs of capital	0.8	0.6	0.6	0.4	0.8	78.0%
Depreciation costs	5.0	5.6	5.5	4.3	3.8	-10.0%
<b>Economic indicators</b>						
GVA	14.6	12.2	10.6	5.0	14.6	
Gross profit	8.1	6.7	5.8	2.4	9.2	
Net profit	2.3	0.5	-0.3	-2.3	4.6	
<b>Capital value</b>						
Fleet depreciated replacement value	22.9	25.2	24.9	19.7	17.9	-9.1%
<b>Profitability</b>						
Net profit margin (%)	9%	2%	-1%	-13%	19%	
RoFTA (%)	14%	4%	1%	-9%	30%	
GVA per fisherman (thousand €)	41.7	34.5	33.1	18.1	49.6	

Source: Mipaaf - Italian National Program for Data Collection

MAREA MEDITERRANEAN HALIEUTIC RESOURCES EVALUATION AND ADVICE  
Specific Contract no 10 - SEDAF: "Improved knowledge of the main socio-economic aspects related to the most important fisheries in the Adriatic Sea"



Source: Mipaaf - Italian National Program for Data Collection

In 2013, the demersal trawler fleet 18-24 m in GSA 18 consisted of 77 vessels with a total tonnage of 23 thousand GT and 21 thousand kW. The size of this fleet segment shows a slight increase of 2 vessels (3.1% and 2.1% in terms of GT and kW respectively) compared to 2012.

Total operating costs incurred by this fleet segment were equal to around €15.3 million. Crew cost and fuel costs, the two major fishing items, were equal to around €5.3 and €7.8 million, respectively, in 2013. Energy costs decreased of -11%, probably due to a decrease in average fuel price.

The decrease of the level of income has largely impacted the level of the economic indicators: in 2013 the total gross value added produced by this fleet segment was around €14.6 million (equal to around 190 thousand euro per vessel). The net profit is positive, equaling €4.6 million, that is around 59 thousand euro per vessel.

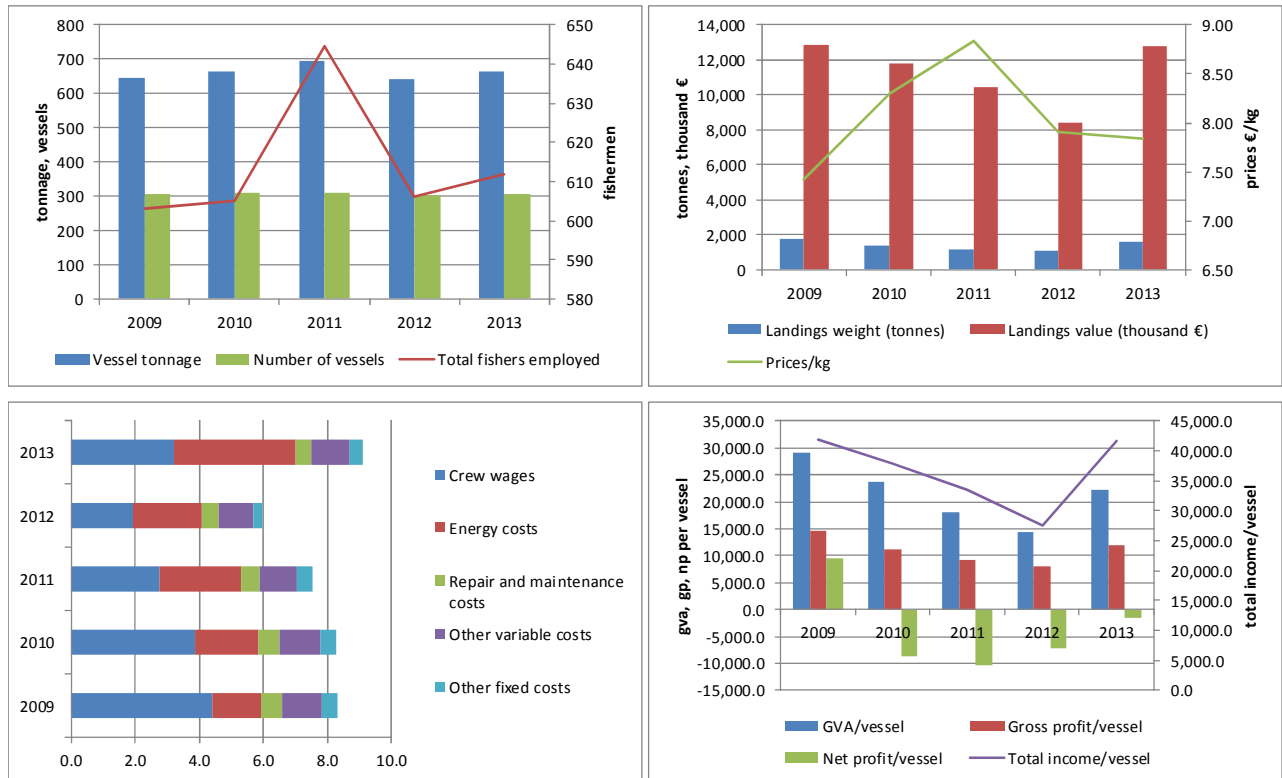
## ITA GSA 18 polyvalent passive gears 06-12 m

<b>COUNTRY</b>	ITA
<b>GSA</b>	18
<b>FLEET SEGMENT</b>	PGP_VL0612

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	308	311	312	304	307	1.0%
Average vessel age	29.0	29.0	28.9	30.2	31.0	2.6%
GT (thousand tonnes)	0.6	0.7	0.7	0.6	0.7	3.3%
Engine power (thousand kW)	7.3	7.7	7.8	7.6	4.9	-34.8%
<b>Employment</b>						
Total fishers employed	603	605	644	606	612	1.0%
Full Time Equivalent	304.0	360.9	471.0	447.3	429.0	-4.1%
Average wage per fisherman (thousand €)	7.3	6.4	4.3	3.2	5.2	64.9%
<b>Fishing effort</b>						
Days at sea	48,955	52,021	48,349	44,498	50,501	13.5%
Energy consumption (million litres)	3.2	3.4	3.5	2.7	5.1	89.9%
Fuel consumption per kg landed (litre/kg)	1.9	2.4	2.9	2.5	3.1	23.5%
<b>Production</b>						
Landings weight (thousand tonnes)	1.7	1.4	1.2	1.1	1.6	53.7%
Landings value (million €)	12.9	11.8	10.4	8.4	12.8	52.4%

VARIABLE (million €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	12.9	11.8	10.4	8.4	12.8	52.4%
Direct subsidies		0.0	0.0	0.0		
<b>Costs</b>						
Crew wages	4.4	3.9	2.7	1.9	3.2	66.5%
Energy costs	1.5	2.0	2.6	2.2	3.8	77.2%
Repair and maintenance costs	0.6	0.7	0.6	0.6	0.5	-10.8%
Other variable costs	1.3	1.3	1.1	1.1	1.2	13.3%
Other fixed costs	0.5	0.5	0.5	0.3	0.4	45.3%
Opportunity costs of capital	0.2	0.6	0.6	0.4	0.7	68.0%
Depreciation costs	1.4	5.6	5.5	4.2	3.4	-18.8%
<b>Economic indicators</b>						
GVA	8.9	7.4	5.6	4.3	6.9	58.2%
Gross profit	4.5	3.5	2.9	2.4	3.7	51.5%
Net profit	2.9	-2.7	-3.2	-2.2	-0.4	-79.8%
<b>Capital value</b>						
Fleet depreciated replacement value	5.7	23.8	23.5	19.2	16.4	-14.2%
<b>Profitability</b>						
Net profit margin (%)	23%	-23%	-31%	-26%	-3%	-86.7%
RoFTA (%)	55%	-9%	-11%	-9%	2%	-117.8%
GVA per fisherman (thousand €)	14.8	12.2	8.7	7.2	11.2	56.6%

Source: Mipaaf - Italian National Program for Data Collection



Source: Mipaaf - Italian National Program for Data Collection

In 2013, the vessels classified as polyvalent passive gears 06-12 m in GSA 18 consisted of 307 vessels with a total tonnage of 0.7 thousand GT and 4.9 thousand kW. The size of this fleet segment shows a slight increase of 1% in terms of number of vessels and 3.3% in terms of GT compared to 2012.

The number of fishermen employed in this fleet was equal, in 2013, to 612, registering an increase of 1% compared to 2012. The highest number has been registered in 2011 (644 fishermen). On average 2 fishermen were working on board of each vessel in 2013, highlighting that this fishery is An artisanal activity. The average wage for crewmembers working on board of these small vessels has been equal, in 2013, to 5 thousand €. The gross profit has been equal to 12 thousand € per vessel. This value has to be considered to be estimated the total remuneration of the vessel activity.

In 2013, total production of the Italian GSA 18 polyvalent passive gears 06-12 m was equal to 1.6 thousand tons equal to €12.8 million.

Total operating costs incurred by this fleet in 2013 were equal to around €9.1 million. Crew cost and fuel costs, the two major fishing items, were equal to around 3.2 million € and 3.8 million €, respectively, in 2013. If compared to 2012, labour costs show an increase of around 66%, mainly due to the increase of the average remuneration per fisherman employed. Gross value added per fisherman in 2013 was equal to 11.2 thousand € in 2013.



## ITA GSA 17 all fleet segments

The Italian fleet operating in GSA 17 (North and Central Adriatic) in 2013, consists of 3,211 vessels accounting for a total GT of 50 thousand tons and 320 thousand kW.

Fishing capacity of the fleet in 2013 continued to decrease steadily, with a 6% drop in GT and 3.7% on capacity (kW), with respect to the previous year.

The largest segment within the fleet is represented by small-scale fishing, which is composed of 1,771 vessels, followed by trawlers (651 vessels), hydraulic dredges (593), mid-water pair trawlers (106), beam trawlers (60) and purse seiners (30). Trawlers account for most (50%) of the total tonnage; small-scale fishing vessels, though representing the largest number of units, only make up for 6.5% of the total tonnage.

The fishing fleet activity in Italy GSA 17 amounted to 292 thousand days in 2013, with a decrease of 21% compared to 2012. An in-depth analysis of fishing activity by fishing gear shows that the decrease in activity is essentially due to small-scale fishing vessels and purse seiners.

The fishing sector employed around 7 thousand workers in 2013. Small-scale fishing is the most relevant sector from a social and job-related point of view, followed by trawling and dredgers. The reduced level of fishing activity, but also the decline in the physical and economic productivity of vessels contributed to a decline in the economy of fishing enterprises and thus of workers. The annual cost of labour per worker, which amounts to the gross earning of the crew, fell by 40% both on an annual and a monthly basis.

In 2013 the Italian fleet in GSA 17 produced 78 thousand tons of seafood generating 227 million euro. Results are down 12% in quantity and 17% in value since 2012, following the downward trend of the last few years. The decline in 2013 took place in line with the reduction of activity of the fleet. The average catch per vessel and revenue dropped considerably, and particularly the annual average catch per vessel, which fell below 24 tons – minus 10% compared to 2009.

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	3,386	3,357	3,406	3,339	3,211	-3.8%
Average vessel age	26.5	26.9	29.4	27.5	29.4	6.8%
GT (thousand tonnes)	54.4	54.2	54.9	53.4	50.2	-5.9%
Engine power (thousand kW)	329.1	329.8	336.4	332.1	319.7	-3.7%
<b>Employment</b>						
Total fishers employed	6,982	7,157	6,957	6,440	6,847	6.3%
Full Time Equivalent	3,984.2	4,283.5	3,865.0	4,639.9	4,363.0	-6.0%
Average wage per fisherman (thousand €)	16.1	13.0	11.5	10.9	9.5	-13.0%
<b>Fishing effort</b>						
Days at sea	407,792	394,290	396,214	370,517	291,825	-21.2%
Energy consumption (million litres)	120.2	112.5	109.2	92.5	81.5	-11.9%
Fuel consumption per kg landed (litre/kg)	1.3	1.2	1.4	1.0	1.0	0.2%
<b>Production</b>						
Landings weight (thousand tonnes)	91.8	92.0	79.9	88.4	77.7	-12.1%
Landings value (million €)	361.4	322.5	307.4	275.6	226.9	-17.7%

VARIABLE (million €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	361.4	322.5	307.4	275.6	226.9	-17.7%
Direct subsidies	3.4	6.3	0.0	4.6		
<b>Costs</b>						
Crew wages	112.4	93.2	80.3	70.4	65.2	-7.5%
Energy costs	56.0	66.2	80.8	74.3	61.1	-17.8%
Repair and maintenance costs	12.6	12.4	12.2	12.9	10.9	-15.1%
Other variable costs	34.4	31.5	27.9	26.5	10.5	-60.5%
Other fixed costs	11.3	11.1	10.8	11.5	8.4	-26.7%
Opportunity costs of capital	7.7	5.3	5.3	4.5	8.0	77.1%
Depreciation costs	51.0	51.7	49.6	47.1	42.7	-9.2%
<b>Economic indicators</b>						
GVA	247.0	201.3	175.8	150.4	136.0	-9.6%
Gross profit	134.6	108.1	95.4	80.0	70.8	-11.4%
Net profit	75.9	51.0	40.5	28.4	20.1	-29.3%
<b>Capital value</b>						
Fleet depreciated replacement value	221.6	222.7	216.5	205.4	185.8	-9.5%
<b>Profitability</b>						
Net profit margin (%)	21%	16%	13%	10%	9%	-12.7%
RoFTA (%)	38%	25%	21%	16%	15%	-5.6%
GVA per fisherman (thousand €)	35.4	28.1	25.3	23.4	19.9	-14.9%

Source: Mipaaf - Italian National Program for Data Collection

The Italian fishing sector in GSA 17 continued to record considerably negative performances in 2013; the revenue produced by the seafood sector has consistently declined since 2009. The added value produced by the fleet in the last year was 136 million euro, of which 65 million were allocated in salaries and the rest (70 mill euro) represented the gross profits of the sector.

The proportion of intermediate costs over revenues amounted to 69% against 62% in 2009. Induced by lower production costs, the influence of gross profit on revenues declined to 31%, the worst since 2009. The general contraction of the economy in this sector, due to a rise in intermediate consumptions and a fall in revenue, had negative repercussions on labour cost: only 28% of revenue was allocated to crew payments in the last year, compared to 31% in 2009.

Overall, in 2013 the costs of fuel amounted to 61 million euro, opposed to 57M€ in 2009. In unit terms, the average fuel expenses per vessel increased by 30% during the period under analysis and its weight on the overall costs rose from 25% in 2009 to 39% in 2013.

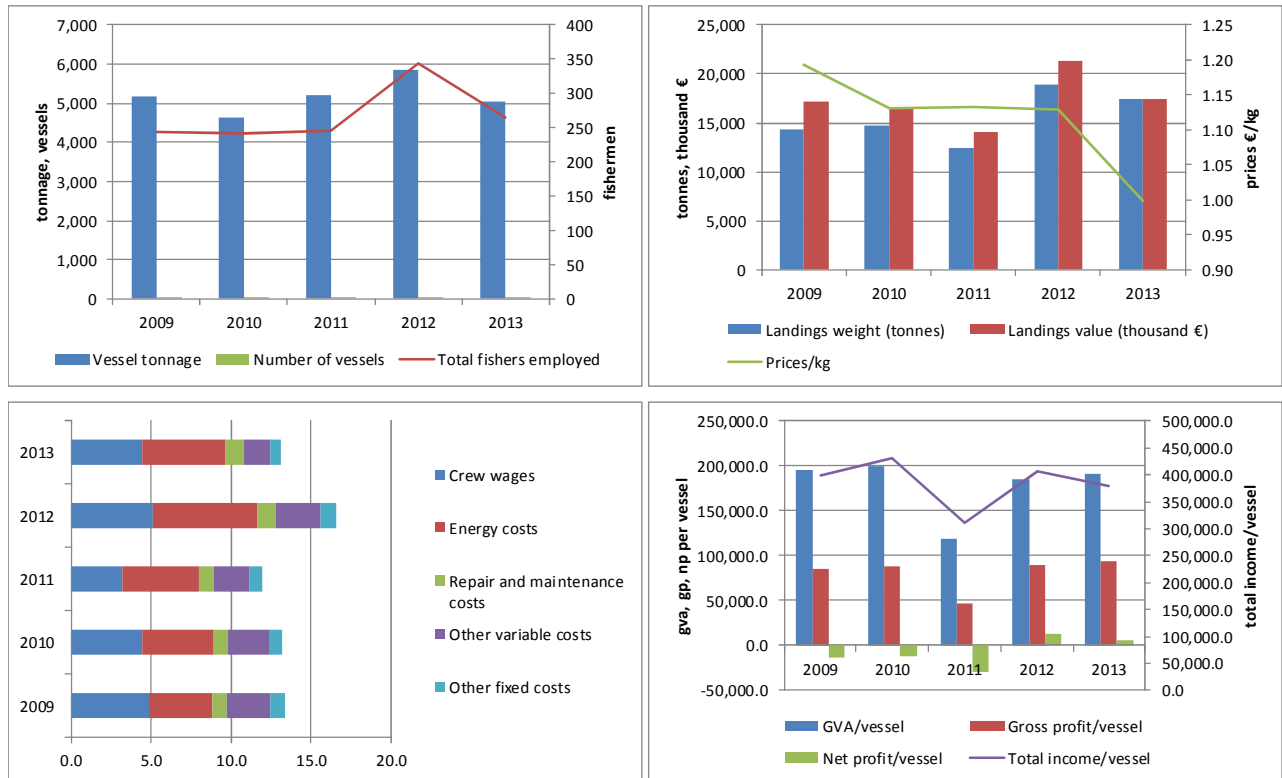
## ITA GSA 17 pelagic trawlers 24-40 m

<b>COUNTRY</b>	ITA
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	TM_VL2440

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	44	40	45	54	46	-14.4%
Average vessel age	20.0	21.0	24.3	20.1	18.0	-10.4%
GT (thousand tonnes)	5.2	4.6	5.2	5.8	5.0	-14.0%
Engine power (thousand kW)	21.0	19.2	21.0	23.5	20.2	-14.1%
<b>Employment</b>						
Total fishers employed	243	241	246	344	264	-23.3%
Full Time Equivalent	168.7	150.9	118.0	250.0	187.0	-25.2%
Average wage per fisherman (thousand €)	20.0	18.3	13.1	14.8	17.0	14.7%
<b>Fishing effort</b>						
Days at sea	7,438	6,810	5,820	8,041	7,674	-4.6%
Energy consumption (million litres)	8.4	7.5	6.5	8.1	6.8	-15.9%
Fuel consumption per kg landed (litre/kg)	0.6	0.5	0.5	0.4	0.4	-8.7%
<b>Production</b>						
Landings weight (thousand tonnes)	14.4	14.7	12.4	18.9	17.5	-7.8%
Landings value (million €)	17.2	16.6	14.0	21.4	17.4	-18.5%

VARIABLE (million €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	17.2	16.6	14.0	21.4	17.4	-18.5%
Direct subsidies	0.4	0.4		0.4		
<b>Costs</b>						
Crew wages	4.9	4.4	3.2	5.1	4.5	-12.0%
Energy costs	3.9	4.4	4.8	6.5	5.1	-21.5%
Repair and maintenance costs	1.0	0.9	0.9	1.1	1.2	5.1%
Other variable costs	2.7	2.6	2.2	2.8	1.7	-40.9%
Other fixed costs	0.9	0.8	0.8	0.9	0.6	-33.8%
Opportunity costs of capital	0.6	0.4	0.4	0.4	0.7	71.3%
Depreciation costs	3.7	3.5	3.1	3.7	3.4	-9.5%
<b>Economic indicators</b>						
GVA	8.7	7.9	5.4	9.9	8.8	-11.3%
Gross profit	3.8	3.5	2.1	4.8	4.3	-10.6%
Net profit	-0.6	-0.4	-1.3	0.7	0.3	-63.2%
<b>Capital value</b>						
Fleet depreciated replacement value	17.9	16.7	15.4	18.6	16.2	-12.5%
<b>Profitability</b>						
Net profit margin (%)	-3%	-3%	-9%	3%	2%	-54.1%
RoFTA (%)	0%	0%	-6%	6%	6%	-1.8%
GVA per fisherman (thousand €)	35.6	32.7	21.8	28.8	33.3	15.6%

Source: Mipaaf - Italian National Program for Data Collection



Source: Mipaaf - Italian National Program for Data Collection

In 2013, the pelagic trawlers 24-40 m operating in GSA 17 consisted of 46 vessels with a total tonnage of 5 thousand tons and around 20 thousand kW. The number of pelagic trawlers decreased by 14% in 2013 compared to 2012. The tonnage and the total engine power decreased both by 14%.

The number of fishermen employed in this fleet was equal, in 2013 to 264 units, with a decrease of 80 units compared to the previous year. This means around 6 person working on board of each vessel, in 2013. The average wage for crew members working on board of these vessels has been equal, in 2013, to 17 thousand €.

The total production of this fleet segment was equal, in 2013, to 17.5 thousand tons. As far as the value of production, in 2013 the income from landings of this fleet segment was equal to around 17.4 million €, decreasing of -18% compared to 2012.

Total operating costs incurred by the pelagic trawlers 24-40 m were equal to around €13.1 million. Crew cost and fuel costs, the two major fishing items, were equal to around €4.5 and €5.1 million, respectively, in 2013. If compared to 2012, all the operational costs show a decrease, with the exception of repair and maintenance costs.

The GVA of the segment in 2013 has been equal to €8.8 million, with a decrease of 11% compared to 2012. The net profit of the segment for the year 2012 has been equal to around €0.3 million (-63% compared to 2012). This negative trend is linked with the decrease in income landings.

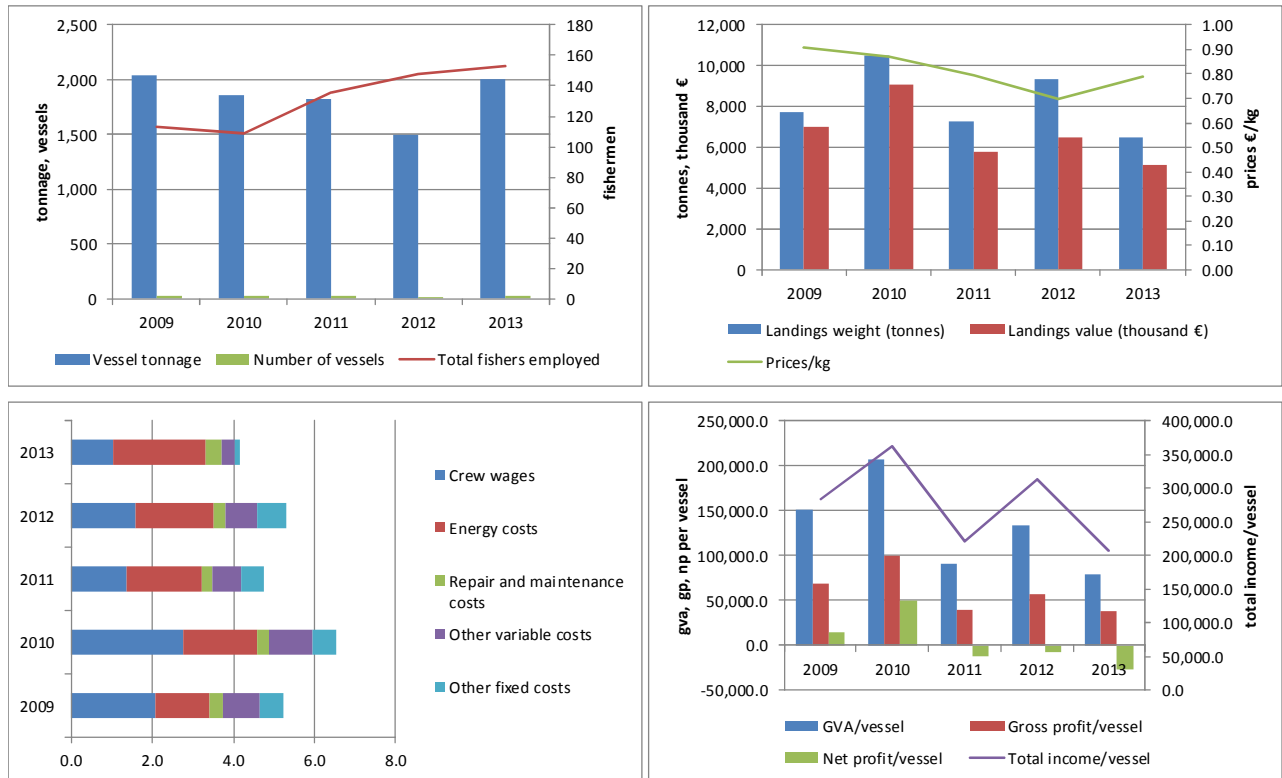
## ITA GSA 17 pelagic trawlers 18-24 m

<b>COUNTRY</b>	ITA
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	TM_VL1824

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	25	25	26	21	25	17.9%
Average vessel age	25.0	27.0	28.5	26.7	27.0	1.1%
GT (thousand tonnes)	2.0	1.9	1.8	1.5	2.0	33.2%
Engine power (thousand kW)	8.1	8.4	8.7	7.5	8.8	17.3%
<b>Employment</b>						
Total fishers employed	113	109	135	148	153	3.4%
Full Time Equivalent	80.1	85.4	91.0	115.3	108.0	-6.3%
Average wage per fisherman (thousand €)	18.4	25.2	10.0	10.8	6.7	-37.8%
<b>Fishing effort</b>						
Days at sea	3,905	4,247	3,056	3,571	3,449	-3.4%
Energy consumption (million litres)	2.9	3.1	2.5	2.4	3.1	27.5%
Fuel consumption per kg landed (litre/kg)	0.4	0.3	0.3	0.3	0.5	84.2%
<b>Production</b>						
Landings weight (thousand tonnes)	7.7	10.5	7.3	9.3	6.5	-30.8%
Landings value (million €)	7.0	9.1	5.8	6.5	5.1	-21.2%

VARIABLE (million €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	7.0	9.1	5.8	6.5	5.1	-21.2%
Direct subsidies	0.2	0.2		0.1		
<b>Costs</b>						
Crew wages	2.1	2.8	1.4	1.6	1.0	-35.7%
Energy costs	1.3	1.8	1.8	1.9	2.3	19.0%
Repair and maintenance costs	0.3	0.3	0.3	0.3	0.4	44.3%
Other variable costs	0.9	1.1	0.7	0.8	0.3	-61.5%
Other fixed costs	0.6	0.6	0.5	0.7	0.2	-77.0%
Opportunity costs of capital	0.2	0.1	0.1	0.1	0.3	106.3%
Depreciation costs	1.2	1.2	1.2	1.2	1.3	7.7%
<b>Economic indicators</b>						
GVA	3.8	5.3	2.4	2.8	2.0	-29.8%
Gross profit	1.7	2.5	1.0	1.2	0.9	-22.1%
Net profit	0.4	1.3	-0.3	-0.2	-0.7	
<b>Capital value</b>						
Fleet depreciated replacement value	4.8	4.9	5.1	5.6	5.9	5.4%
<b>Profitability</b>						
Net profit margin (%)	5%	14%	-5%	-2%	-13%	
RoFTA (%)	11%	28%	-4%	-1%	-7%	
GVA per fisherman (thousand €)	33.8	48.5	17.5	18.9	12.8	-32.1%

Source: Mipaaf - Italian National Program for Data Collection



Source: Mipaaf - Italian National Program for Data Collection

In 2013 the fleet pelagic trawlers 18-24 m operating in GSA 17 consisted of 25 registered vessels, with a total gross tonnage of 2 thousand tons and a total engine power of 8.8 thousand kW.

Average days at sea per vessel have been around 138, with an decrease of 19% compared to the previous year. Total employment in 2013 was estimated at 153 fishermen, which corresponds to 6 units employed per vessel.

Total volume of landings amounted to €6.5 thousand tons, with a decrease of 30% compared with 2012.

In 2013, the total landings income was almost €5.1 million and gross value added amounted to €2 million.

Energy costs were the main expenditures incurred by this fleet segment, representing 55% of total operative costs. Crew costs represented 23% of total expenditures. The average wage per fisherman is estimated at 7 thousand euro.

This fleet segment generated a gross profit of around 0.9 million euro, that is lower compared with 2012 (-22%), and the trend over the whole period is highly negative (in 2009 the gross profit was estimated at 1.7 million million €).

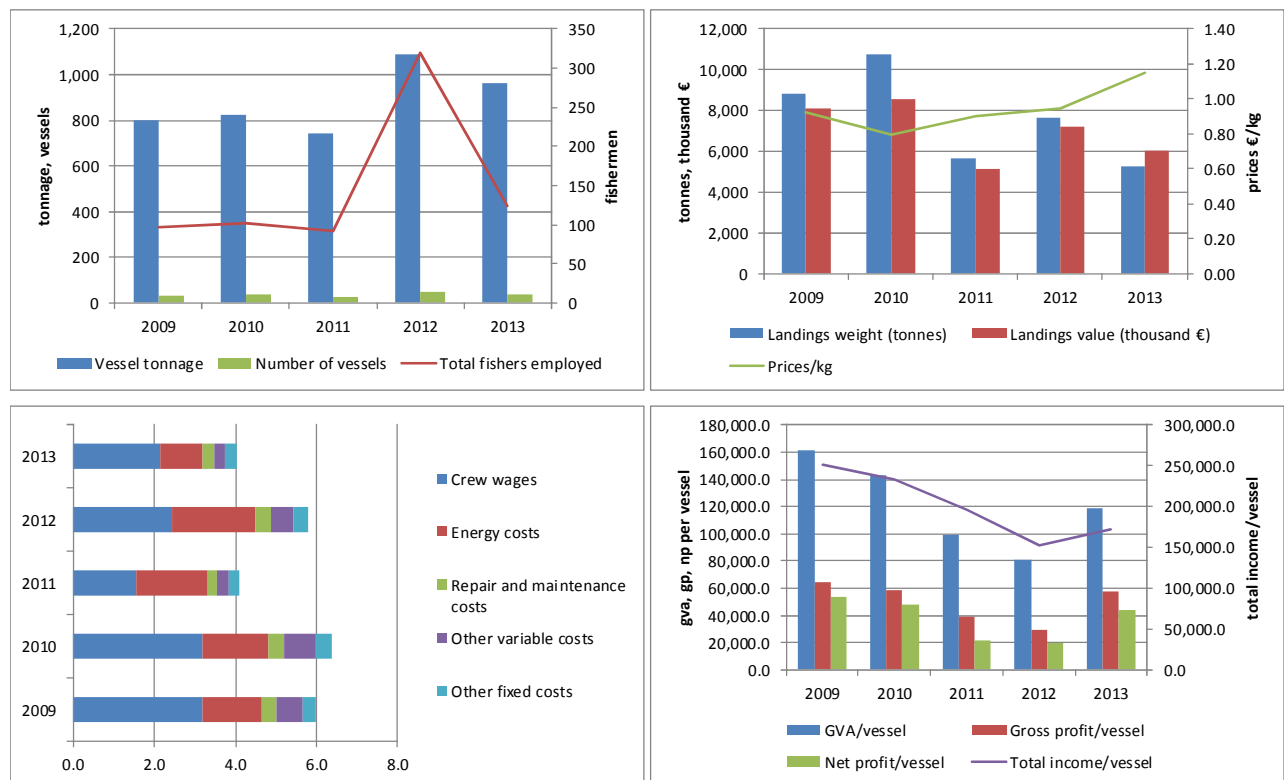
## ITA GSA 17 pelagic trawlers 12-18 m

<b>COUNTRY</b>	ITA
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	TM_VL1218

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	33	37	26	47	35	-25.8%
Average vessel age	18.0	19.0	18.7	23.9	25.0	4.6%
GT (thousand tonnes)	0.8	0.8	0.7	1.1	1.0	-11.7%
Engine power (thousand kW)	5.0	5.7	4.4	8.1	6.5	-19.9%
<b>Employment</b>						
Total fishers employed	97	102	92	170	124	-27.1%
Full Time Equivalent	73.5	63.5	21.0	116.7	88.0	-24.6%
Average wage per fisherman (thousand €)	32.8	31.1	17.1	14.3	17.3	21.3%
<b>Fishing effort</b>						
Days at sea	6,036	5,762	3,075	5,225	4,293	-17.8%
Energy consumption (million litres)	3.2	2.8	2.3	2.6	1.4	-45.8%
Fuel consumption per kg landed (litre/kg)	0.4	0.3	0.4	0.3	0.3	-21.4%
<b>Production</b>						
Landings weight (thousand tonnes)	8.8	10.7	5.7	7.6	5.3	-31.0%
Landings value (million €)	8.1	8.6	5.1	7.2	6.0	-15.9%

VARIABLE (million €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	8.1	8.6	5.1	7.2	6.0	-15.9%
Direct subsidies	0.1	0.2		0.0		
<b>Costs</b>						
Crew wages	3.2	3.2	1.6	2.4	2.1	-11.5%
Energy costs	1.5	1.7	1.7	2.1	1.0	-49.4%
Repair and maintenance costs	0.4	0.4	0.3	0.4	0.3	-20.0%
Other variable costs	0.6	0.8	0.3	0.6	0.2	-56.2%
Other fixed costs	0.3	0.4	0.3	0.4	0.3	-19.1%
Opportunity costs of capital	0.1	0.0	0.0	0.0	0.1	87.9%
Depreciation costs	0.3	0.4	0.4	0.4	0.4	-3.0%
<b>Economic indicators</b>						
GVA	5.3	5.4	2.6	3.8	4.2	8.9%
Gross profit	2.1	2.2	1.0	1.4	2.0	44.4%
Net profit	1.8	1.8	0.6	0.9	1.5	63.8%
<b>Capital value</b>						
Fleet depreciated replacement value	1.6	1.7	1.9	1.9	1.8	-4.0%
Investments						
<b>Profitability</b>						
Net profit margin (%)	21%	20%	11%	13%	25%	95.9%
RoFTA (%)	115%	105%	32%	52%	89%	71.7%
GVA per fisherman (thousand €)	54.8	52.6	28.2	22.5	33.5	49.3%

Source: Mipaaf - Italian National Program for Data Collection



Source: Mipaaf - Italian National Program for Data Collection

In 2013 the overall fleet of pelagic trawlers 12-18 m operating in GSA 17 consisted of 35 registered vessels, with a combined gross tonnage of 1 thousand tons and an installed engine power of 6.5 thousand kW.

The size of this fleet segment decreased compared with the previous year. In 2013, average days at sea per vessel have been around 123.

This fleet segment landed 5.3 thousand tons of production, which corresponds to 6 million €.

Total operating costs incurred were equal to around €3.9 million. Crew cost and fuel costs, the two major fishing items, were equal to around €2.1 and €1 million, respectively, in 2013. If compared to 2012, all the operational costs show a decrease.

The GVA of the segment in 2013 has been equal to €4.2 million, with an increase of 9% compared to 2012. The net profit of the segment for the year 2013 has been equal to around €1.5 million, equals to 43 thousand € per vessel). The positive trend in profitability indicators is linked with the decrease in operative costs.



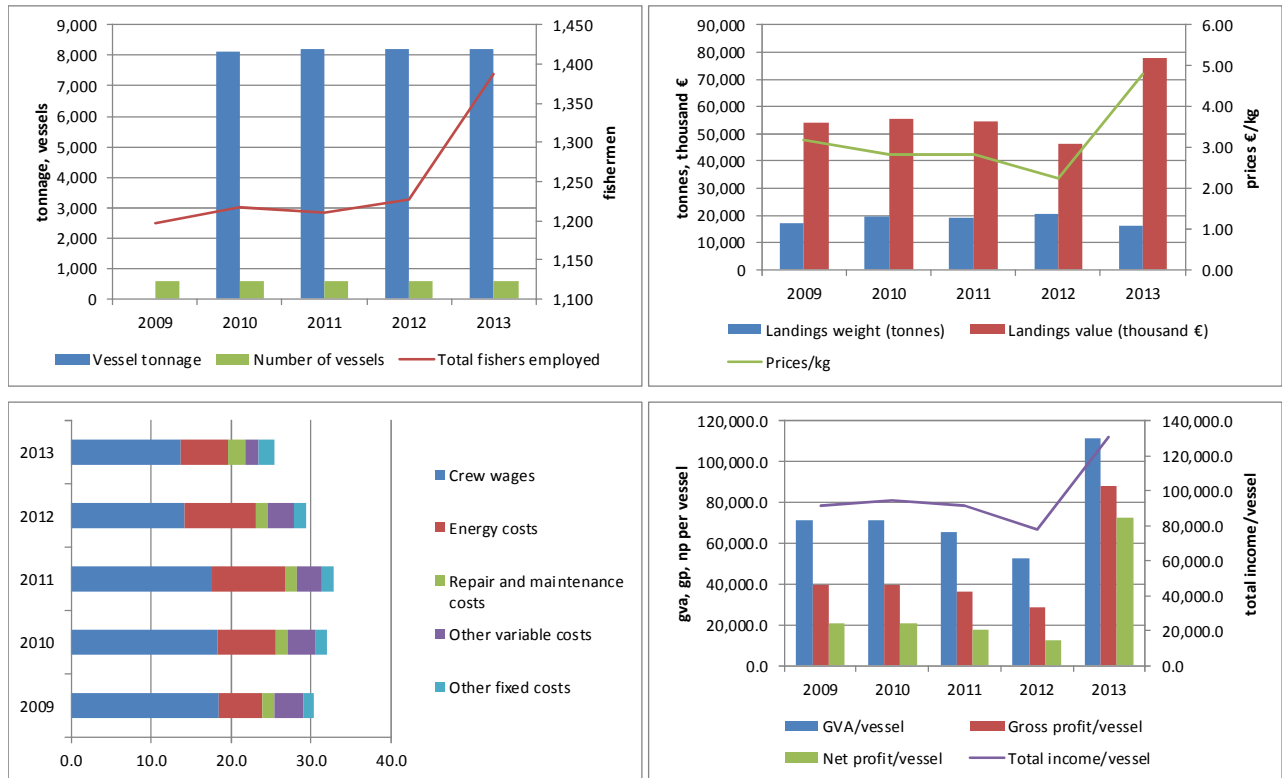
## ITA GSA 17 dredgers -12-18 m

<b>COUNTRY</b>	ITA
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	DRB_VL1218

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	593	587	594	591	593	0.3%
Average vessel age	23.0	24.0	24.2	25.2	26.0	3.2%
GT (thousand tonnes)		8.1	8.2	8.2	8.2	0.2%
Engine power (thousand kW)	63.9	63.6	64.4	64.0	64.4	0.6%
<b>Employment</b>						
Total fishers employed	1,197	1,217	1,211	1,227	1,388	13.1%
Full Time Equivalent	205.2	244.7	283.0	270.1	330.0	22.2%
Average wage per fisherman (thousand €)	15.5	15.1	14.4	11.5	9.8	-14.7%
<b>Fishing effort</b>						
Days at sea	49,988	52,790	50,574	48,514	44,508	-8.3%
Energy consumption (million litres)	11.8	12.4	12.5	11.2	8.0	-28.5%
Fuel consumption per kg landed (litre/kg)	0.7	0.6	0.6	0.5	0.5	-9.4%
<b>Production</b>						
Landings weight (thousand tonnes)	17.0	19.6	19.3	20.5	16.2	-21.1%
Landings value (million €)	54.1	55.4	54.3	46.3	77.7	67.7%

VARIABLE (million €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	54.1	55.4	54.3	46.3	77.7	67.7%
Direct subsidies		0.1				
<b>Costs</b>						
Crew wages	18.5	18.3	17.5	14.1	13.6	-3.5%
Energy costs	5.5	7.3	9.2	9.0	6.0	-33.3%
Repair and maintenance costs	1.4	1.4	1.5	1.5	2.2	46.0%
Other variable costs	3.6	3.5	3.2	3.3	1.6	-50.8%
Other fixed costs	1.4	1.4	1.4	1.4	1.9	34.4%
Opportunity costs of capital	1.4	1.0	1.0	0.8	1.4	71.9%
Depreciation costs	9.8	10.3	9.9	8.9	7.8	-13.0%
<b>Economic indicators</b>						
GVA	42.2	41.8	39.0	31.1	66.0	
Gross profit	23.7	23.5	21.5	17.0	52.3	
Net profit	12.4	12.2	10.6	7.3	43.2	
<b>Capital value</b>						
Fleet depreciated replacement value	41.1	42.0	40.5	36.5	32.1	-12.2%
<b>Profitability</b>						
Net profit margin (%)	23%	22%	20%	16%	56%	
RoFTA (%)	34%	31%	29%	22%	139%	
GVA per fisherman (thousand €)	35.2	34.4	32.2	25.4	47.5	87.3%

Source: Mipaaf - Italian National Program for Data Collection



Source: Mipaaf - Italian National Program for Data Collection

In 2013, 593 vessels in GSA 17 operated with dredgers. The size of this fleet segment remained stable between 2013 and 2012.

Average days at sea per vessel have been around 75, with an increase of 13% compared to the previous year. Total employment in 2013 was estimated at 1388 fishermen, which corresponds to 2.3 units employed per vessel.

Total volume of landings amounted to 16.2 thousand tons, with a decrease of 21% compared with previous year. In 2013, the total landings income was almost €77 million and gross value added amounted to €66 million.

Labour cost was the main expenditure incurred by dredgers, representing 53% of total operative costs. The average wage per fisherman is estimated at around 10 thousand euro.

This fleet segment generated a gross profit of around 52 million euro per vessel. If we count for the capital costs, the segment generated a net profit of 43 million €.

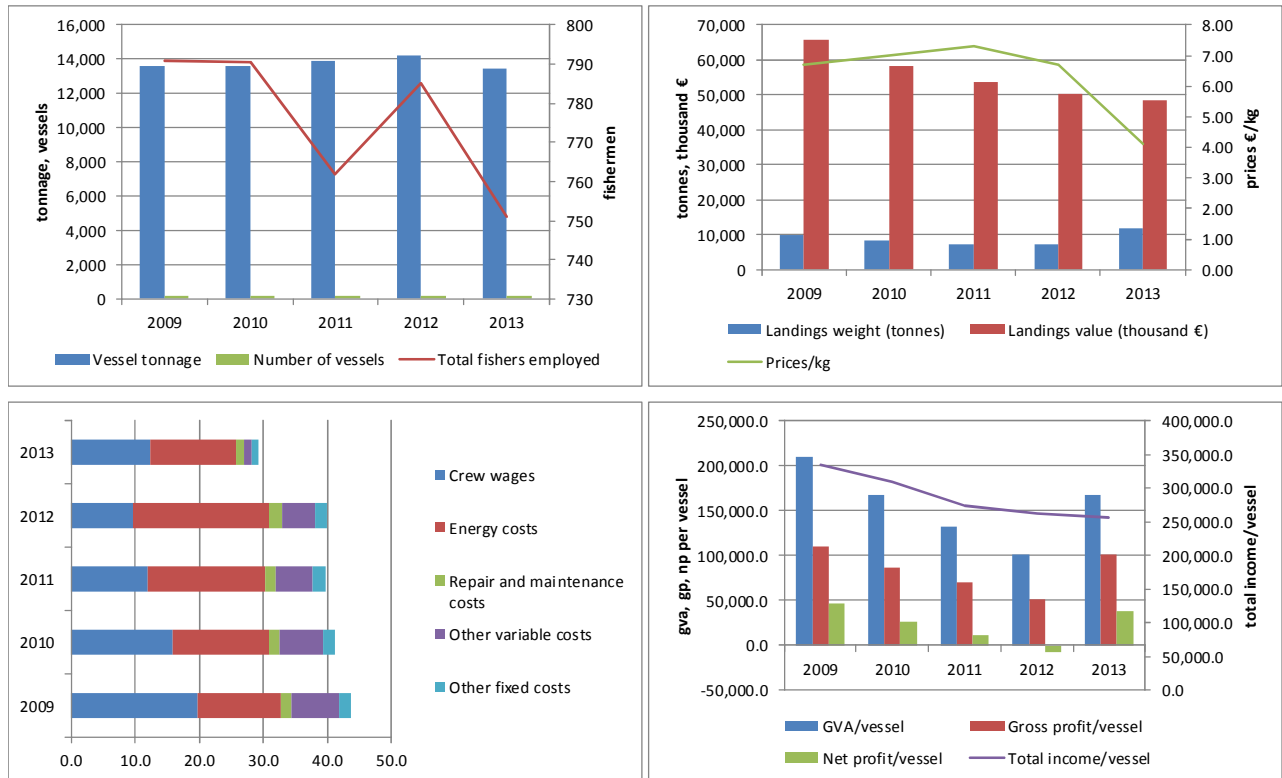
## ITA GSA 17 demersal trawlers 18-24 m

<b>COUNTRY</b>	ITA
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	DTS_VL1824

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	200	194	196	198	189	-4.8%
Average vessel age	25.0	25.0	25.0	26.1	26.0	-0.4%
GT (thousand tonnes)	13.6	13.6	13.9	14.2	13.4	-5.6%
Engine power (thousand kW)	53.8	54.0	54.3	56.8	57.6	1.3%
<b>Employment</b>						
Total fishers employed	791	790	762	785	751	-4.3%
Full Time Equivalent	694.4	717.2	611.0	776.9	601.0	-22.6%
Average wage per fisherman (thousand €)	25.1	20.0	15.8	12.4	16.5	33.1%
<b>Fishing effort</b>						
Days at sea	28,950	27,701	26,889	26,427	23,966	-9.3%
Energy consumption (million litres)	27.5	25.8	24.6	26.3	17.8	-32.3%
Fuel consumption per kg landed (litre/kg)	2.8	3.1	3.3	3.5	1.5	-56.8%
<b>Production</b>						
Landings weight (thousand tonnes)	9.8	8.3	7.3	7.5	11.7	56.9%
Landings value (million €)	65.9	58.1	53.7	50.2	48.4	-3.6%

VARIABLE (million €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	65.9	58.1	53.7	50.2	48.4	-3.6%
Direct subsidies	1.0	1.8		1.7		
<b>Costs</b>						
Crew wages	19.8	15.8	12.0	9.7	12.4	27.3%
Energy costs	12.8	15.2	18.2	21.1	13.3	-36.8%
Repair and maintenance costs	1.7	1.7	1.7	2.1	1.3	-35.4%
Other variable costs	7.3	6.7	5.9	5.2	1.2	-76.9%
Other fixed costs	2.0	2.0	1.9	1.9	0.9	-52.3%
Opportunity costs of capital	1.7	1.2	1.2	1.1	2.0	82.3%
Depreciation costs	10.9	10.7	10.4	10.7	10.0	-6.3%
<b>Economic indicators</b>						
GVA	41.9	32.6	26.0	20.0	31.6	58.4%
Gross profit	22.1	16.9	14.0	10.2	19.2	88.1%
Net profit	9.5	5.0	2.4	-1.5	7.3	
<b>Capital value</b>						
Fleet depreciated replacement value	48.7	49.2	48.2	48.6	45.3	-6.9%
<b>Profitability</b>						
Net profit margin (%)	14%	8%	4%	-3%	15%	
RoFTA (%)	23%	13%	7%	-1%	20%	
GVA per fisherman (thousand €)	53.0	41.3	34.1	25.4	42.1	65.6%

Source: Mipaaf - Italian National Program for Data Collection



Source: Mipaaf - Italian National Program for Data Collection

In 2013 the fleet segment demersal trawlers 18-24 m operating in GSA 17 consisted of 189 registered vessels, with a combined gross tonnage of 13 thousand tons and an installed engine power of 57.6 thousand kW.

The number of vessels decreased by 4.8% in 2013 compared to 2012. The tonnage decreased by 5.6% and the total engine power increased by 1.3% kW.

The number of fishermen was equal to 751 units, which corresponds to 4 fishermen per vessel, confirming the labour intensity of this type of fishery.

Total production was equal to 11.7 thousand tons, which corresponds to 48.4 million €. In 2013 the production increased compared to 2012 in volume (+56%) and it decreased in value (-3%). The reason was due to the reduction in average price which passed from 6.6 €/kg in 2012 to 4.1 €/kg in 2013.

In 2013, around 751 fishermen were employed in this fleet segment, with an average wage of 16.5 thousand €.

This fleet segment was still profitable in 2013, with a reported gross profit of around 19 million €. However the trend in economic indicators over the last 4 years is negative.

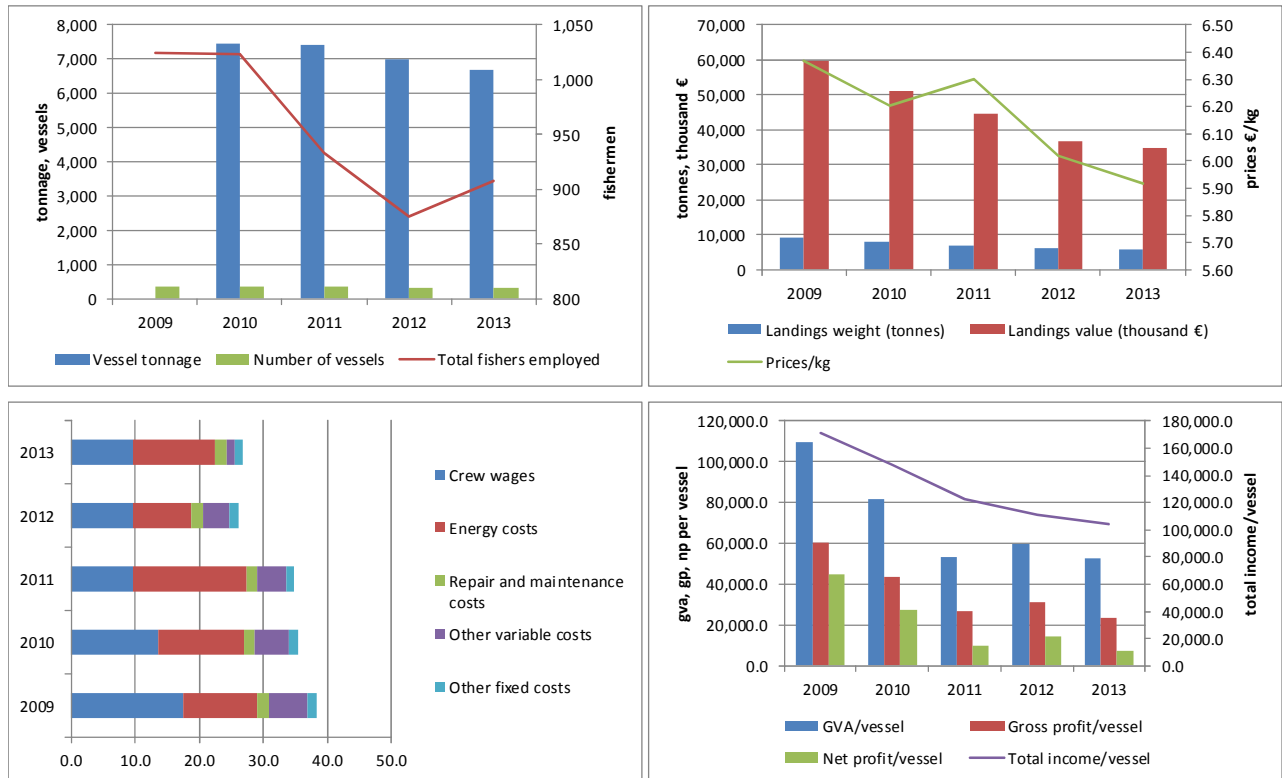
## ITA GSA 17 demersal trawlers 12-18 m

<b>COUNTRY</b>	ITA
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	DTS_VL1218

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	356	358	366	343	333	-2.9%
Average vessel age	28.0	28.0	27.2	28.2	28.0	-0.7%
GT (thousand tonnes)		7.5	7.4	7.0	6.7	-4.3%
Engine power (thousand kW)	50.9	51.7	52.1	48.6	48.2	-1.0%
<b>Employment</b>						
Total fishers employed	1,024	1,023	933	875	908	3.8%
Full Time Equivalent	648.8	653.1	542.0	646.1	727.0	12.5%
Average wage per fisherman (thousand €)	17.1	13.3	10.3	11.1	10.7	-3.5%
<b>Fishing effort</b>						
Days at sea	48,522	43,482	41,361	34,847	34,234	-1.8%
Energy consumption (million litres)	24.9	22.6	23.9	11.2	17.0	52.3%
Fuel consumption per kg landed (litre/kg)	2.7	2.7	3.4	1.8	2.9	59.1%
<b>Production</b>						
Landings weight (thousand tonnes)	9.4	8.2	7.1	6.1	5.9	-4.3%
Landings value (million €)	59.7	51.1	44.8	36.9	34.7	-6.0%

VARIABLE (million €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	59.7	51.1	44.8	36.9	34.7	-6.0%
Direct subsidies	1.2	1.9		1.3		
<b>Costs</b>						
Crew wages	17.5	13.6	9.6	9.7	9.7	0.1%
Energy costs	11.6	13.3	17.7	9.0	12.8	42.1%
Repair and maintenance costs	1.8	1.8	1.8	1.9	1.8	-5.4%
Other variable costs	6.0	5.3	4.5	4.0	1.3	-68.3%
Other fixed costs	1.4	1.4	1.4	1.6	1.3	-14.6%
Opportunity costs of capital	0.7	0.5	0.6	0.5	0.8	71.6%
Depreciation costs	4.8	5.4	5.6	5.2	4.4	-14.2%
<b>Economic indicators</b>						
GVA	38.9	29.2	19.5	20.4	17.5	-14.2%
Gross profit	21.4	15.6	9.9	10.7	7.8	-27.1%
Net profit	15.9	9.7	3.7	5.0	2.5	-50.0%
<b>Capital value</b>						
Fleet depreciated replacement value	20.5	22.6	23.2	21.9	19.2	-12.3%
<b>Profitability</b>						
Net profit margin (%)	26%	18%	8%	13%	7%	-45.0%
RoFTA (%)	81%	45%	19%	25%	17%	-30.8%
GVA per fisherman (thousand €)	38.0	28.6	20.9	23.3	19.3	-17.3%

Source: Mipaaf - Italian National Program for Data Collection



Source: Mipaaf - Italian National Program for Data Collection

In 2013 the overall fleet of demersal trawlers 12-18 m operating in GSA 17 consisted of 333 registered vessels, with a combined gross tonnage of 6.7 thousand tons and an installed engine power of 48.2 thousand kW.

The size of this fleet segment remained almost stable over the last three years. In 2013, average days at sea per vessel have been around 103, reporting a decrease if compared with the activity level of previous year (-1.5%).

Total employment in 2013 was estimated at 908 fishermen. The level of employment slightly increased between 2012 and 2013 by 3.8%.

Total production was equal to 5.9 thousand tons, while in 2012 it was equal to 6.1 thousand tons.

Total landing income in 2013 was equal to 34.7 million €, with a reduction of 6% compared to 2012, mainly due to the decrease in volume of production. The average production price remained stable (around 6 €/kg).

In 2013, this fleet segment was profitable, with a reported gross profit of around €7.8 million and net profit of €2.5 million. Profitability decreased between 2012 and 2013 because of the decrease in the value of landings.

In 2013, the demersal trawlers 12-18 m in GSA 17 had an estimated (depreciated) replacement value of €19 million. Net profit margin has highly decreased over the last years.

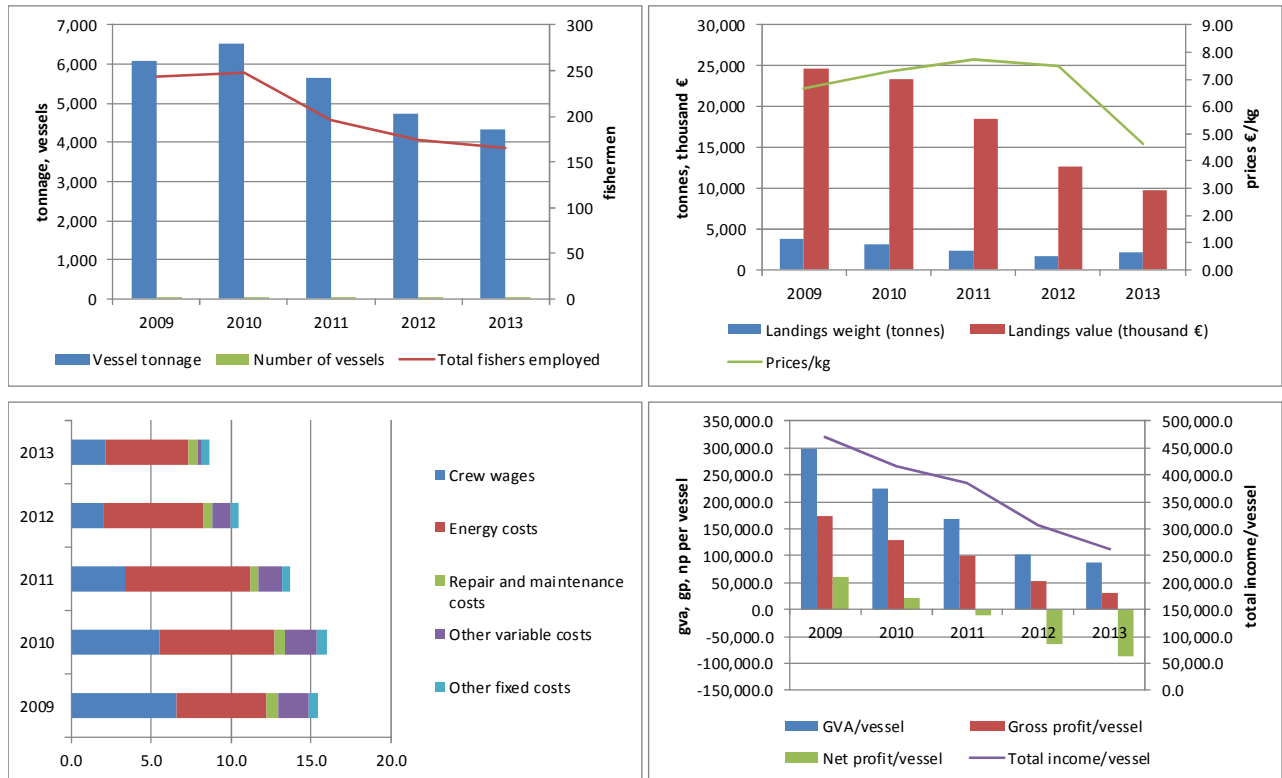
## ITA GSA 17 demersal trawlers 24-40 m

<b>COUNTRY</b>	ITA
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	DTS_VL2440

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	53	57	48	43	38	-12.3%
Average vessel age	20.0	22.0	19.1	22.5	22.0	-2.2%
GT (thousand tonnes)	6.1	6.5	5.6	4.7	4.3	-8.2%
Engine power (thousand kW)	20.2	21.9	19.2	16.0	13.8	-13.6%
<b>Employment</b>						
Total fishers employed	243	247	195	174	166	-4.6%
Full Time Equivalent	205.7	220.6	151.0	138.7	133.0	-4.1%
Average wage per fisherman (thousand €)	27.2	22.3	17.1	12.0	12.9	7.0%
<b>Fishing effort</b>						
Days at sea	7,442	7,675	6,653	4,931	4,436	-10.0%
Energy consumption (million litres)	12.1	12.2	10.6	7.7	7.0	-9.6%
Fuel consumption per kg landed (litre/kg)	3.3	3.8	4.4	4.5	3.3	-27.4%
<b>Production</b>						
Landings weight (thousand tonnes)	3.7	3.2	2.4	1.7	2.1	24.5%
Landings value (million €)	24.7	23.3	18.5	12.7	9.8	-23.1%

VARIABLE (million €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	24.7	23.3	18.5	12.7	9.8	-23.1%
Direct subsidies	0.4	0.5		0.4		
<b>Costs</b>						
Crew wages	6.6	5.5	3.3	2.1	2.1	2.1%
Energy costs	5.6	7.2	7.8	6.2	5.2	-15.6%
Repair and maintenance costs	0.7	0.7	0.6	0.6	0.5	-5.7%
Other variable costs	2.0	1.9	1.5	1.1	0.3	-72.7%
Other fixed costs	0.6	0.6	0.5	0.5	0.5	-13.4%
Opportunity costs of capital	0.8	0.6	0.6	0.5	0.7	62.0%
Depreciation costs	5.1	5.6	4.8	4.6	3.7	-19.3%
<b>Economic indicators</b>						
GVA	15.8	12.9	8.2	4.4	3.3	-24.5%
Gross profit	9.2	7.4	4.8	2.3	1.2	-49.0%
Net profit	3.3	1.2	-0.5	-2.8	-3.3	18.6%
<b>Capital value</b>						
Fleet depreciated replacement value	23.5	24.8	22.9	20.7	17.1	-17.2%
<b>Profitability</b>						
Net profit margin (%)	13%	5%	-3%	-21%	-33%	58.5%
RoFTA (%)	17%	7%	0%	-11%	-15%	32.9%
GVA per fisherman (thousand €)	65.1	52.1	41.8	25.0	19.8	-20.8%

Source: Mipaaf - Italian National Program for Data Collection



Source: Mipaaf - Italian National Program for Data Collection

In 2013 the fleet demersal trawlers 24-40 m operating in GSA 17 consisted of 38 registered vessels, with a gross tonnage of 4.3 thousand tons and engine power of 13.8 thousand kW.

Total days at sea have been around 4.4 thousand, with a decrease of 10% compared to the previous year. Total employment in 2013 was estimated at 166 fishermen, which corresponds to 4.3 units employed per vessel.

Total volume of landings amounted to €2.1 thousand tons, with an increase of 24% compared with 2012.

In 2013, the total landings income was almost €9.8 million and gross value added amounted to €3.3 million.

Energy cost was the main expenditure incurred by this fleet segment, representing 60% of total operative costs. Crew costs represented 24% of total expenditures. The average wage per fisherman is estimated at 13 thousand euro.

This fleet segment generated a gross profit of around 1.2 million euro, that is lower compared with 2012 (-50%), and the trend over the whole period is highly negative (in 2009 the gross profit was estimated at 9.2 million €).



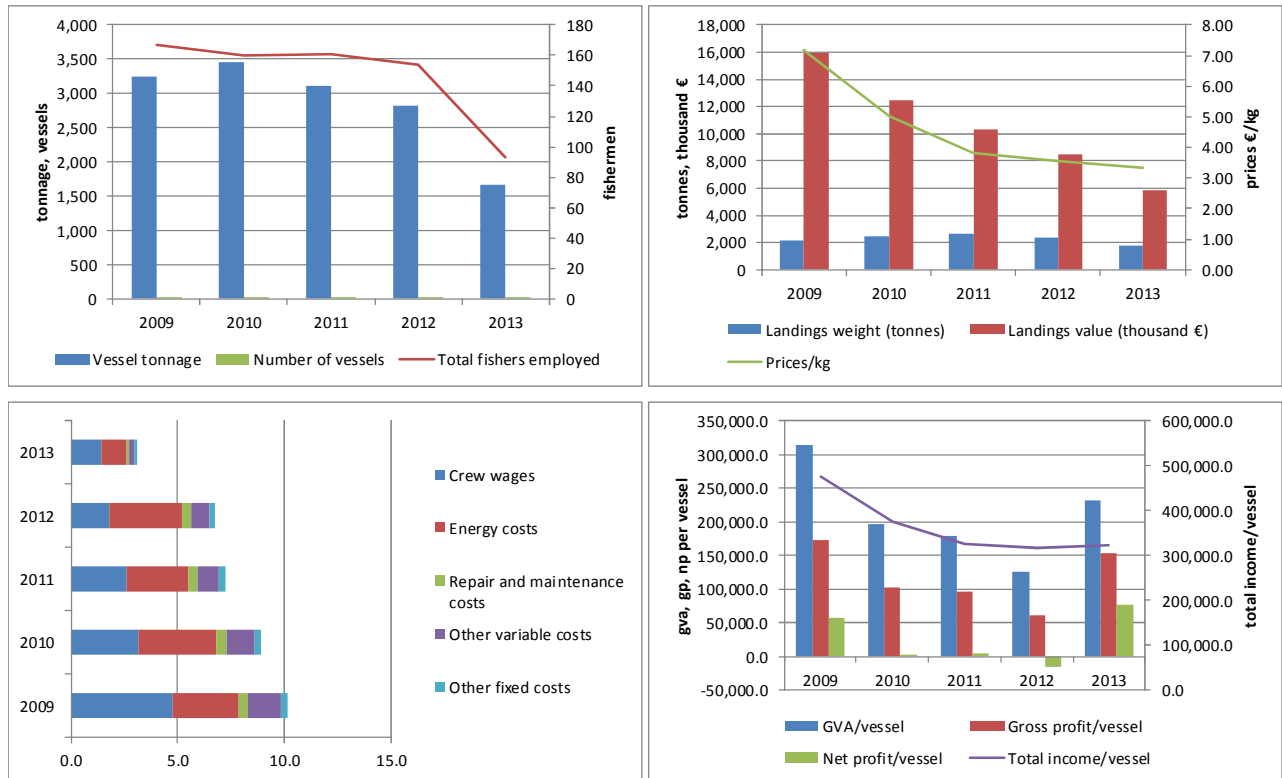
## ITA GSA 17 beam trawlers ("rapido") 24-40 m

<b>COUNTRY</b>	ITA
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	TBB_VL2440

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	33	34	32	27	18	-33.4%
Average vessel age	25.0	26.0	25.4	26.3	29.0	10.3%
GT (thousand tonnes)	3.2	3.5	3.1	2.8	1.7	-40.8%
Engine power (thousand kW)	12.8	13.6	12.2	11.0	6.1	-44.2%
<b>Employment</b>						
Total fishers employed	167	160	161	154	93	-39.6%
Full Time Equivalent	182.9	180.0	127.0	151.1	84.0	-44.4%
Average wage per fisherman (thousand €)	28.3	19.7	16.2	11.4	15.4	34.8%
<b>Fishing effort</b>						
Days at sea	5,327	5,108	3,794	3,488	1,913	-45.2%
Energy consumption (million litres)	6.7	6.2	3.9	4.2	1.6	-63.4%
Fuel consumption per kg landed (litre/kg)	3.0	2.5	1.4	1.8	0.9	-50.2%
<b>Production</b>						
Landings weight (thousand tonnes)	2.2	2.5	2.7	2.4	1.8	-26.4%
Landings value (million €)	15.9	12.4	10.3	8.5	5.9	-30.5%

VARIABLE (million €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	15.9	12.4	10.3	8.5	5.9	-30.5%
Direct subsidies		0.3	0.0	0.2		
<b>Costs</b>						
Crew wages	4.7	3.1	2.6	1.8	1.4	-18.6%
Energy costs	3.1	3.7	2.9	3.4	1.2	-65.8%
Repair and maintenance costs	0.5	0.5	0.4	0.4	0.1	-73.5%
Other variable costs	1.5	1.3	1.0	0.9	0.2	-72.7%
Other fixed costs	0.3	0.3	0.3	0.3	0.1	-56.8%
Opportunity costs of capital	0.5	0.3	0.3	0.2	0.2	12.4%
Depreciation costs	3.4	3.1	2.7	1.9	1.2	-38.7%
<b>Economic indicators</b>						
GVA	10.5	6.7	5.7	3.5	4.2	22.4%
Gross profit	5.8	3.5	3.1	1.7	2.8	64.6%
Net profit	1.9	0.1	0.1	-0.4	1.4	
<b>Capital value</b>						
Fleet depreciated replacement value	14.3	13.1	11.2	8.9	5.1	-42.6%
<b>Profitability</b>						
Net profit margin (%)	12%	1%	1%	-5%	24%	
RoFTA (%)	17%	3%	4%	-2%	32%	
GVA per fisherman (thousand €)	62.9	41.7	35.2	22.5	45.6	

Source: Mipaaf - Italian National Program for Data Collection



Source: Mipaaf - Italian National Program for Data Collection

In 2013 18 vessels in GSA 17 operated with beam trawlers 24-40 m. The size of this fleet segment decreased by 9 units between 2012 and 2013.

Average days at sea per vessel have been around 106, with a decrease of 17% compared to the previous year. Total employment in 2013 was estimated at 93 fishermen, which corresponds to 5 units employed per vessel.

Total volume of landings amounted to 1.8 thousand tons, with a decrease of 26% compared with previous year.

In 2013, the total landings income was almost €6 million and gross value added amounted to €4.2 million.

Labour cost was the main expenditure incurred by beam trawlers, representing 46% of total operative costs. The average wage per fisherman is estimated at 15 thousand euro.

This fleet segment generated a gross profit of around 155 thousand euro per vessel. But if we count for the capital costs, then the segment generated a net profit of 77 thousand €.

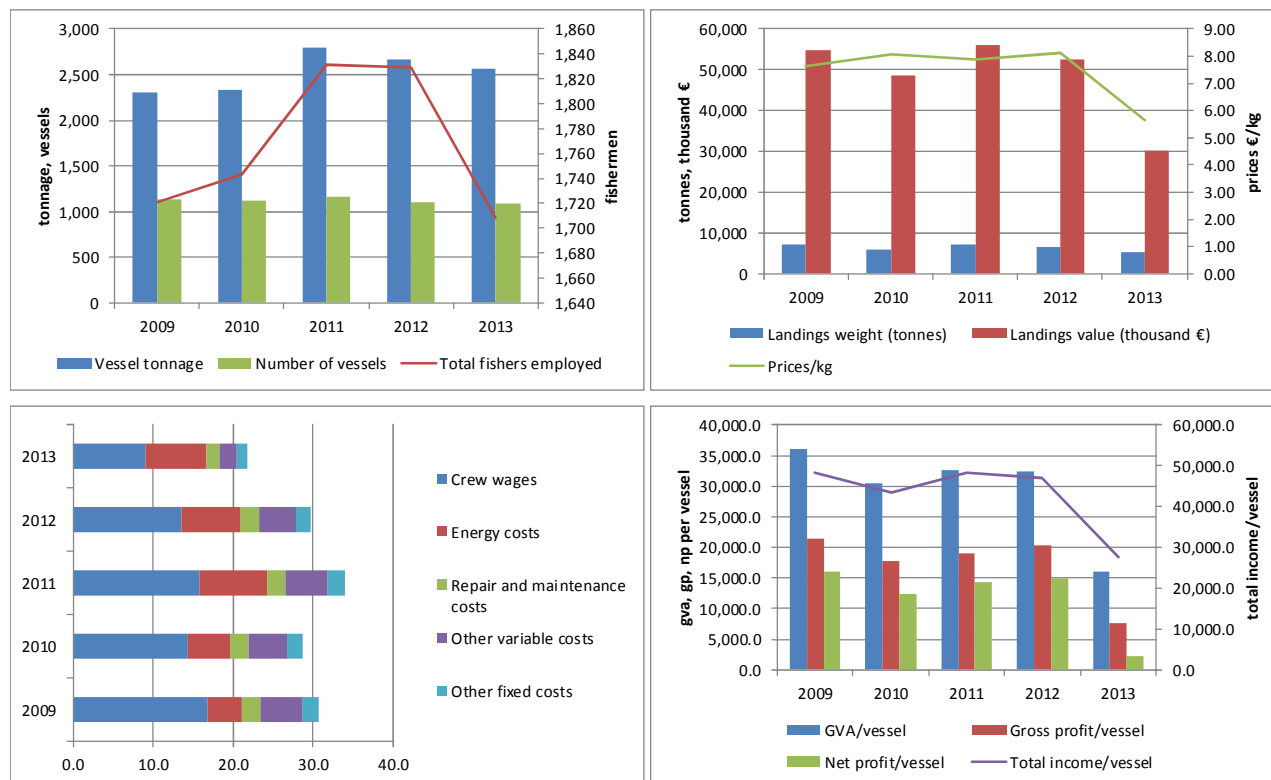
## ITA GSA 17 polyvalent passive gears 06-12 m

<b>COUNTRY</b>	ITA
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	PGP_VL0612

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	1,134	1,124	1,162	1,112	1,092	-1.8%
Average vessel age	27.0	27.0	26.1	26.8	27.0	0.7%
GT (thousand tonnes)	2.3	2.3	2.8	2.7	2.6	-4.0%
Engine power (thousand kW)	52.4	53.6	59.0	56.5	36.5	-35.4%
<b>Employment</b>						
Total fishers employed	1,721	1,744	1,831	1,829	1,708	-6.6%
Full Time Equivalent	827.3	988.1	1,022.0	1,172.0	1,185.0	1.1%
Average wage per fisherman (thousand €)	9.7	8.2	8.6	7.4	5.3	-27.6%
<b>Fishing effort</b>						
Days at sea	142,944	141,879	153,490	151,077	99,224	-34.3%
Energy consumption (million litres)	9.5	9.2	11.5	9.2	10.1	9.8%
Fuel consumption per kg landed (litre/kg)	1.3	1.5	1.6	1.4	1.9	32.0%
<b>Production</b>						
Landings weight (thousand tonnes)	7.2	6.0	7.2	6.5	5.4	-16.9%
Landings value (million €)	54.8	48.7	56.2	52.4	30.2	-42.3%

VARIABLE (million €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	54.8	48.7	56.2	52.4	30.2	-42.3%
Direct subsidies		0.3	0.0	0.1		
<b>Costs</b>						
Crew wages	16.7	14.3	15.8	13.5	9.1	-32.4%
Energy costs	4.4	5.4	8.5	7.4	7.6	2.5%
Repair and maintenance costs	2.2	2.2	2.3	2.3	1.6	-31.5%
Other variable costs	5.2	4.9	5.3	4.7	2.1	-55.1%
Other fixed costs	2.0	2.0	2.1	1.9	1.5	-22.4%
Opportunity costs of capital	0.8	0.5	0.5	0.5	0.9	78.1%
Depreciation costs	5.3	5.5	5.1	5.6	5.1	-9.4%
<b>Economic indicators</b>						
GVA	40.9	34.2	38.0	36.1	17.5	-51.5%
Gross profit	24.2	19.9	22.2	22.6	8.4	-62.8%
Net profit	18.1	13.9	16.6	16.5	2.5	-85.1%
<b>Capital value</b>						
Fleet depreciated replacement value	21.6	22.2	20.7	22.4	20.4	-9.0%
<b>Profitability</b>						
Net profit margin (%)	33%	28%	30%	32%	8%	-74.1%
RoFTA (%)	88%	65%	82%	76%	16%	-78.4%
GVA per fisherman (thousand €)	23.8	19.6	20.8	19.7	10.3	-48.0%

Source: Mipaaf - Italian National Program for Data Collection



Source: Mipaaf - Italian National Program for Data Collection

In 2013, the polyvalent passive gears 06-12 m consisted of 1092 vessels with a total tonnage of 2.6 thousand tons GT and around 36 thousand kW. The size of this fleet segment is almost stable over the period under analysis.

The number of fishermen employed in this fleet was equal, in 2013, to 1708 units, showing a decrease of 6.6% compared to 2012. This means around 1.5 person working on board of each vessel. The average wage for crewmembers working on board of the these vessels has been equal, in 2013, to 5.3 thousand €, decreasing of -27% compared to 2012.

The total production was equal, in 2013, to 5.4 thousand tons. The landings value of this fleet segment was equal to around 30 million €, decreasing of -42% compared to 2012.

Total operating costs incurred by polyvalent passive gears 06-12 m were equal to around €22 million. Crew cost and fuel costs, the two major fishing items, were equal to around €9.1 and €7.6 million, respectively, in 2013. If compared to 2012, all the operational costs show a decrease, except the fuel costs, registering an increase of 2.5%.

The GVA of the segment in 2013 has been equal to €17.5 million, with a decrease of 51% compared to 2012.

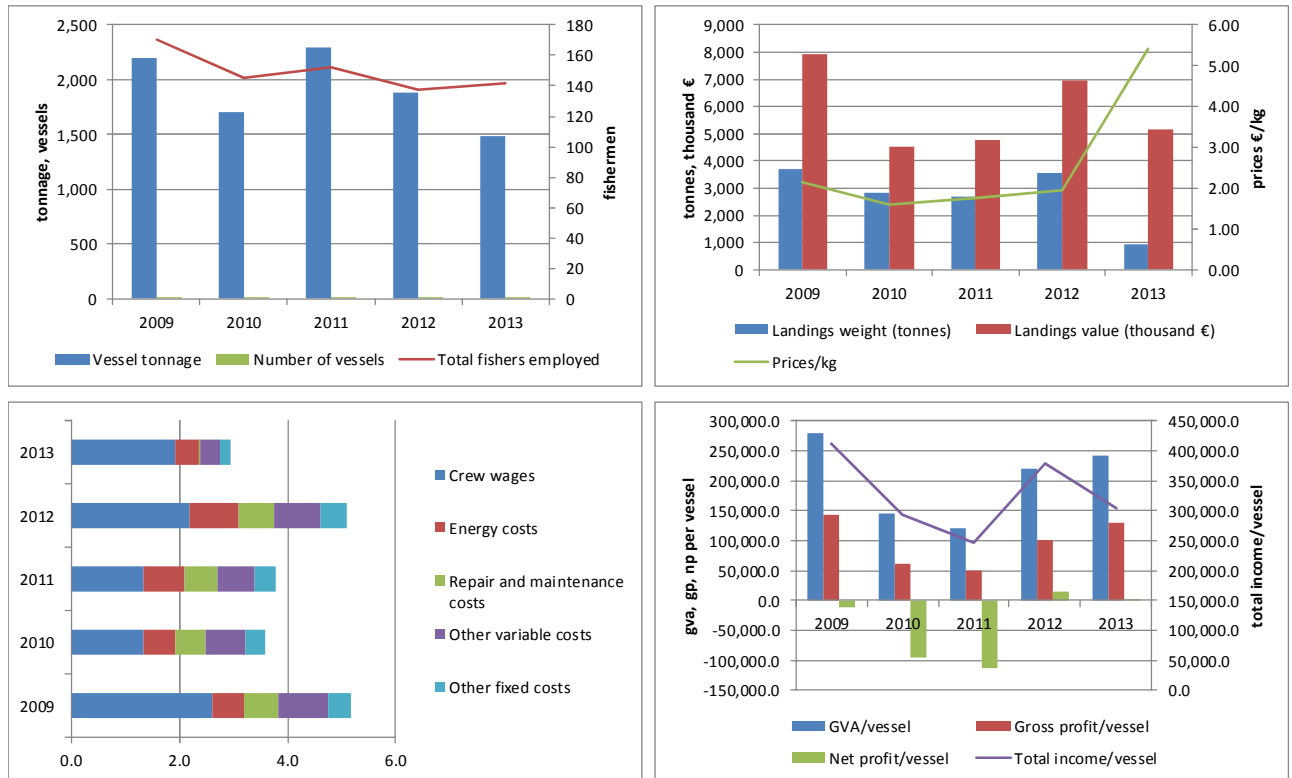
## ITA GSA 17 purse seiners 24-40 m

<b>COUNTRY</b>	ITA
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	PS_VL2440

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	19	16	19	19	17	-8.1%
Average vessel age	30.0	28.0	28.3	30.5	32.0	4.9%
GT (thousand tonnes)	2.2	1.7	2.3	1.9	1.5	-21.2%
Engine power (thousand kW)	7.3	6.0	7.3	6.9	6.5	-6.0%
<b>Employment</b>						
Total fishers employed	170	145	152	137	142	3.6%
Full Time Equivalent	82.5	92.6	111.0	96.9	81.0	-16.4%
Average wage per fisherman (thousand €)	15.4	9.2	8.8	16.0	13.5	-15.5%
<b>Fishing effort</b>						
Days at sea	1,758	1,449	1,416	1,613	1,078	-33.2%
Energy consumption (million litres)	1.2	1.0	1.0	1.1	0.6	-46.9%
Fuel consumption per kg landed (litre/kg)	0.3	0.4	0.4	0.3	0.6	99.1%
<b>Production</b>						
Landings weight (thousand tonnes)	3.7	2.8	2.7	3.6	1.0	-73.3%
Landings value (million €)	7.9	4.5	4.8	7.0	5.2	-25.9%

VARIABLE (million €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	7.9	4.5	4.8	7.0	5.2	-25.9%
Direct subsidies		0.1		0.0		
<b>Costs</b>						
Crew wages	2.6	1.3	1.3	2.2	1.9	-12.4%
Energy costs	0.6	0.6	0.8	0.9	0.5	-50.4%
Repair and maintenance costs	0.6	0.6	0.6	0.7	0.0	-97.2%
Other variable costs	0.9	0.7	0.7	0.9	0.4	-56.7%
Other fixed costs	0.4	0.4	0.4	0.5	0.2	-57.1%
Opportunity costs of capital	0.4	0.2	0.3	0.2	0.3	128.9%
Depreciation costs	2.6	2.2	2.8	1.5	1.8	25.7%
<b>Economic indicators</b>						
GVA	5.4	2.3	2.3	4.1	4.1	1.5%
Gross profit	2.8	1.0	1.0	1.9	2.2	17.7%
Net profit	-0.2	-1.5	-2.2	0.3	0.0	-89.3%
<b>Capital value</b>						
Fleet depreciated replacement value	12.0	9.8	13.0	6.9	8.0	17.0%
<b>Profitability</b>						
Net profit margin (%)	-3%	-33%	-45%	4%	1%	-85.5%
RoFTA (%)	2%	-13%	-14%	6%	5%	-23.3%
GVA per fisherman (thousand €)	31.7	15.8	15.3	29.6	29.0	-2.1%

Source: Mipaaf - Italian National Program for Data Collection



Source: Mipaaf - Italian National Program for Data Collection

In 2013, the purse seiners 24-40 m in GSA 17 consisted of 17 vessels with a total tonnage of around 1.5 thousand tons and around 6.5 thousand kW. The size of this fleet segment shows a reduction of -8% in terms of number and 21% in terms of GT.

The number of fishermen employed in this fleet was equal, in 2013, to 142, registering an increase (3.6%) compared to 2012. The average wage for crewmembers working on board of these vessels has been equal, in 2013, to 13.5 thousand €, decreasing of 15% compared to 2012.

The total production of this fleet segment was equal, in 2013, to 1 thousand tons. As far as the value of production, in 2013 the income from landings of this fleet segment was equal to around 5.2 million €, decreasing of -25% compared to 2012.

Total operating costs incurred by this fleet segment were equal to around €3 million. Crew cost and fuel costs, the two major fishing items, were equal to around €1.9 and €0.5 million, respectively, in 2013. If compared to 2012, labour costs show a decrease of around -12%.

The decrease of the level of income has been compensated by the reduction of operative costs. In 2013 the total gross value added produced by this fleet segment was around €4.1 million (equal to around 241 thousand euro per vessel). On the other hand, total operational costs show a decrease compared to 2013 and this has impacted the gross profit, improving in 2013.

## Croatia

### National fleet

Croatian fishing fleet is divided in ten fleet segments – DFN, DRB, DTS, FPO, HOK, MGO, MGP, PGP, PMP, PS. From 2009 to 2013 number of vessels (active and inactive) makes Croatian fishing fleet slightly varied (from 3886 in 2009 to 4368 in 2013) and shows an average annual increase of 3% per year. Here it should be stress that the number of inactive vessels was growing from year to year but on an average base makes about 33 % of whole vessel number. The largest percentage of the fleet (over 80%) is comprised of vessels less than 12 m LoA, which also constitutes the largest segment of the fleet capacity in terms of power (50% kW). The most important part of total tonnage of Croatian fishing fleet belongs to purse-seiners, and the most important part of total power to multipurpose vessels. Average age and GT did not varied significantly over the years; vessels were 31.7 years old with an average combined GT of 43,580 tons. Slight increase observed in number of fishing vessels led to an increase in engine power, which was lowest in 2009 (232,700 kW) and highest in 2013 (347,500 kW).

DFN fleet segment, in terms of number of vessels, was represented with the highest percentage (41%), while other fleet segments in Croatian fishing fleet were represented as DTS (17%), MGO (13%), HOK (12%), PS (8%), and FPO (5%). Remaining 4 segments previously mentioned (DRB, MGP, PGP, PMP) represented less than 3% in terms of number of vessel.

Level of employment, the average wage per fisherman as well as days at sea over the investigated period slightly varied but overall did not significantly changed. Concerning the energy consumption significant decrease was noticed in last year (2013) but this inconsistency should be further analysed. Total weight and value of landings showed the same positive trend with the slight variations over the years; total landings weight and values were in range from 62285.6kg (2012) to 73814.6kg (2013) and from €41586.5 thousands (2012) to €52245.2 thousands (2013), respectively. Here it should be stress that small pelagic fish species, precisely sardines, were the most abundant in obtained catches and in general this species makes around 80% of overall Croatian landings.

Among all previously mentioned segments, the most important fishery in Croatia is purse-seine commercial fisheries obtained with the "Srdelara" purse seine net. "Srdelara" purse seine nets are categorized as intended for sardine (*Sardina pilchardus*) and other types of small pelagic species. The minimum mesh size of the "Srdelara" purse seine net is 14 mm (diagonally measured from one mesh angle to the other opposite mesh angle by using the mesh gauge). The use of artificial light is permitted in this type of fishing. Usage of this net is permitted throughout the fishing seas of the Republic of Croatia.

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	3,886	4,029	3,912	4,236	4,368	3.1%
Average vessel age	31.7	31.6	31.7	31.6	32.3	2.0%
GT (thousand tonnes)	41.7	43.4	42.1	44.9	45.8	2.0%
Engine power (thousand kW)	232.7	242.1	235.1	326.5	347.5	6.5%
<b>Employment</b>						
Total fishers employed	1,138	1,184	1,150	1,125	1,149	2.2%
Average wage per fisherman (thousand €)	8.4	8.4	8.4	8.2	8.4	1.9%
<b>Fishing effort</b>						
Days at sea	225,671	234,790	227,951	221,393	197,955	-10.6%
Energy consumption (million litres)	14.7	15.2	14.8	11.0	10.0	-9.6%
Fuel consumption per kg landed (litre/kg)	0.2	0.2	0.2	0.2	0.1	-40.0%
<b>Production</b>						
Landings weight (thousand tonnes)	68.5	71.3	69.2	62.3	73.8	18.5%
Landings value (million €)	45.8	47.7	46.3	41.6	52.2	25.6%

Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR

VARIABLE (thousand €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	45,835.4	47,687.3	46,298.4	41,586.5	52,245.2	25.6%
Direct subsidies	5,500.2	5,722.5	5,555.8	4,990.4		
<b>Costs</b>						
Crew wages	9,582.4	9,969.6	9,679.2	9,238.6	9,617.4	4.1%
Energy costs	8,161.2	8,490.9	8,243.6	7,466.2	8,090.5	8.4%
Repair and maintenance costs	2,405.3	2,502.5	2,429.6	2,587.0	2,481.1	-4.1%
Other variable costs	3,727.3	3,877.9	3,764.9	3,319.4	3,672.4	10.6%
Other fixed costs	2,639.3	2,745.9	2,666.0	2,642.0	2,673.3	1.2%
Opportunity costs of capital	4,517.5	4,700.1	4,563.2	4,483.1	4,566.0	1.8%
Depreciation costs	1,986.0	2,066.2	2,006.0	4,953.3	2,752.9	-44.4%
<b>Economic indicators</b>						
GVA	34,402.6	35,792.6	34,750.1	30,562.1	35,327.9	15.6%
Gross profit	24,820.2	25,823.1	25,070.9	21,323.6	25,710.5	20.6%
Net profit	18,316.7	19,056.8	18,501.7	11,887.2	18,391.7	54.7%
<b>Capital value</b>						
Fleet depreciated replacement value	74,058.0	77,050.2	74,806.0	73,493.5	74,851.9	1.8%
Investments	3,429.8	3,568.3	3,464.4	2,561.1	3,255.9	27.1%
<b>Profitability</b>						
Net profit margin (%)	36%	36%	36%	26%	35%	37.9%
RoFTA (%)	31%	31%	31%	22%	31%	37.7%
GVA per fisherman (thousand €)	30.2	30.2	30.2	27.2	30.7	13.1%

Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR – Note: Croatian official data are under revision



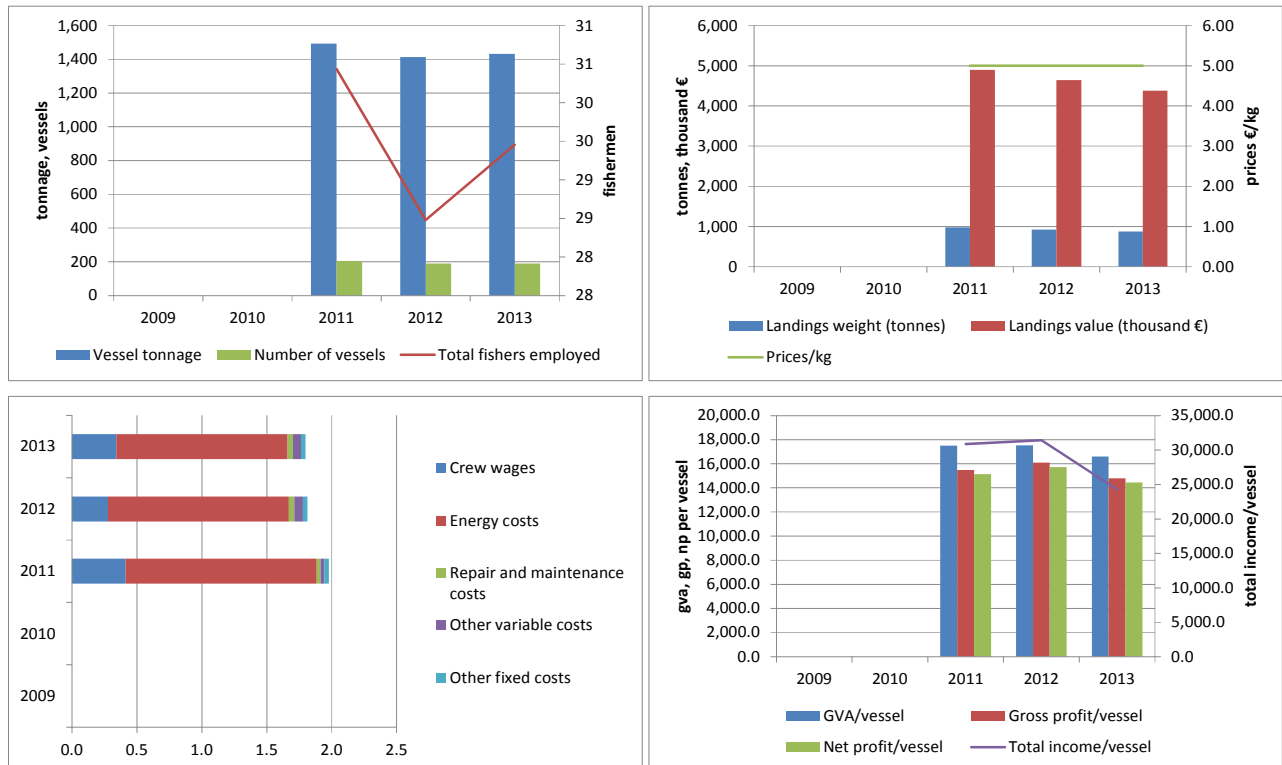
## HRV - Demersal trawlers 06-12 m

<b>COUNTRY</b>	HRV
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	DTS_VL0612

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels			205	191	190	-0.5%
Average vessel age			34.9	33.4	33.5	0.2%
GT (thousand tonnes)			1.5	1.4	1.4	1.3%
Engine power (thousand kW)			10.9	15.5	16.5	6.8%
<b>Employment</b>						
Total fishers employed			30	28	29	3.4%
Average wage per fisherman (thousand €)			13.5	9.7	11.6	20.0%
<b>Fishing effort</b>						
Days at sea			11,629	9,787	9,329	-4.7%
Energy consumption (million litres)			2.0	1.9	1.8	-5.6%
Fuel consumption per kg landed (litre/kg)			2.0	2.0	2.0	0.0%
<b>Production</b>						
Landings weight (thousand tonnes)			1.0	0.9	0.9	-5.6%
Landings value (million €)			4.9	4.6	4.4	-5.6%

VARIABLE (thousand €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income			4,897.0	4,641.2	4,379.3	-5.6%
Direct subsidies			1,175.3	1,113.9		
Other income			258.6	245.1	231.2	-5.6%
<b>Costs</b>						
Crew wages			411.9	275.2	341.6	24.2%
Energy costs			1,471.8	1,394.9	1,316.2	-5.6%
Repair and maintenance costs			29.0	41.9	42.5	1.3%
Other variable costs			30.2	66.6	63.4	-4.7%
Other fixed costs			35.2	33.7	34.1	1.3%
Opportunity costs of capital			52.6	49.8	50.5	1.3%
Depreciation costs			19.9	18.8	19.0	1.3%
<b>Economic indicators</b>						
GVA			3,589.3	3,349.2	3,154.3	-5.8%
Gross profit			3,177.4	3,074.0	2,812.7	-8.5%
Net profit			3,104.9	3,005.4	2,743.1	-8.7%
<b>Capital value</b>						
Fleet depreciated replacement value			1,460.1	816.8	812.5	-0.5%
Investments			52.6	87.3		
<b>Profitability</b>						
Net profit margin (%)			49%	50%	59%	18.8%
RoFTA (%)			216%	374%	344%	-8.1%
GVA per fisherman (thousand €)			117.9	117.6	107.1	-8.9%

Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR – Note: Croatian official data are under revision



Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR – Note: Croatian official data are under revision

**Demersal trawlers 06-12 m** – over the three years period (2011-2013) number of vessels that operate within this segment in the Croatian territorial waters decrease from 205 to 190. Observed annual decrease was -6.8 between 2011 and 2012 and -0.5 between 2012 and 2013 and probably due to the retreat of vessels from this segment or from fishing at all. The fleet catches were composed of a wide range of demersal fish species, but the main target species were MUT (red mullet), HKE (European hake), OCM (Eledone spp.) and SPC (picarel). Average annual level of employment over three years period decreased for 1.5% per year. The main factor causing this decrease is related to the previously mentioned fact - some of the fishing vessels became inactive or they left this fishing segment. Although number of employed fisherman over the years show minor decrease, the average wage per fisherman decrease little bit more (average annual decrease over the three year period was 4.3% per year). Mean annual fishing effort in terms of days at sea also show decrease of about 10.3% per year over the investigated period. Total weight and value of landing show almost the same trend from 2011 to 2013. Namely, total landed weight decrease from 2011 to 2012 after on landed weight stayed at the same level in 2013, while landing values showed a decreasing trend overall in three years period. As composition of landed species did not change in investigated period this should be due to oscillations in average price of some commercially important fish species. Estimated profitability indicators Gross Value Added (GVA), gross profit and net profit generated by this segment in three years period did not change a lot and showed similar trends.

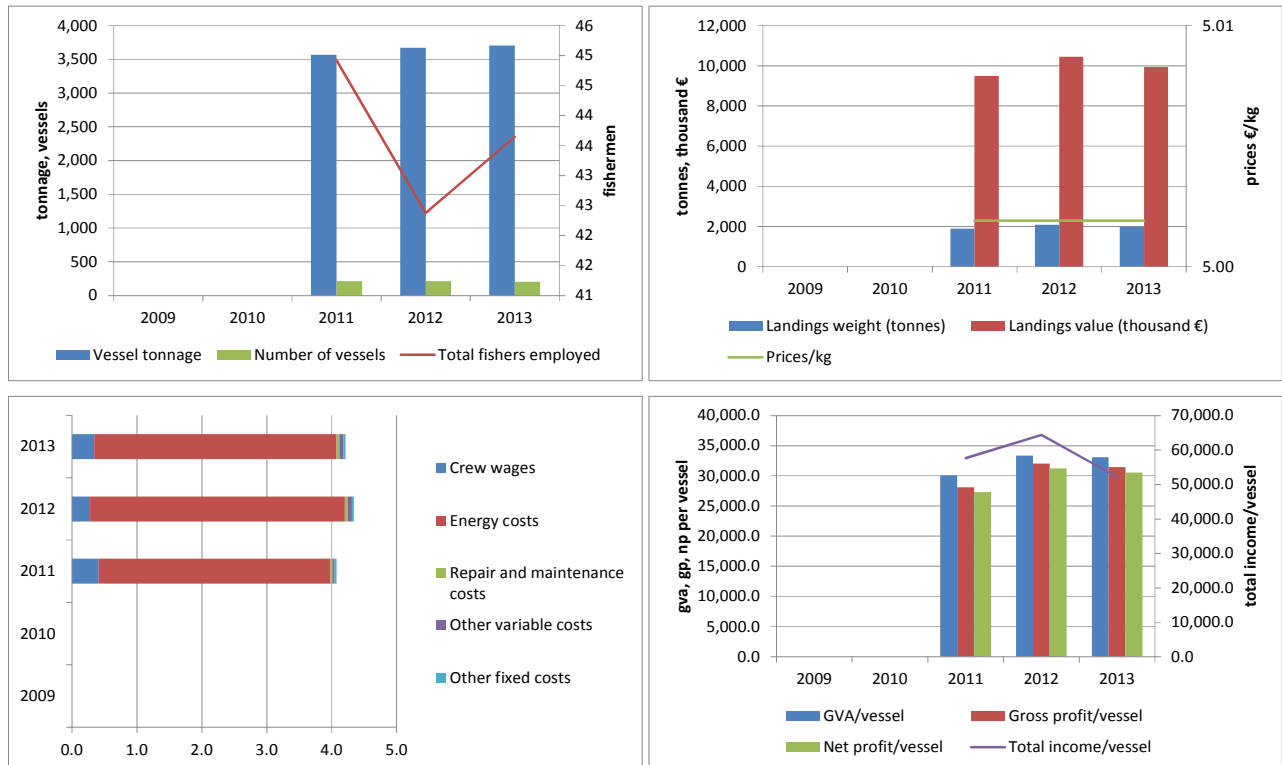
## HRV - Demersal trawlers 12-18 m

<b>COUNTRY</b>	HRV
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	DTS_VL1218

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels			215	212	203	-4.2%
Average vessel age			39.7	39.0	39.9	2.4%
GT (thousand tonnes)			3.6	3.7	3.7	0.9%
Engine power (thousand kW)			19.9	32.0	31.0	-3.2%
<b>Employment</b>						
Total fishers employed			45	42	44	3.0%
Average wage per fisherman (thousand €)			9.2	6.5	7.8	20.6%
<b>Fishing effort</b>						
Days at sea			13,458	13,145	12,180	-7.3%
Energy consumption (million litres)			4.7	5.2	5.0	-4.9%
Fuel consumption per kg landed (litre/kg)			2.5	2.5	2.5	0.0%
<b>Production</b>						
Landings weight (thousand tonnes)			1.9	2.1	2.0	-4.9%
Landings value (million €)			9.5	10.5	9.9	-4.9%

VARIABLE (thousand €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income			9,496.3	10,450.3	9,936.0	-4.9%
Direct subsidies			2,279.1	2,508.1		
Other income			626.8	689.7	655.8	-4.9%
<b>Costs</b>						
Crew wages			411.9	275.2	341.9	24.2%
Energy costs			3,567.6	3,926.0	3,732.7	-4.9%
Repair and maintenance costs			29.0	41.9	42.3	0.9%
Other variable costs			30.2	66.6	61.7	-7.3%
Other fixed costs			35.2	33.7	34.0	0.9%
Opportunity costs of capital			151.2	155.5	157.0	0.9%
Depreciation costs			19.9	18.8	19.0	0.9%
<b>Economic indicators</b>						
GVA			6,461.0	7,071.9	6,721.0	-5.0%
Gross profit			6,049.1	6,796.7	6,379.2	-6.1%
Net profit			5,878.1	6,622.4	6,203.2	-6.3%
<b>Capital value</b>						
Fleet depreciated replacement value			2,388.4	2,549.2	2,441.0	-4.2%
Investments			108.0	74.1		
<b>Profitability</b>						
Net profit margin (%)			47%	49%	59%	20.7%
RoFTA (%)			252%	266%	261%	-2.0%
GVA per fisherman (thousand €)			143.9	166.9	154.0	-7.7%

Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR – Note: Croatian official data are under revision



Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR – Note: Croatian official data are under revision

**Demersal trawlers 12-18 m** – over the three years period (2011-2013) number of vessels that operate with this type of fishing gear mainly in the Croatian territorial waters decrease from 215 to 203. Observed average annual decrease over the years was 2.8% per year and is related to the same fact previously mentioned for the segment DTS\_VL0612. The fleet catches were composed of a wide range of demersal fish species, but the main target species were MUT (red mullet), HKE (European hake), OCM (Eledone spp.), GRO (bony fish) and SQR (Loligo vulgaris). Average annual level of employment over three years period decreased for less than 1% per year. The main factor causing this decrease is related to the previously mentioned fact that some of the fishing vessels become inactive or they leave this segment. Just like in the previous fishing segment some inconsistency in data concerning the average wage per fisherman was noticed – in three years period average wage per fisherman significantly decrease from €9200 to €7800 (average annual decrease was 4.7% per year in the whole period of investigation) although number of employed fisherman almost did not change over the years. Hence, some further revisions concerning these values should be done in order to solve obtained inconsistency. Mean annual fishing effort in terms of days at sea also show decrease of about 4.8% per year over the investigated period. Total weight and value of landing slightly fluctuated over the years but in general showed the same trend from 2011 to 2013. Namely, total landings weight was more or less stable over the years and on average base this value was 2000 tonnes per year, while total landings value slightly increase from €9.5 in 2011 to 10.5 million in 2012 and than slightly decreased to €9.9 million. Considering that during the investigated period this fishing segment did not change its target species noticed increase in landings value is most likely due to changes in average price of same commercially important fish species. Estimated profitability indicators Gross Value Added (GVA), gross profit and net profit generated by this segment in three years period showed increasing trend.

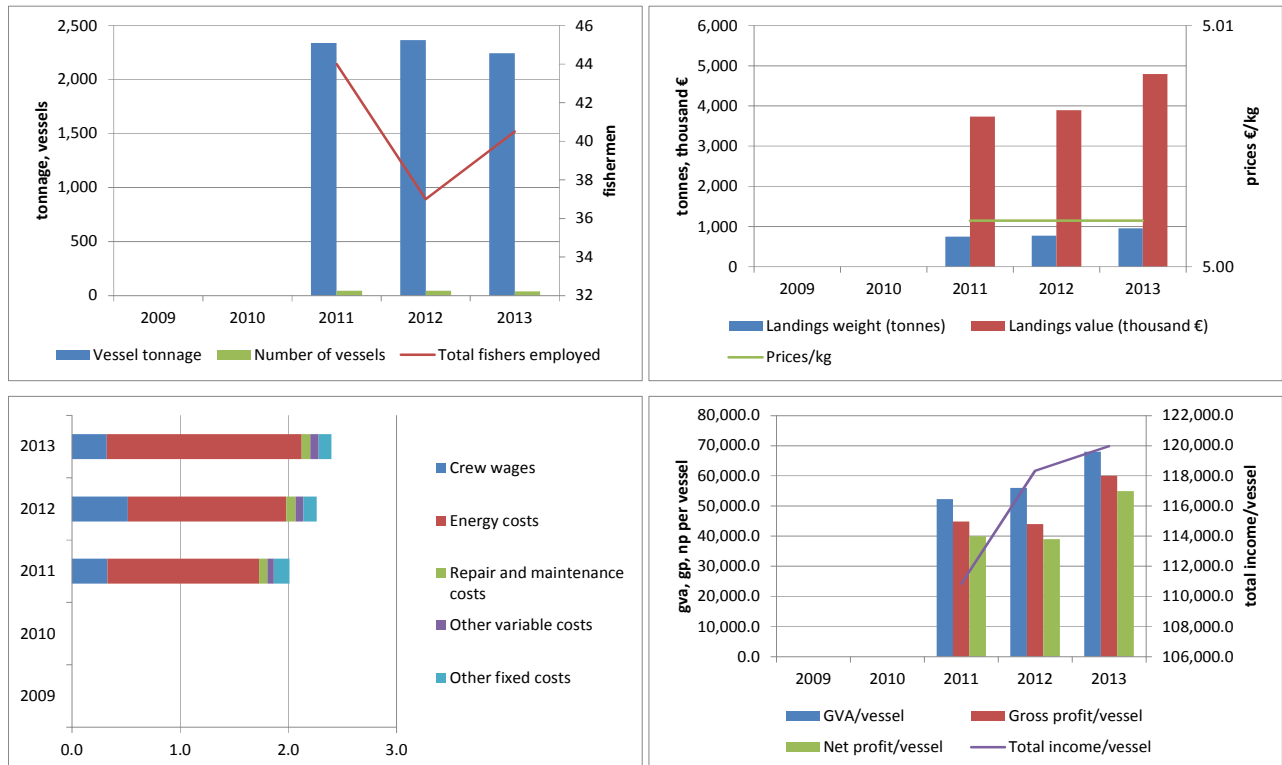
## HRV - Demersal trawlers 18-24 m

<b>COUNTRY</b>	HRV
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	DTS_VL1824

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels			44	43	40	-7.0%
Average vessel age			45.8	47.0	46.2	-1.7%
GT (thousand tonnes)			2.3	2.4	2.2	-5.2%
Engine power (thousand kW)			9.0	10.0	9.9	-0.8%
<b>Employment</b>						
Total fishers employed			44	37	41	9.5%
Average wage per fisherman (thousand €)			7.4	13.9	7.9	-43.3%
<b>Fishing effort</b>						
Days at sea			4,749	4,373	4,632	5.9%
Energy consumption (million litres)			1.9	1.9	2.4	23.2%
Fuel consumption per kg landed (litre/kg)			2.5	2.5	2.5	0.0%
<b>Production</b>						
Landings weight (thousand tonnes)			0.7	0.8	1.0	23.2%
Landings value (million €)			3.7	3.9	4.8	23.2%

VARIABLE (thousand €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income			3,733.9	3,896.5	4,798.7	23.2%
Direct subsidies			896.1	935.2		
Other income			246.4	257.2		
<b>Costs</b>						
Crew wages			325.8	516.1	320.1	-38.0%
Energy costs			1,402.7	1,463.8	1,802.8	23.2%
Repair and maintenance costs			76.4	85.3	80.9	-5.2%
Other variable costs			58.6	71.7	75.9	5.9%
Other fixed costs			144.2	122.9	116.5	-5.2%
Opportunity costs of capital			134.8	136.3	129.2	-5.2%
Depreciation costs			80.4	79.4	75.2	-5.2%
<b>Economic indicators</b>						
GVA			2,298.4	2,409.9	2,722.6	13.0%
Gross profit			1,972.6	1,893.8	2,402.5	26.9%
Net profit			1,757.4	1,678.0	2,198.1	31.0%
<b>Capital value</b>						
Fleet depreciated replacement value			2,827.7	2,235.2	2,079.3	-7.0%
Investments			216.1	123.6		
<b>Profitability</b>						
Net profit margin (%)			36%	33%	46%	38.9%
RoFTA (%)			67%	81%	112%	37.9%
GVA per fisherman (thousand €)			52.2	65.1	67.2	3.2%

Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR – Note: Croatian official data are under revision



Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR – Note: Croatian official data are under revision

**Demersal trawlers 18-24 m** – over the three years period (2011-2013) number of vessels that operate within this segment inside the Croatian fishing sea that include its inner and territorial waters as well as in Ecological and Fisheries Protection Zone decrease from 44 to 41. Observed average annual decrease over the years was 4.6 % per year and is related to the same fact previously mentioned for the other DTS segments. Landed species caught within this fishing segment was consist of a wide range of demersal fish species, but the main target species were MUT (red mullet), HKE, NEP (Norway lobster), GRO (bony fish), DPS (deep-water pink shrimp) and SQU (various squids as Loliginidae and Ommastrephidae). The level of employment varied over three years period and on an annual average basis show a decreasing trend of 2.5% per year. The main factor causing this decrease is because some fishing vessels become inactive or they leave this segment. Like in the previous fishing segment some inconsistency in data concerning the average wage per fisherman was noticed – in three years period average wage per fisherman significantly increase in 2012 (€13,949), precisely this value was almost twice as high as the values in 2011 and 2013 in spite the fact that number of employed fisherman did not change that much. Hence, some further revisions concerning these values should be done in order to solve obtained inconsistency. Fishing effort in terms of days at sea was more or less stable with slight oscillations and mean value of  $4584.7 \pm 192.4$  days at sea per year. Total weight and value of landing show positive trend from 2011 to 2013. Namely, total landings weight and values were in the range from 746.8kg (2011) to 959.7kg (2013) and from €3700 thousands (2011) to €4800 thousands (2013), respectively. Considering that during the investigated period this fishing segment did not change its target species noticed increase in landings value is most likely due to changes in average price of same commercially important fish species. Estimated profitability indicators Gross Value Added (GVA), gross profit and net profit generated by this segment in three years period showed slight variation but overall had an increasing trend.

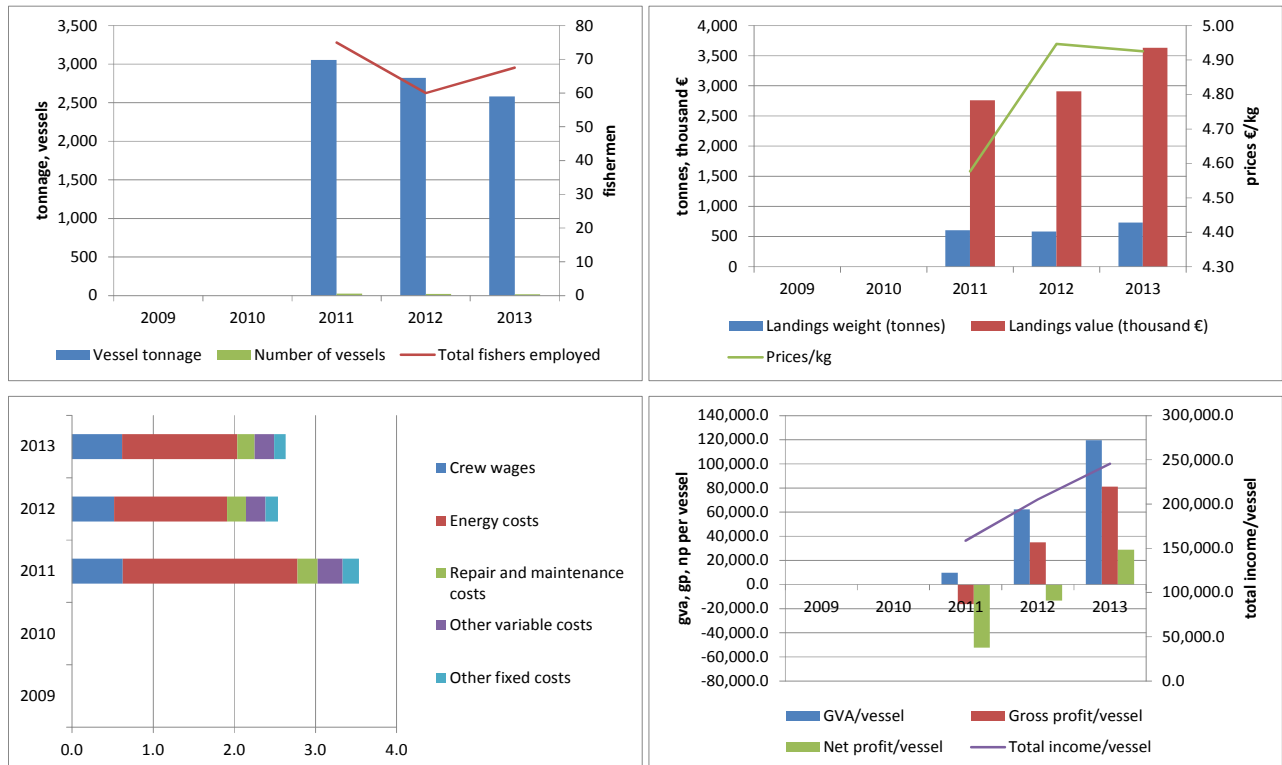
## HRV - Demersal trawlers 24-40 m

<b>COUNTRY</b>	HRV
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	DTS_VL2440

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels			24	19	16	-15.8%
Average vessel age			29.9	33.6	32.6	-3.0%
GT (thousand tonnes)			3.1	2.8	2.6	-8.5%
Engine power (thousand kW)			6.8	6.4	7.4	15.8%
<b>Employment</b>						
Total fishers employed			75	60	68	12.5%
Average wage per fisherman (thousand €)			8.3	8.6	9.2	6.1%
<b>Fishing effort</b>						
Days at sea			3,114	2,766	2,814	1.7%
Energy consumption (million litres)			1.9	1.9	2.4	23.2%
Fuel consumption per kg landed (litre/kg)			3.1	3.3	3.3	-1.8%
<b>Production</b>						
Landings weight (thousand tonnes)			0.6	0.6	0.7	25.4%
Landings value (million €)			2.8	2.9	3.6	24.9%

VARIABLE (thousand €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income			2,765.4	2,908.0	3,631.0	24.9%
Direct subsidies			663.7	697.9		
Other income			378.8	292.1	297.1	1.7%
<b>Costs</b>						
Crew wages			623.4	518.3	618.5	19.3%
Energy costs			2,156.1	1,390.8	1,414.9	1.7%
Repair and maintenance costs			246.2	235.3	215.4	-8.5%
Other variable costs			308.5	237.8	241.9	1.7%
Other fixed costs			199.4	155.7	142.5	-8.5%
Opportunity costs of capital			429.9	397.2	363.6	-8.5%
Depreciation costs			439.8	517.1	473.2	-8.5%
<b>Economic indicators</b>						
GVA			233.9	1,180.5	1,913.5	62.1%
Gross profit			-389.5	662.3	1,295.1	95.5%
Net profit			-1,259.2	-252.0	458.3	-281.8%
<b>Capital value</b>						
Fleet depreciated replacement value			8,012.4	6,512.3	5,484.0	-15.8%
Investments			840.1	105.7		
<b>Profitability</b>						
Net profit margin (%)			-33%	-6%	12%	-280.4%
RoFTA (%)			-10%	2%	15%	572.1%
GVA per fisherman (thousand €)			3.1	19.7	28.3	44.1%

Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR – Note: Croatian official data are under revision



Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR – Note: Croatian official data are under revision

**Demersal trawlers 24-40 m** – over the three years period (2011-2013) number of vessels that operate within this segment inside the Croatian fishing sea that includes its inner and territorial waters as well as Ecological and Fisheries Protection Zone decreased from 24 to 16. Observed average annual decrease over the years was 18.3 % per year - the largest decrease among all the demersal trawler segments, which could be related to the fact that some fishing vessels became inactive or they left this segment. Landed species caught within this fishing segment consist of a wide range of demersal fish species, but the main target species were HKE (European hake), NEP (Norway lobster), MUT (red mullet), DPS (deep-water pink shrimp) and SQU (various squids as Loliginidae and Ommastrephidae). The level of employment varied over three years period and on an annual average basis show a decreasing trend of 3.3% per year. The main factor causing this decrease is related to the fact that number of vessel decreased. Average wage per fisherman slightly varied but overall did not change significantly and its mean value during the observed period was €8707±429. Fishing effort in terms of days at sea throughout the investigated period slight oscillated and showed a decrease of 4.7% per year in relation to whole investigated period. Trends of total landings weight and values were increasing throughout this short time period and in 2013 were 737.2kg and €3631 thousands, respectively. Although total income per vessel in this segment showed an increasing trend, estimated profitability indicators Gross Value Added (GVA), gross profit and net profit were at very low values, especially in 2011 and 2012. This in a way is expected as the landing weight generated within this segment was low considering other demersal trawler segments, as their overall costs are much higher and they were operating mainly on open sea and could not enter the channel area where target species are more abundant. .



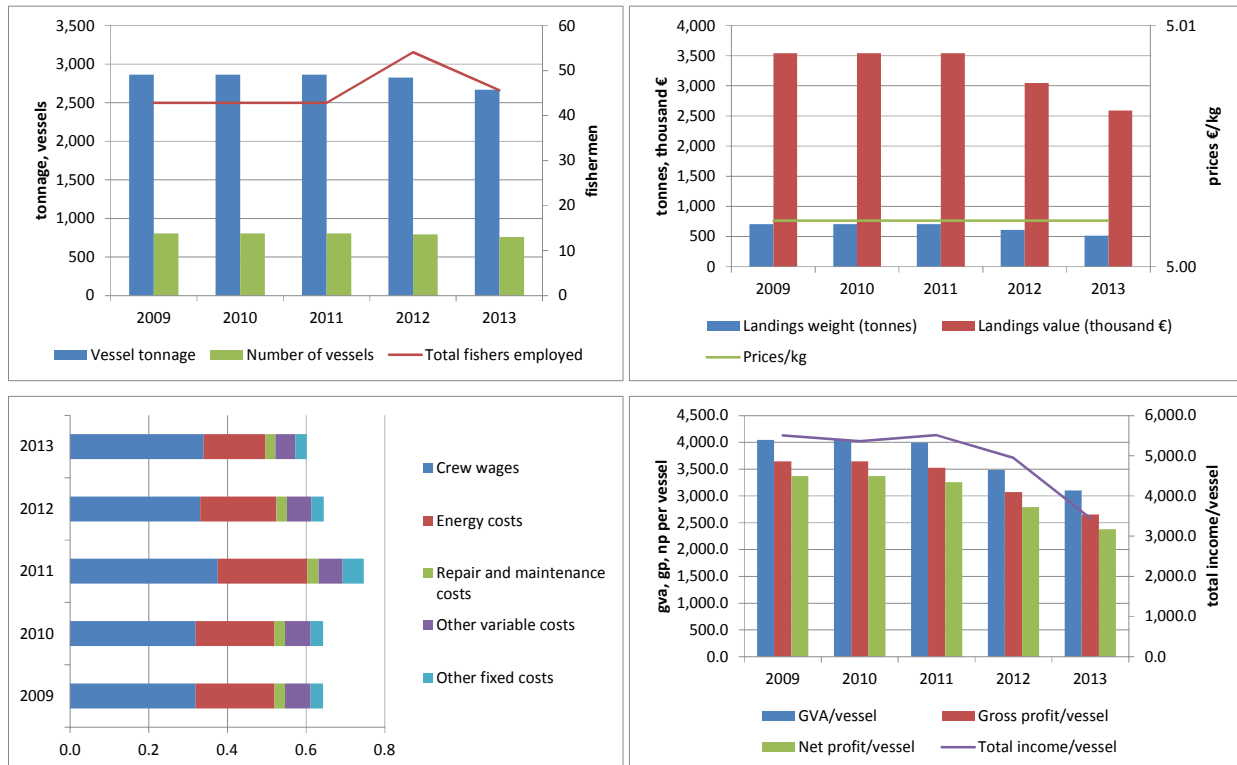
## HRV - Drift and fixed nets 06-12 m

<b>COUNTRY</b>	HRV
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	DFN_VL0612

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	804	804	804	795	760	-4.4%
Average vessel age	29.5	29.5	29.5	30.1	31.0	2.9%
GT (thousand tonnes)	2.9	2.9	2.9	2.8	2.7	-5.6%
Engine power (thousand kW)	28.1	28.1	28.1	47.4	45.8	-3.4%
<b>Employment</b>						
Total fishers employed	43	43	43	54	46	-15.6%
Average wage per fisherman (thousand €)	7.4	7.4	8.8	6.1	7.4	21.8%
<b>Fishing effort</b>						
Days at sea	78,934	78,934	78,934	76,364	61,726	-19.2%
Energy consumption (million litres)	0.3	0.3	0.3	0.3	0.2	-19.2%
Fuel consumption per kg landed (litre/kg)	0.4	0.4	0.4	0.4	0.4	-4.9%
<b>Production</b>						
Landings weight (thousand tonnes)	0.7	0.7	0.7	0.6	0.5	-15.0%
Landings value (million €)	3.5	3.5	3.5	3.1	2.6	-15.0%

VARIABLE (thousand €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	3,541.2	3,541.2	3,541.2	3,051.3	2,592.1	-15.0%
Direct subsidies	849.9	732.3	849.9	849.9		
Other income	35.199	35.199	39.732	34.053	27.526	-19.2%
<b>Costs</b>						
Crew wages	318.8	318.8	375.7	330.3	339.6	2.8%
Energy costs	200.4	200.4	226.2	193.8	156.7	-19.2%
Repair and maintenance costs	27.4	27.4	29.5	27.1	25.5	-5.6%
Other variable costs	64.3	64.3	61.3	62.2	50.3	-19.2%
Other fixed costs	31.8	31.8	53.4	31.3	29.6	-5.6%
Opportunity costs of capital	202.9	202.9	202.9	200.3	189.0	-5.6%
Depreciation costs	21.2	21.2	14.8	20.9	19.8	-5.6%
<b>Economic indicators</b>						
GVA	3,252.5	3,252.5	3,210.6	2,770.8	2,357.5	-14.9%
Gross profit	2,933.8	2,933.8	2,834.9	2,440.5	2,017.9	-17.3%
Net profit	2,709.7	2,709.7	2,617.2	2,219.3	1,809.2	-18.5%
<b>Capital value</b>						
Fleet depreciated replacement value	3,320.4	3,320.4	2,225.0	3,283.2	3,138.7	-4.4%
Investments			53.8	41.1		
<b>Profitability</b>						
Net profit margin (%)	61%	63%	59%	56%	69%	22.5%
RoFTA (%)	88%	88%	127%	74%	64%	-13.6%
GVA per fisherman (thousand €)	75.9	75.9	74.9	51.3	51.6	0.8%

Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR – Note: Croatian official data are under revision



Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR – Note: Croatian official data are under revision

**Drift and fixed nets 06-12 m** – in terms of number of vessel this segment is the most abundant one as it represents the majority of the fishing gears that have been used traditionally in Croatia. Over the five years period (2009-2013) number of vessels that operate within this segment inside the Croatian territorial waters decreased from 804 to 760. As first two years were estimated to be the same as the third year, the trends were observed only for last three years. Hence, an average annual decrease over the last three years was 2.7 % per year, which was probably due to the fact that these vessels retained from this segment and/or became inactive. The fleet catches were composed of a wide range of species, but the main target species were SOL (common sole), SPC (picarel) and HKE (European hake). Mean annual level of employment over the period slightly varied and in 2013 46 fishermen were employed within this segment. Considering the previous year (2012) this segment loss 8 jobs most probably due to lower number of vessel that were active in the past. Just like in the some of the previous fishing segments some inconsistency in data concerning the average wage per fisherman was noticed. Namely, although the numbers of employed fisherman increased in 2012 from 43 to 54 they seemed to receive lower wages (drop of 30% in average wage per fisherman). Hence, some further revisions concerning these values should be done in order to solve obtained inconsistency. Fishing effort in terms of days at sea over the years (2009-2013) showed negative trend as its value drop from 78934 (2009) to 61726 (2013) days at sea. Total landing weight was decreasing over the last three years (from 708 kg in 2011 drop to 518 kg in 2013). Although composition of the landing species was more or less the same, landing value showed some oscillations that were probably related to the changes in average price of same commercially important fish species over the years. Estimated profitability indicators as Gross Value Added (GVA), gross profit and net profit generated by this segment in last three years period showed some fluctuations but a slight decreasing trend could be observed.

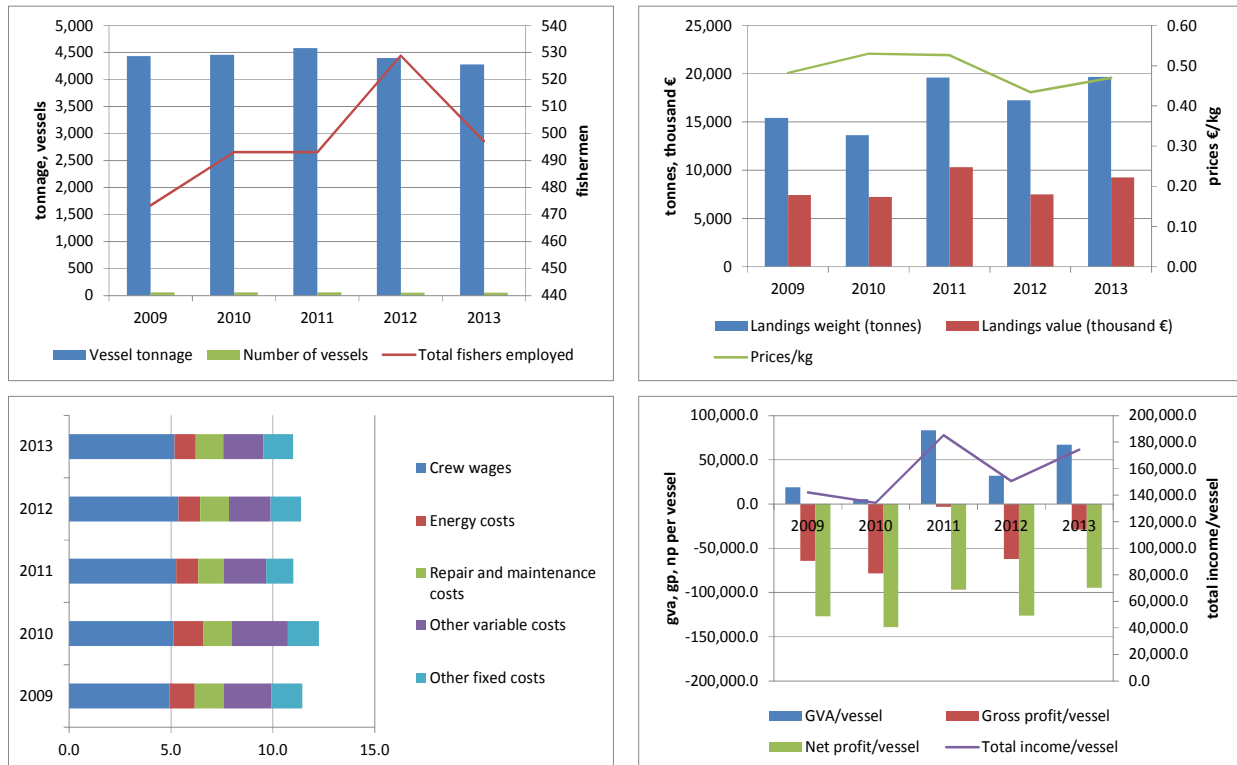
## HRV - Purse seiners 18-24 m

<b>COUNTRY</b>	HRV
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	PS_VL1824

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	59	61	61	57	54	-5.3%
Average vessel age	48.7	48.7	48.7	48.7	48.8	0.2%
GT (thousand tonnes)	4.4	4.5	4.6	4.4	4.3	-2.8%
Engine power (thousand kW)	18.8	19.3	17.2	18.9	18.4	-3.0%
<b>Employment</b>						
Total fishers employed	473	493	493	529	497	-6.0%
Average wage per fisherman (thousand €)	10.4	10.4	10.7	10.1	10.4	2.6%
<b>Fishing effort</b>						
Days at sea	6,024	7,012	6,016	5,216	5,005	-4.0%
Energy consumption (million litres)	1.6	1.8	1.9	1.3	1.3	-4.0%
Fuel consumption per kg landed (litre/kg)	0.1	0.1	0.1	0.1	0.1	-15.8%
<b>Production</b>						
Landings weight (thousand tonnes)	15.4	13.6	19.6	17.3	19.7	14.0%
Landings value (million €)	7.4	7.2	10.3	7.5	9.2	23.3%

VARIABLE (thousand €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	7,437.1	7,230.6	10,329.4	7,498.7	9,248.5	23.3%
Direct subsidies	743.7	723.1	477.4	750.3		
Other income	204.9	238.5	486.3	332.7	170.3	-48.8%
<b>Costs</b>						
Crew wages	4,927.1	5,132.3	5,262.1	5,365.0	5,173.8	-3.6%
Energy costs	1,243.1	1,447.0	1,078.8	1,076.4	1,032.8	-4.0%
Repair and maintenance costs	1,409.2	1,415.8	1,250.9	1,397.8	1,358.9	-2.8%
Other variable costs	2,360.4	2,747.6	2,085.5	2,043.8	1,961.2	-4.0%
Other fixed costs	1,504.9	1,512.0	1,321.0	1,492.8	1,451.2	-2.8%
Opportunity costs of capital	474.7	477.0	490.4	470.9	457.8	-2.8%
Depreciation costs	3,212.5	3,227.7	5,242.6	3,186.6	3,097.8	-2.8%
<b>Economic indicators</b>						
GVA	1,124.4	346.7	5,079.6	1,820.6	3,614.7	98.5%
Gross profit	-3,802.7	-4,785.6	-182.5	-3,544.4	-1,559.1	-56.0%
Net profit	-7,489.9	-8,490.3	-5,915.5	-7,201.9	-5,114.7	-29.0%
<b>Capital value</b>						
Fleet depreciated replacement value	7,990.8	8,261.7	9,282.8	7,720.0	7,313.6	-5.3%
Investments			745.7	511.5		
<b>Profitability</b>						
Net profit margin (%)	-89%	-104%	-52%	-84%	-54%	-35.3%
RoFTA (%)	-88%	-97%	-58%	-87%	-64%	-27.0%
GVA per fisherman (thousand €)	2.4	0.7	10.3	3.4	7.3	111.2%

Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR – Note: Croatian official data are under revision



Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR – Note: Croatian official data are under revision

**Purse seiners 18-24 m** – throughout investigated period (2009-2013) number of vessels that operate within this segment inside the Croatian fishing sea that includes its inner and territorial waters as well as Ecological and Fisheries Protection Zone decrease from 61 to 54. An average annual decrease in number of vessels over the investigated period was 5.9 % per year and could be related with the fact that some vessels retreat from this segment or fishing at all. This segment and its fishing gears are targeting mainly sardine and anchovy, which are by far the most abundant species in its catches. The level of employment varied over five years period – each year level of employment was increasing except in 2013, when mentioned value decrease for 6% in respect to 2012. The main factor causing this decrease is related to the fact that number of vessel decreased. The average wage per fisherman during the investigated period did not change a lot and its mean value per year was €10.4±0.19 thousands. Mean annual fishing effort in terms of days at sea throughout the investigated period slight oscillated and showed a decrease of 3.7% per year. Trends of total landings weight and values fluctuated over the years but in the same manner and in 2013 were 19677.7kg and €9248.5, respectively. Although total income per vessel in this segment showed slight increasing trend, estimated profitability indicators Gross Value Added (GVA), gross profit and net profit were negative.

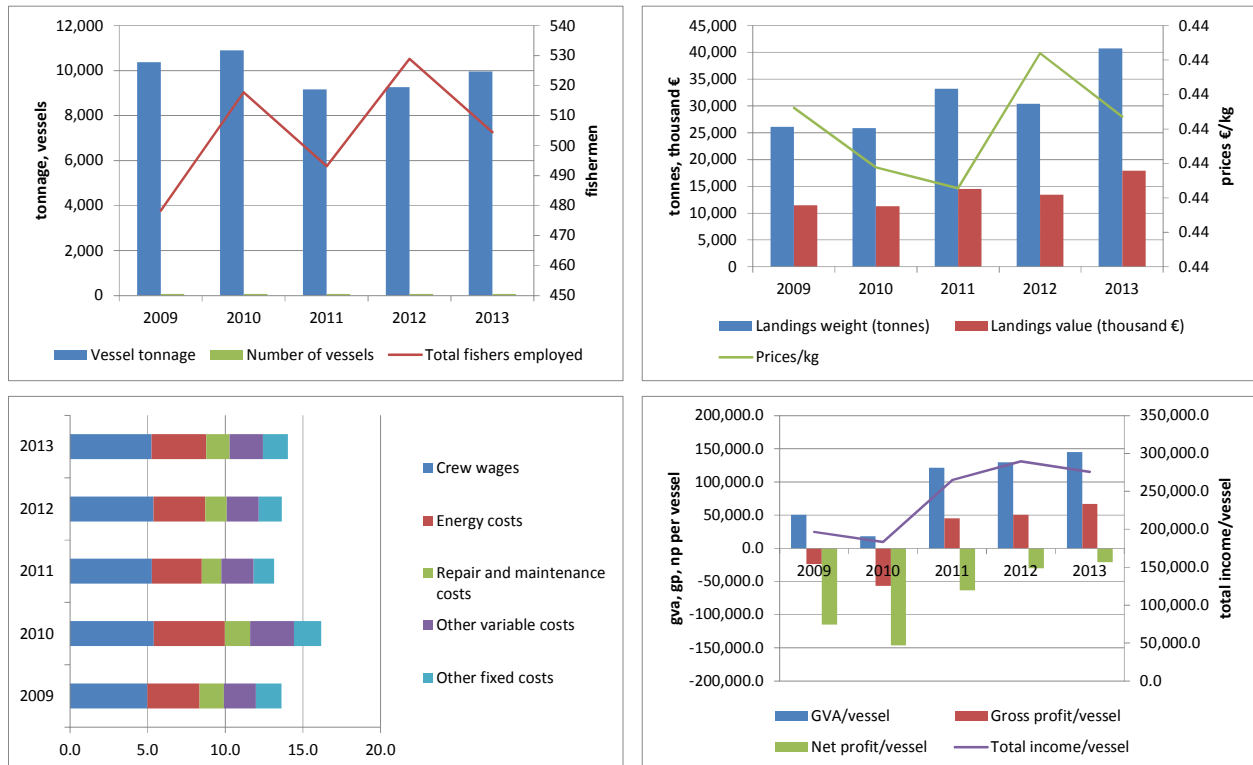
## HRV - Purse seiners 24-40 m

<b>COUNTRY</b>	HRV
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	PS_VL2440

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	67	72	69	68	67	-1.5%
Average vessel age	28.2	28.2	28.3	28.1	26.2	-6.8%
GT (thousand tonnes)	10.4	10.9	9.2	9.3	10.0	7.5%
Engine power (thousand kW)	37.3	39.1	26.5	33.3	35.9	8.1%
<b>Employment</b>						
Total fishers employed	478	518	493	529	505	-4.6%
Average wage per fisherman (thousand €)	10.4	10.4	10.7	10.1	10.4	2.6%
<b>Fishing effort</b>						
Days at sea	7,181	9,777	7,822	7,137	7,517	5.3%
Energy consumption (million litres)	4.2	5.7	5.6	4.2	4.4	5.3%
Fuel consumption per kg landed (litre/kg)	0.2	0.2	0.2	0.1	0.1	-21.4%
<b>Production</b>						
Landings weight (thousand tonnes)	26.1	25.9	33.2	30.4	40.8	34.0%
Landings value (million €)	11.5	11.3	14.5	13.4	17.9	33.4%

VARIABLE (thousand €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	11,467.6	11,322.4	14,515.9	13,420.0	17,905.4	33.4%
Direct subsidies	1,146.8	1,132.2	2,025.0	2,630.1		
Other income	554.2	754.6	1,730.2	3,644.3	580.2	-84.1%
<b>Costs</b>						
Crew wages	4,978.1	5,389.2	5,262.1	5,365.0	5,250.8	-2.1%
Energy costs	3,361.9	4,577.2	3,219.6	3,341.3	3,519.2	5.3%
Repair and maintenance costs	1,564.2	1,645.5	1,250.9	1,397.8	1,502.2	7.5%
Other variable costs	2,056.4	2,799.9	2,085.5	2,043.8	2,152.7	5.3%
Other fixed costs	1,670.5	1,757.4	1,321.0	1,492.8	1,604.3	7.5%
Opportunity costs of capital	2,550.0	2,682.6	2,253.1	2,278.8	2,448.9	7.5%
Depreciation costs	3,565.9	3,751.3	5,242.6	3,186.6	3,424.5	7.5%
<b>Economic indicators</b>						
GVA	3,368.9	1,297.1	8,369.2	8,788.5	9,707.3	10.5%
Gross profit	-1,609.3	-4,092.2	3,107.1	3,423.5	4,456.5	30.2%
Net profit	-7,725.1	-10,526.1	-4,388.6	-2,041.9	-1,416.9	-30.6%
<b>Capital value</b>						
Fleet depreciated replacement value	36,807.9	39,554.8	36,621.4	37,357.3	36,807.9	-1.5%
Investments			1,073.0	1,418.6		
<b>Profitability</b>						
Net profit margin (%)	-59%	-80%	-24%	-10%	-8%	-26.1%
RoFTA (%)	-14%	-20%	-6%	1%	3%	342.1%
GVA per fisherman (thousand €)	7.0	2.5	17.0	16.6	19.2	15.8%

Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR – Note: Croatian official data are under revision



Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR – Note: Croatian official data are under revision

**Purse seiners 24-40 m** – throughout investigated period (2009-2013) number of vessels that operate within this segment inside the Croatian fishing sea that include its inner and territorial waters as well as Ecological and Fisheries Protection Zone decrease from 72 to 67. An average annual decrease in number of vessels over the investigated period was 0.25 % per year. This segment and its fishing gears are targeting mainly sardine and anchovy, which are by far the most abundant species in its catches. The level of employment varied over five years period and on an annual basis increase of 1.5% per year was recorded. The average wage per fisherman during the investigated period did not change a lot and its mean value per year was €10.4±0.19 thousands. Mean annual fishing effort in terms of days at sea throughout the investigated period slight oscillated and showed an increase of 3.2% per year regarding the whole investigated period. Trends of total landings weight and values fluctuated over the years but in the same manner and in 2013 were 40753.8kg and €17905.4 thousands, respectively. Although total income per vessel in this segment showed increasing trend, some profitability indicators were negative.

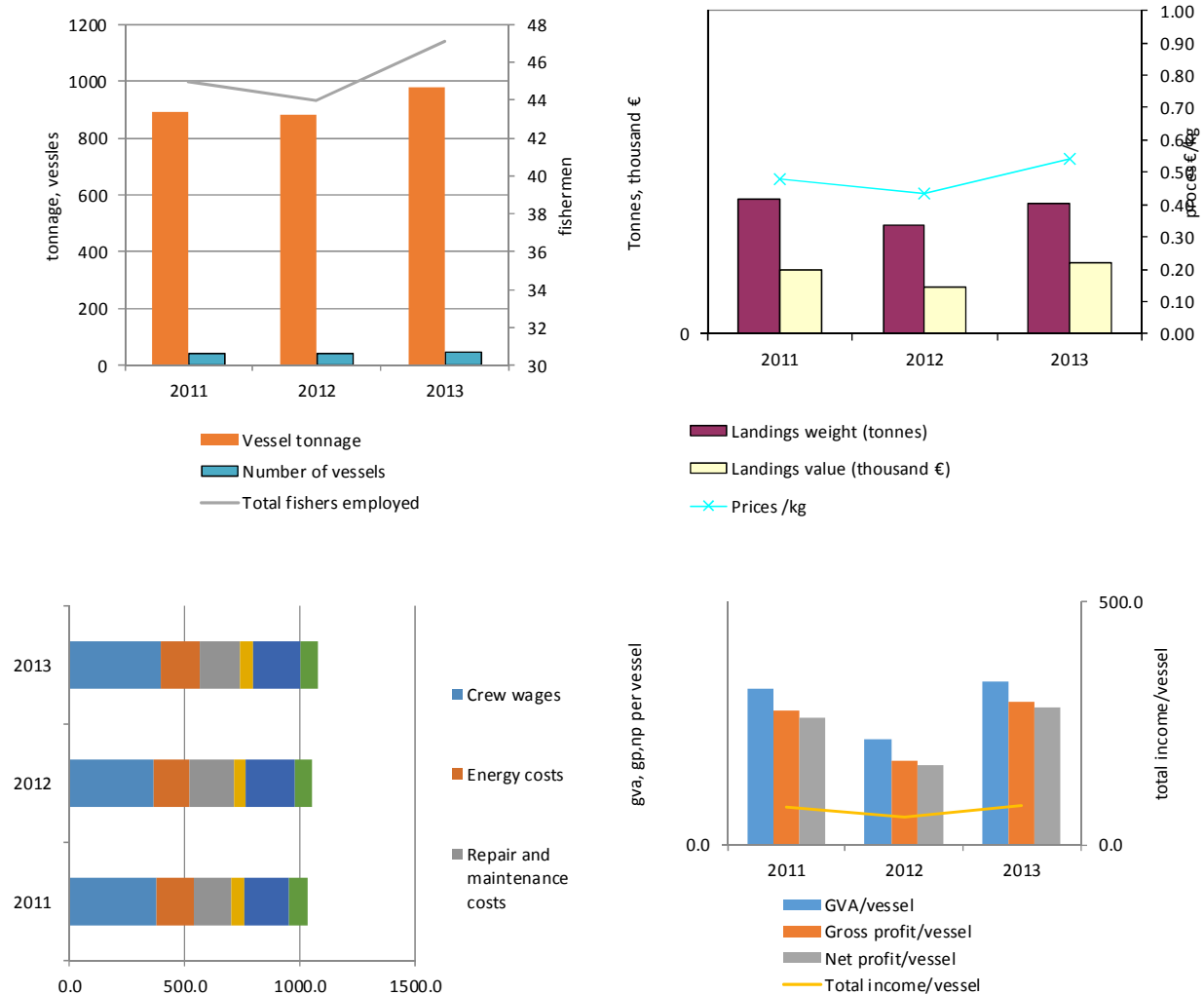
## HRV - Purse seiners 12-18 m

<b>COUNTRY</b>	HRV
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	PS_VL1218

VARIABLE	2011	2012	2013	Var. %
<b>Structure</b>				
Number of vessels	43	42	45	7.1%
Average vessel age	39.1	38.0	38.0	0.0%
GT (thousand tonnes)	0.9	0.9	1.0	10.8%
Engine power (thousand kW)	5.0	6.8	7.3	7.8%
<b>Employment</b>				
Total fishers employed	45	44	47	7.1%
Full Time Equivalent	6.0	5.4	5.7	4.8%
Average wage per fisherman (thousand €)	8.4	8.3	8.3	0.0%
<b>Fishing effort</b>				
Days at sea	3,341	3,448	3047	-11.6%
Energy consumption (million litres)	0.2	0.2	0.2	11.3%
Fuel consumption per kg landed (litre/kg)	0.03	0.04	0.03	-7.2%
<b>Production</b>				
Landings weight (thousand tonnes)	6.2	5.0	6.0	20.0%
Landings value (million €)	3.0	2.2	3.3	50.1%

VARIABLE (thousand €)	2011	2012	2013	Var. %
<b>Income</b>				
Landings income	2,994.3	2,185.2	3,279.1	50.1%
Direct subsidies	299.43	218.52	327.91	50.1%
Other income	26.58	23.71	26.40	11.3%
<b>Costs</b>				
Crew wages	379.1	366.0	392.1	7.1%
Energy costs	159.3	155.4	173.0	11.3%
Repair and maintenance costs	161.5	190.8	176.2	-7.7%
Other variable costs	55.2	53.5	54.3	1.6%
Other fixed costs	197.5	208.4	202.9	-2.6%
Opportunity costs of capital	33.1	12.1	15.0	24.5%
Depreciation costs	81.9	77.9	79.9	2.6%
<b>Economic indicators</b>				
GVA	2,746.7	1,819.4	3,026.9	66.4%
Gross profit	2,367.6	1,453.4	2,634.7	81.3%
Net profit	2,252.6	1,363.4	2,539.8	86.3%
<b>Capital value</b>				
Fleet depreciated replacement value	2,440.1	1,947.5	2,086.6	7.1%
Investments	140.8	79.5	85.2	7.1%
<b>Profitability</b>				
Net profit margin (%)	68%	56%	70%	24.5%
RoFTA (%)	94%	71%	122%	73.4%
GVA per fisherman (thousand €)	61.0	41.4	64.3	55%

Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR – Note: Croatian official data are under revision



Source: Directorate of Fisheries of the Ministry of Agriculture and IZOR – Note: Croatian official data are under revision

**Purse seiners 12-18 m** – In 2013 the purse seiners 12-18 m operating in Croatia consisted of 45 registered vessels, with a total gross tonnage of 1 thousand tons and a total engine power of 7.3 thousand kW. Average days at sea per vessel have been around 68, with a decrease of 17% compared to the previous year. Total employment in 2013 was estimated at 47 fishermen. Total volume of landings amounted to 6 thousand tons, with an increase of 20% compared with 2012. In 2013, the total landings income was almost €3.3 million and gross value added amounted to €3 million. Crew costs represented 39% of total expenditures. The average wage per fisherman is estimated at 8 thousand euro. This fleet segment generated a gross profit of around 2.6 million euro, that is much higher compared with 2012.



## Slovenia

### National fleet

In 2013, the Slovenian fishing fleet consisted of 171 registered vessels, with a combined gross tonnage of 599 GT, a total power of 8.5 thousand kW and an average age of 36 years. The size of the fleet decreased between 2008 and 2013; the number of vessels by 7.5% and GT and kW by 40% and 23%, respectively. The major factors causing the fleet to decrease consist of the scrapping of vessels, including two of the largest vessels.

The Slovenian national economy is insignificantly influenced by the marine fisheries sector. However, the sector has a particular social impact in terms of employment. The watershed moment for Slovenian marine fisheries began with Slovenian independency in the year 1991. This period marked a decrease in the extent of fishing regions and a substantial loss of market for fish products. A large number of poorly equipped small-scale fishermen, inadaptability of large-scale fisherman, along with discordance among fishing, producing and marketing capabilities brought the sector into crisis. Landings of almost 6 thousands tonnes in 1990 have decreased to 238 tonnes in 2013.

The existence of two sea fishery restricted areas where all fishing activities are banned (Portorož and Strunjan) further limit the reduced Slovenian fishing area. For the last few years, this has had a negative impact, particularly on those fishermen who are engaged only in small-scale coastal fishing.

In 2012, the number of fishing enterprises totaled 146, with the majority (70%), owning a single vessel. Only 29% of the enterprises owned two to five fishing vessels. Total employment in 2012 was estimated at 107 jobs, corresponding to 63 FTEs. The level of employment decreased between 2009 and 2012, with total employed decreasing by 2,5%.

The Slovenian fishing fleet consists predominantly of small vessels of less than 12 meters (mainly vessels of 6 meters). Self-employed fishermen who own one fishing vessel about six meters long represent a typical Slovenian fishing enterprise.

In 2013, the fleet spent a total of around 7.7 thousand days at sea. Effort, in days at sea, increased 11% between 2009 and 2013. The fisheries sector, particularly the small scale fleet, is affected by the limited size of marine fishing area. For this reason, most fish stocks targeted by the Slovenian fleet are overexploited, resulting in lower landings and increased effort. Most of the fleet is poorly equipped and unable to operate in international waters. One of the reasons for increased days at sea is the high price of fuel, which encourages the fishermen to do shorter and more frequent trips.

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	185	185	186	181	171	-5.5%
Average vessel age	34.1	35.1	35.7	35.9	0	-100.0%
GT (tonnes)	1,004.3	1,004.3	1,004.5	841.2	598.7	-28.8%
Engine power (thousand kW)	11.0	11.0	10.9	10.1	8.5	-16.3%
<b>Employment</b>						
Total fishers employed	117	116	114	107	114	6.1%
Average wage per fisherman (€)	8,226.1	9,550.9	10,338.1	8,815.6	6,269.1	-28.9%
<b>Fishing effort</b>						
Days at sea	6,873	7,749	7,680	7,614	7,647	0.4%
Energy consumption (thousand litres)	641.0	604.5	546.7	277.8	279.0	0.4%
Fuel consumption per kg landed (litre/kg)	0.7	0.8	0.8	0.8	1.2	39.0%
<b>Production</b>						
Landings weight (tonnes)	867.2	764.0	719.4	329.2	238.0	-27.7%
Landings value (thousand €)	2,178.0	1,992.9	2,051.1	1,464.0	1,231.1	-15.9%

Source: Slovenian National Program for the collection of fisheries data under the EU DCF

The quantity of fuel consumed in 2012 was around 280 thousand litres, a decrease of around 56% from 2009. The major factor causing this decrease consist of the scrapping of several vessels in the fleet, including two of the largest vessels.

The total weight of seafood landed in 2012 was around 330 tonnes, with a landed value of around €1.5 million. The total weight and value of landings decreased by 62% and 33%, respectively, over the period analysed. In terms of landings weight, in 2009 the fleet landed around 866 tonnes, 764 tonnes in 2010, 719 tonnes in 2011 and 330 tonnes in 2012. The major factors causing the decrease in landed weight and value, especially for European anchovy and sardine, include overexploited stocks and scrapping of fishing vessels. In the last quarter of 2011, Slovenia sent the two largest ships to be scrapped (pelagic trawlers 24-40m); those vessels targeted mainly sardine and anchovy and represented around 50% of the Slovenian landed weight.

The amount of income generated by the Slovenian national fleet in 2012 was €2.7 million. This consisted of €1.5 million in landings value, 0,3 million in direct subsidies and €0.9 million in non-fishing income. The Slovenian fleet's landings income decreased 32% between 2009 and 2012, while other income increased 317% during the same period. Due to reduced landings, Slovenian fishermen are looking for the opportunity to generate earnings in other industries, such as tourism.

VARIABLE (thousand €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	2,178.0	1,992.9	2,051.1	1,464.0	1,231.1	-15.9%
Direct subsidies			90.9	323.1		
Other income	204.2	431.7	633.1	850.9		
<b>Costs</b>						
Crew wages	962.5	1,107.9	1,178.5	943.3	711.5	-24.6%
Energy costs	559.7	556.5	616.9	284.1	285.3	0.4%
Repair and maintenance costs	211.1	664.5	246.7	186.1	132.4	-28.8%
Other variable costs	394.1	212.7	205.9	223.2	224.1	0.4%
Other fixed costs	35.2	28.5	22.5	16.6	11.8	-28.8%
Opportunity costs of capital	90.4	300.1	513.7	253.9	239.9	-5.5%
Depreciation costs	193.6	209.7	272.4	193.7	137.9	-28.8%
<b>Economic indicators</b>						
GVA	1,182.2	962.5	1,592.2	1,605.0	577.5	-64.0%
Gross profit	219.8	-145.4	413.7	661.7	-134.1	-120.3%
Net profit	-64.3	-655.2	-372.5	214.1	-511.9	-339.1%
<b>Capital value</b>						
Fleet depreciated replacement value	4,937.7	5,377.7	5,549.1	4,569.4	4,317.0	-5.5%
Investments	552.8	798.2	319.1	313.0		
<b>Profitability</b>						
Net profit margin (%)	-3%	-27%	-13%	8%	-42%	-612%
RoFTA (%)	1%	-7%	3%	10%	-6%	-162%
GVA per fisherman (€)	10,104.4	8,297.7	13,966.8	14,999.8	5,087.7	-66.1%

Source: Slovenian National Program for the collection of fisheries data under the EU DCF

Total operating costs incurred by the fleet in 2012 equated to €2,1 million, amounting to 72% of total income. Crew cost and fuel costs, the two major fishing expenses, were €0,9 and €0.3 million, respectively. Between 2009 and 2012, total operating costs decreased 14%, largely due to scrapping of several vessels.

In terms of economic performance, the amount of Gross Value Added (GVA), gross profit and net profit generated by the Slovenian fleet in 2012 were €1.6 million, €0.7 million and €0,2 million, respectively. Between 2009 and 2012, GVA, gross profit and net profit increased 33%, 200 and 430% respectively. The major factors causing the improvement in economic performance in 2012 included lower expenditure in fuel and labour costs and increases in income from other sources. Regardless of the increase in economic performance, the fleet was in a poor economic condition because of old and poorly equipped vessels and reduced catches. In 2012, the Slovenian fleet had an estimated (depreciated) replacement value of €4.3 million. Investments by the fleet amounted to €0.3 million in 2012.

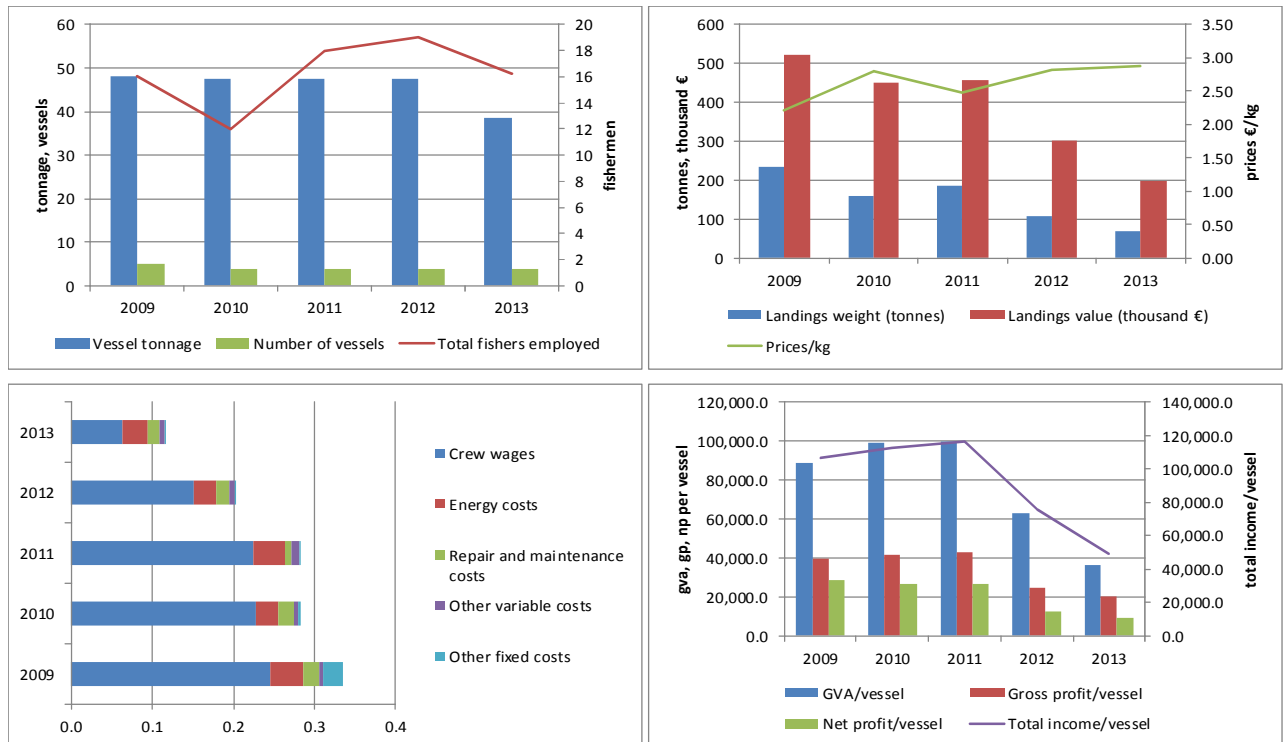
## SVN - Purse seiners 12-18 m

<b>COUNTRY</b>	SVN
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	PS_VL1218

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	5	4	4	4	4	0.0%
Average vessel age	46.8	49	50	51	43.23	-15.2%
GT (tonnes)	48.2	47.4	47.4	47.4	38.5	-18.7%
Engine power (kW)	479.8	472.5	472.5	472.5	421.1	-10.9%
<b>Employment</b>						
Total fishers employed	16	12	18	19	16	-14.5%
Full Time Equivalent	10	6	10	8		
Average wage per fisherman (€)	15,335.2	19,018.7	12,507.2	7,993.1	3,914.7	-51.0%
<b>Fishing effort</b>						
Days at sea	515	476	426	290	346	19.3%
Energy consumption (thousand litres)	54.0	31.7	30.5	19.3	23.0	19.3%
Fuel consumption per kg landed (litre/kg)	0.2	0.2	0.2	0.2	0.3	85.5%
<b>Production</b>						
Landings weight (tonnes)	235.5	161.1	184.6	107.2	69.0	-35.7%
Landings value (thousand €)	523.2	450.7	456.6	301.7	197.8	-34.4%

VARIABLE (thousand €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	523.2	450.7	456.6	301.7	197.8	-34.4%
Direct subsidies	0.0	0.0	10.5	0.0	0.0	0.0%
Other income	8.6	0.0	0.0	0.0	0.0	0.0%
<b>Costs</b>						
Crew wages	245.4	228.2	225.1	151.9	63.6	-58.1%
Energy costs	40.7	27.3	37.7	26.2	31.2	19.3%
Repair and maintenance costs	19.5	18.5	9.5	17.1	13.9	-18.7%
Other variable costs	5.0	5.6	8.8	6.0	7.1	19.3%
Other fixed costs	23.9	3.4	2.6	1.2	1.0	-18.7%
Opportunity costs of capital	6.3	15.6	29.2	22.2	22.2	0.0%
Depreciation costs	48.4	46.3	35.9	27.9	22.6	-18.7%
<b>Economic indicators</b>						
GVA	442.6	396.0	398.1	251.2	144.6	-42.4%
Gross profit	197.3	167.7	172.9	99.3	81.0	-18.5%
Net profit	142.5	105.8	107.8	49.3	36.1	-26.6%
<b>Capital value</b>						
Fleet depreciated replacement value	344.6	280.0	315.0	400.0	400.0	0.0%
Investments	79.8	78.0	14.9	129.2		
<b>Profitability</b>						
Net profit margin (%)	27%	23%	23%	16%	18%	12%
RoFTA (%)	43%	43%	43%	18%	15%	-18%
GVA per fisherman (€)	27,665.0	32,996.3	22,114.8	13,222.0	8,899.6	-32.7%

Source: Slovenian National Program for the collection of fisheries data under the EU DCF



Source: Slovenian National Program for the collection of fisheries data under the EU DCF

**Purse seiners 12-18** – 4 vessels make up this segment.. These vessels target pelagic species. Most important species are European pilchard (Sardine) and Anchovy. The total value of landings was €0,31 million and around 8 FTEs were employed in this fleet segment in 2012, contributing to 21% and 13% of the total income from landings and FTEs generated by the Slovenian fishing fleet, respectively. This fleet segment was profitable, with reported net profits of around €0, 05 million in 2012.

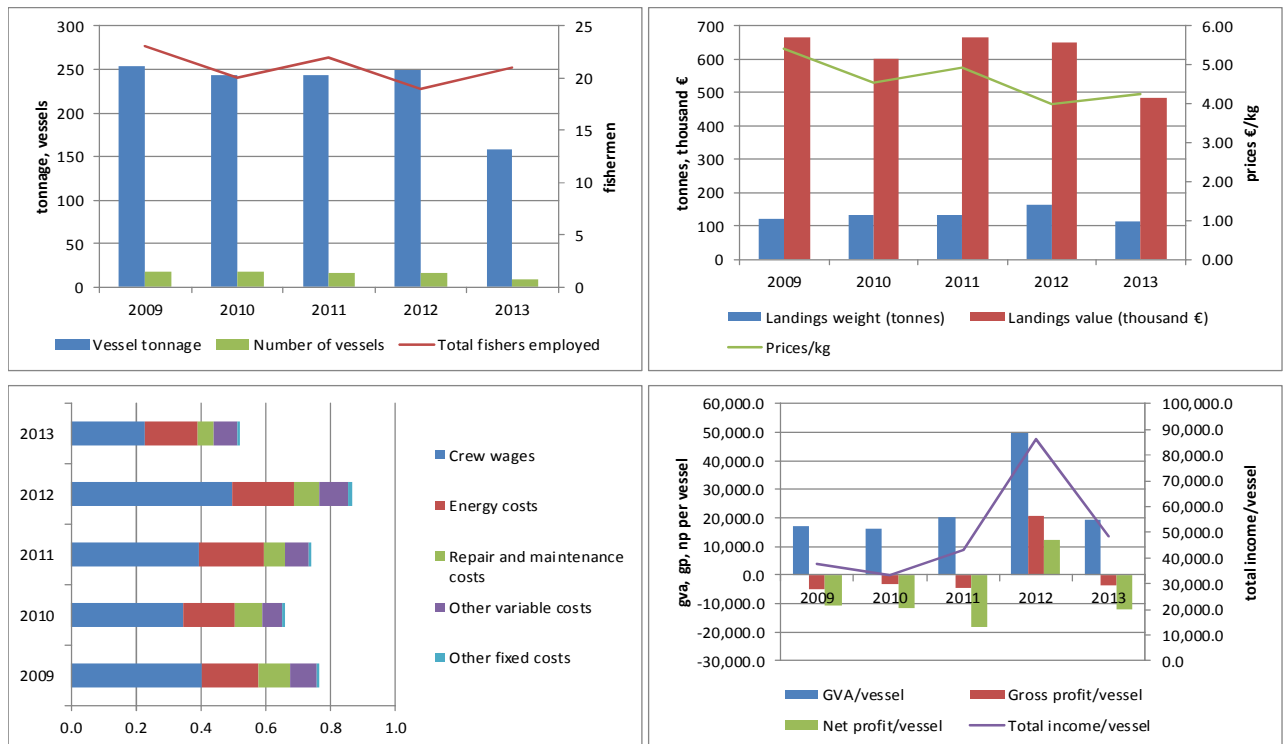
## SVN - Demersal trawlers 12-18 m

<b>COUNTRY</b>	SVN
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	DTS_VL1218

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	18	18	16	17	10	-41.2%
Average vessel age	40.44	43.44	41.38	44.25	44.75	1.1%
GT (tonnes)	253.7	243.1	243.8	248.6	157.8	-36.5%
Engine power (kW)	2707.78	2693.78	2473.78	2545.49	1506.41	-40.8%
<b>Employment</b>						
Total fishers employed	23	20	22	19	21	10.5%
Full Time Equivalent	16	16	16	12	0	0.0%
Average wage per fisherman (€)	17,482	17,326	17,931	26,070	10,909	-58.2%
<b>Fishing effort</b>						
Days at sea	1,311	1,573	1,215	1,086	905	-16.7%
Energy consumption (thousand litres)	232.0	228.9	200.3	197.7	164.7	-16.7%
Fuel consumption per kg landed (litre/kg)	1.9	1.7	1.5	1.2	1.4	19.8%
<b>Production</b>						
Landings weight (tonnes)	123.2	133.0	135.0	163.5	113.8	-30.4%
Landings value (thousand €)	666.0	602.9	666.1	650.2	484.0	-25.6%

VARIABLE (thousand €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	666.0	602.9	666.1	650.2	484.0	-25.6%
Direct subsidies			21.1	249.5		
Other income	8.6	0.0	0.0	562.1		
<b>Costs</b>						
Crew wages	402.1	346.5	394.5	495.3	229.1	-53.8%
Energy costs	174.6	157.8	198.0	192.6	160.5	-16.7%
Repair and maintenance costs	99.9	86.7	66.6	76.8	48.7	-36.5%
Other variable costs	78.3	60.9	73.0	90.1	75.1	-16.7%
Other fixed costs	10.8	5.2	6.6	9.2	5.8	-36.5%
Opportunity costs of capital	28.1	84.9	150.8	66.1	38.9	-41.2%
Depreciation costs	72.7	65.1	63.9	69.5	44.1	-36.5%
<b>Economic indicators</b>						
GVA	311.0	292.3	321.8	843.6	193.9	-77.0%
Gross profit	-91.1	-54.2	-72.6	348.3	-35.2	-110.1%
Net profit	-191.8	-204.2	-287.4	212.7	-118.2	-155.6%
<b>Capital value</b>						
Fleet depreciated replacement value	1,531.5	1,521.4	1,629.2	1,190.0	700.0	-41.2%
Investments	149.9	290.4	90.7	15.5		
<b>Profitability</b>						
Net profit margin (%)	-28%	-34%	-42%	15%	-24%	-268%
RoFTA (%)	-11%	-8%	-8%	23%	-11%	-148%
GVA per fisherman (€)	13,521.3	14,614.4	14,629.2	44,399.6	9,231.0	-79.2%

Source: Slovenian National Program for the collection of fisheries data under the EU DCF



Source: Slovenian National Program for the collection of fisheries data under the EU DCF

**Demersal trawlers and demersal seiners 12-18m** - 17 vessels make up this segment.. The fleet targets a variety of species, the most important being whiting, musky octopus and European squid. The value of landings was €0.65 million and 12 FTEs were employed in this fleet segment in 2012, contributing to 43% and 19% of the total income from landings and FTEs generated by the MS fishing fleet respectively. This fleet segment was profitable, with reported net profits of around €0, 2 million in 2012.

## SVN - Drift and fixed nets 06-12 m

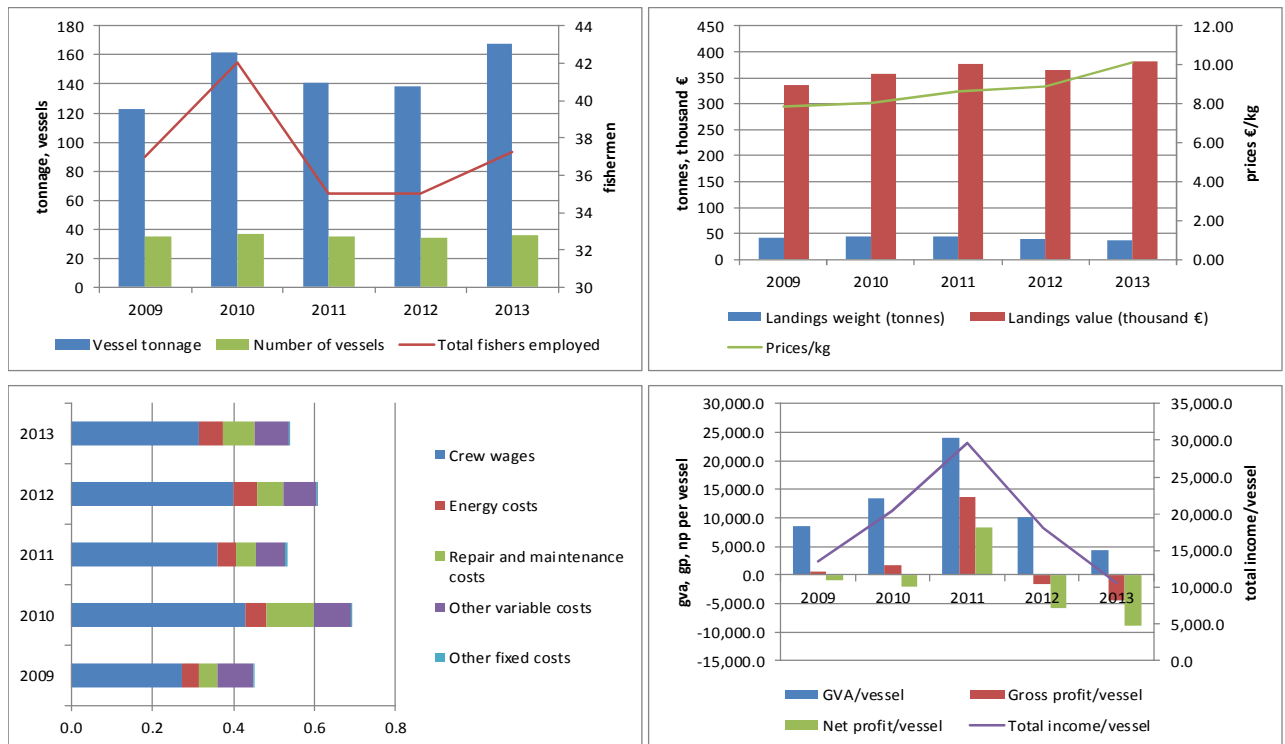
<b>COUNTRY</b>	SVN
<b>GSA</b>	17
<b>FLEET SEGMENT</b>	DFN_VL0612

VARIABLE	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>						
Number of vessels	35	37	35	34	36	5.9%
Average vessel age	31.2	30.35	33.6	32.18	30.17	-6.2%
GT (tonnes)	122.6	161.7	140.8	138.2	167.4	21.1%
Engine power (kW)	2167.64	2599.35	2219.96	2293.81	3525.4	53.7%
<b>Employment</b>						
Total fishers employed	37	42	35	35	37	6.4%
Full Time Equivalent	29	32	26	25	0	0.0%
Average wage per fisherman (€)	7,399.7	10,245.3	10,316.5	11,439.2	8,446.6	-26.2%
<b>Fishing effort</b>						
Days at sea	2,750	3,224	3,495	3,213	3,326	3.5%
Energy consumption (thousand litres)	56.6	59.8	40.8	53.0	54.9	3.5%
Fuel consumption per kg landed (litre/kg)	1.3	1.3	0.9	1.3	1.5	12.1%
<b>Production</b>						
Landings weight (tonnes)	42.8	44.4	43.7	40.9	37.8	-7.6%
Landings value (thousand €)	336.1	357.8	377.2	364.5	382.6	5.0%

VARIABLE (thousand €)	2009	2010	2011	2012	2013	Var. %
<b>Income</b>						
Landings income	336.1	357.8	377.2	364.5	382.6	5.0%
Direct subsidies	0.0	0.0	25.7	64.6		
Other income	136.9	397.7	633.1	188.3		
<b>Costs</b>						
Crew wages	273.8	430.3	361.1	400.4	314.6	-21.4%
Energy costs	40.6	51.6	46.0	57.5	59.5	3.5%
Repair and maintenance costs	46.9	116.4	48.7	64.9	78.7	21.1%
Other variable costs	86.5	91.0	72.6	80.8	83.6	3.5%
Other fixed costs	0.4	1.3	5.7	3.0	3.6	21.1%
Opportunity costs of capital	15.8	65.9	89.7	61.6	65.2	5.9%
Depreciation costs	42.8	74.9	95.3	79.1	95.8	21.1%
<b>Economic indicators</b>						
GVA	298.7	495.1	837.4	346.6	157.1	-54.7%
Gross profit	24.9	64.8	476.3	-53.8	-157.5	193.0%
Net profit	-33.7	-76.0	291.4	-194.4	-318.5	63.8%
<b>Capital value</b>						
Fleet depreciated replacement value	861.0	1,180.3	968.4	1,108.8	1,174.0	5.9%
Investments	145.1	311.2	127.5	53.2		
<b>Profitability</b>						
Net profit margin (%)	-7%	-10%	28%	-31%	-83%	164%
RoFTA (%)	-2%	-1%	39%	-12%	-22%	80%
GVA per fisherman (€)	8,072.6	11,788.6	23,926.0	9,903.1	4,218.4	-57.4%

Source: Slovenian National Program for the collection of fisheries data under the EU DCF





Source: Slovenian National Program for the collection of fisheries data under the EU DCF

**Drift and fixed netters 6-12m** – Around 34 vessels make up this segment which operates in Slovenian coastal areas of the Adriatic. These vessels target demersal species, such as sole, common pandora and sea bream. The total value of landings was €0.365 million and around 25 FTEs were employed in this fleet segment in 2012, contributing 24% and 40% of the total income from landings and FTEs generated by the national fleet respectively. This fleet segment registered a loss of 0,2 million in 2012.

## Montenegro

### National fleet

In 2013, the Montenegro fishing fleet consisted of 118 registered commercial vessels and 15 fleet segments, with a combined total gross tonnage (GT) of 1,148.44 tones, a total engine power of 7,975.55 kilowatts (kW) and an average vessel age of 35.8 years. The number of vessels increased 15.7% between 2012 and 2013. The size of the Montenegro fleet was almost the same during the period 2008-2012 and it was around 100 vessels by year. Until early 2011, the Montenegrin fishing fleet is comprised of about 170 vessels (most of which were part of the small-scale fisheries), 22 bottom trawlers (two of which exceed 24 m in overall length), 8 purse-seiners, 3 multipurpose vessels (bottom trawling and purse seining) (two of which were over 24 m LOA). It must be stressed that about 70 licences were given to subsistence fishers (subsistence fishing is used to describe part time activity of fishers that have other jobs or are retired and can be generally included in small scale fisheries category). In Montenegro, the Fisheries Information System (FIS) was established in 2011, which is the reason of the incomplete number of active vessels during the previous years. In 2011, according to the latest version of the Law on Marine Fisheries and Mariculture, new fishing licences were issued. According to the licences, the fishing fleet numbers 99 vessels in total, as follows: 3 bottom trawlers >24 m LOA (two also licensed for mid-water trawling; all limited to the outside of 8 NM limit), 16 bottom trawlers, 12 purse seiners, 58 vessels in small-scale fisheries and 10 vessels in subsistence fisheries (licences are valid until 22nd August, 2014). The general trend from 2011 is an increase in capacity, i.e. number of vessels, which is also reflected in the increase of total engine power and gross tonnage. It must be highlighted that the Ministry of Agriculture and Rural Development of Montenegro (the body responsible for the issuing of fishing licences and for the management of fisheries) has estimated that the maximum number of licences can be 223 vessels of which 180 vessels are small scale fishery vessels. Montenegro does not limit its fishing capacity and an increase in the number of fishing vessels and of engine capacity is presently allowed, until it reaches planned census of 223 vessels.

The most important fisheries in the Montenegro are: large-scale commercial fisheries, small-scale commercial fisheries (classification based on the size of the vessel as well as the type, size and number of the fishing gears used) and sport recreational fisheries. The legislature defines small-scale commercial fishing as a fishery using a vessel of up to 12 m length overall with fishing gear allowed for small-scale commercial fishery: gillnets and trammel nets, fish pots and traps, harpoons, longlines (up to 250 hooks) and other hooks (rods, hooks and lines, etc.), beach seine for pilchard („srdelara“; mesh size no less than 12 mm). Large-scale commercial fishing is the fishing carried out by using fishing vessel shorter than 12 and longer than 12 m over all, with the following fishing tools and gear: bottom trawls, pelagic (floating) trawls, purse seines, shore seines, beach seines, gill and trammel nets, fish traps, harpoons with and without the use of artificial light; long-lines and other hooks, Norway lobster (*Nephrops norvegicus*) traps, traps for big crustaceans, also the nets for catching shellfish and other marine organisms.

The Montenegro demersal fishing fleet is represented by the following fleet segments: demersal trawler segment (DTS\_VL0612, DTS\_VL1218, DTS\_VL1824, DTS\_VL2440), drift and/or fixed netters segment (DFN\_VL0006, DFN\_VL0612) and vessels using hooks segment (HOK\_VL0006, HOK\_VL0612). Pelagic fishing fleet is represented by the purse seiner segment (PS\_VL0006, PS\_VL0612, PS\_VL1218, PS\_VL1824), pelagic trawler segment (TM\_VL2440) and vessels using other active gears segment (MGO\_VL0006, MGO\_VL0612).

When analyzed by main fishing gear, the drift and/or fixed netters segment (DFN) was the largest in terms of number of vessels in whole analyzed period 2008-2013 followed by vessels using other active gears segment (MGO). The latter segment possessed the lowest gross tonnage as well as the lowest

engine power. In terms of gross tonnage as well as engine power demersal trawlers segment (DTS) represents the main fleet followed by purse seiners (PS) in terms of engine power and pelagic trawler segment (TM) in terms of gross tonnage. When analysed the gross tonnage, the maximum value of 1,226.9 GT was in 2010 because two active trawlers (>24 m) had experimental licenses and they started with experimental trawling in May 2010 with an increasing of GT of 250 GT compared to 2009 year. But in 2011, number of vessel decreased compared to the previous year and that was the reason of decreasing of 135 GT.

Overall, capacity of the Montenegro fleet increased between 2012 and 2013 by: vessels 15.7%, GT 4.2% and kW 7.4%.

The total weight landed by the Montenegro fleet in 2013 was 615.1 tonnes of seafood with a landed value of almost €3.3 million and it was increased 36.8% compared to the 2012 year. The total weight of landings decreased from 2008 to 2011, when the fleet landed 443 tonnes but after that in 2012 it was reported the increase (466.8 tonnes). In 2008-2012 period, the national fleet generated the highest landed value (€2.9 million) in 2008 which was decreasing until 2012 (€2.4 million). In 2013, the landing value was increased 36.8% compared to 2012. This increase can be explained mostly by the increase in total landing weight. The demersal fleet generated 55.3% of the landing in weight and accounted for 78% of the landed value in 2013. The main ten demersal commercial species are: *Merluccius merluccius*, *Mullus barbatus*, *Parapenaeus longirostris*, *Lophius budegassa*, *Loligo vulgaris*, *Boops boops*, *Eledone moschata*, *Ilex coindetii*, *Sepia elegans* and *Sarda sarda*. The most important demersal species in terms of weight as well as volume are hake, red mullet and deep-water pink shrimp, representing 40% of the total national production. In 2013, the deep-water pink shrimp generated the highest landed value (€293.5 thousands), followed by hake (€291.5 thousands) and red mullet (€191.8 thousands). Of main commercial species, deep-water pink shrimp achieved the highest ex-vessel price per kilo in 2013 (€9 per kg), followed by extra commercial category of hake and red mullet (€8 per kg). The Montenegrin small pelagic fleet operating in GSA 18 in 2013 was targeting mainly sardines, accounting up to 52% in landing weights in each fleet segment. Sardine was less important in PS\_VL1824 and TM\_VL2440, where respectively anchovy and chub mackerel resulted the most important species in term of landing weights. With 118 vessels in the fleet in 2013 there are only 273 employed. The level of employment increased 26.4% compared to 2012. That number is not accurate because many crew members work illegally given that many vessels owners cannot afford to pay salary sacrifice contributions for them. They also have the problem with finding crew members, people from Montenegro aren't willing to work so the majority of members are former refugees and people from neighboring countries (Serbia and Bosnia & Herzegovina). They work for a percentage of catch sales. The same situation was in the previous years. When analyzed by fleet segment, drift and/or fixed netters segment employed the most fishers, followed by the purse seine segment.

The Montenegrin fleet spent a total of around 12.7 thousands days at sea in 2013 according to data. The total number of days at sea decreased between 2008 and 2012 and was the lowest in 2011 and 2012. The reason for this decrease is that during the issuing of fishing licenses in 2011, the government of Montenegro didn't subsidize the fuel for fishing vessels (trawlers), and thus no trawler fisheries were recorded in the April-May period. Ministry of Agriculture and Rural Development gives quota for fuel to fishermen but only to those who have license for large-scale commercial fishery. Fuel price is normally determined through a complex formula which takes into account value of crude oil and various other conditions. To that value various excises determined by the Government and the VAT (17%) are added. Subsidised fuel prices have only the excises removed (which come to about 0.40€/litre). The fishermen have made requests that the VAT for subsidized fuel be reduced from 17% to 9%, but so far no changes have been made. MARD determines fuel quotas based on number of fishing days and engine power. However, Tax Department uses gross income to determine the actual quota (income divided by 0.853 which is subsidised fuel price in 2013). The reduction in the number of days at sea can be linked to the increase in fuel prices. The highest price of fuel was in 2010, around 1.00€ per litre, and dropped to 0.85€/litre in 2013. From 2012 to 2013 there was a 25.3% increase in reported number of days at sea. This increase can be linked not only to the reduced fuel prices, but also to the increase in the number of vessels in the fishing fleet, as each year there is an open call for new fishing licences from Ministry of

Agriculture and Rural Affairs, until such time as the quota is met (17 trawlers with LOA up to 24 m, 6 trawlers of LOA over 24 m, 20 purse seiners and 180 small-scale vessels). The quantity of fuel consumed in 2013 totaled around 0.63 million litres. The quantity of fuel consumed in the same period 2008-2012 decreasing constantly from 2008 to 2012. In the first three years, it was totaled 0.9 million litres, decreasing 30% in 2011, totaling 0.6 million litres, and a further 17% between 2011 and 2012, which is related with decreasing of fishing days in analysed years.

VARIABLE	2008	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>							
Number of vessels	102	101	102	99	102	118	15,7%
GT (tonnes)	986,3	983,6	1.226,9	1.092,0	1.102,0	1.148,4	4,2%
Engine power (kW)	7081,61	7045,61	7965,61	7312,61	7424,16	7975,55	7,4%
<b>Employment</b>							
Total fishers employed	222	220	227	212	216	273	26,4%
<b>Fishing effort</b>							
Days at sea	11.979	11.561	11.080	10.197	10.122	12.686	25,3%
Energy consumption (thousand litres)	908,4	914,0	861,9	618,4	455,8	628,7	37,9%
Fuel consumption per kg landed (litre/kg)	1,6	1,6	1,5	1,4	1,0	1,0	4,7%
<b>Production</b>							
Landings weight (tonnes)	586,0	571,6	575,8	443,0	466,8	615,1	31,8%
Landings value (thousand €)	2.909,8	2.630,8	2.693,5	2.247,9	2.406,3	3.291,6	36,8%

Source: MONSTAT, the Ministry of Agriculture and Rural Development and Institute of Marine Biology

VARIABLE (thousand €)	2008	2009	2010	2011	2012	2013	Var. %
<b>Income</b>							
Landings income	2.909,8	2.630,8	2.693,5	2.247,9	2.406,3	3.291,6	36,8%
Other income						11,1	
<b>Costs</b>							
Crew wages	760,5	753,6	777,6	726,2	739,9	955,1	29,1%
Energy costs	1.007,9	1.016,7	954,2	697,3	537,3	735,8	36,9%
Repair and maintenance costs	419,8	417,3	407,0	383,4	390,7	408,1	4,4%
Other variable costs	244,1	248,9	227,7	176,7	166,6	234,8	40,9%
Other fixed costs	119,3	118,9	114,1	112,7	112,9	110,8	-1,9%
Opportunity costs of capital	80,9	80,3	77,1	74,4	76,7	76,8	0,0%
Depreciation costs	66,0	65,7	64,1	55,5	56,4	60,1	6,5%
<b>Economic indicators</b>							
GVA	1.118,6	828,9	990,5	877,7	1.198,7	1.813,2	51,3%
Gross profit	358,1	75,2	212,8	151,4	458,7	858,1	87,0%
Net profit	211,2	-70,7	71,7	21,6	325,6	721,2	121,5%
<b>Capital value</b>							
Fleet depreciated replacement value	2.190,6	2.167,8	2.161,2	1.955,8	2.027,3	2.186,3	7,8%
Investments						148,0	
<b>Profitability</b>							
Net profit margin (%)	7%	-3%	3%	1%	14%	22%	61,4%
RoFTA (%)	13%	0%	7%	5%	20%	39%	97,8%
GVA per fisherman (€)	5.038,9	3.767,7	4.363,3	4.139,9	5.549,5	6.641,7	19,7%

Source: MONSTAT, the Ministry of Agriculture and Rural Development and Institute of Marine Biology

The amount of income generated by the Montenegro national fleet in 2013 was €3.3 million. This consisted of €3.29 million in landing value and € 0.11 million in non-fishing income. Total landings income increased 36.8% between 2012 and 2013.

Total operating costs incurred by the fleet in 2013 equated to €2.58 million, amounting around 80% of total income. Crew cost and energy costs, the two major fishing expenses, were €955.1 and €735.8 thousands, respectively. In the analyzed period 2008-2012 all major cost items decreased from 2008 to

2012. Between 2012 and 2013, all major cost items increased with the exception of other fixed costs. The Montenegro fleet had an estimated depreciated replacement value of €2.2 million in 2013. Investments by the fleet amounted to €148 thousands in 2013.

In terms of economic performance, the amount of Gross Value Added (GVA), Gross profit and Net profit generated by the Montenegro fleet in 2013 were €1,813.2 thousands, €858.1 thousands and €721.2 thousands, respectively. All three economic indicators increased between 2012 and 2013.

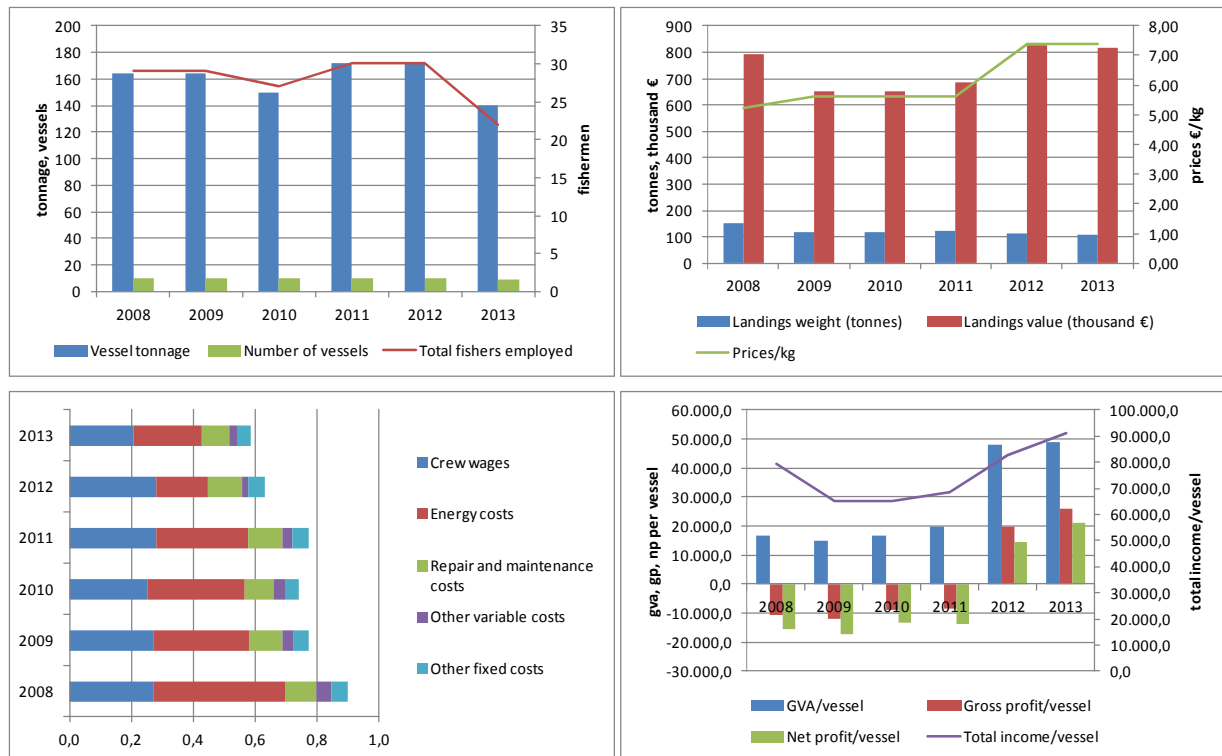
## MNE - Demersal trawlers 12-18 m

<b>COUNTRY</b>	MNE
<b>GSA</b>	18
<b>FLEET SEGMENT</b>	DTS_VL1218

VARIABLE	2008	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>							
Number of vessels	10	10	10	10	10	9	-10,0%
Average vessel age	34,8	35,8	35	36	37	34,5	-6,8%
GT (tonnes)	164,0	164,0	149,4	171,9	171,9	140,2	-18,4%
Engine power (kW)	1263	1263	1563,15	1833,15	1833,15	1689,15	-7,9%
<b>Employment</b>							
Total fishers employed	29	29	27	30	30	22	-26,7%
<b>Fishing effort</b>							
Days at sea	1.287	948	948	900	509	673	32,2%
Energy consumption (thousand litres)	425,8	313,6	313,6	297,8	168,4	222,7	32,2%
Fuel consumption per kg landed (litre/kg)	2,8	2,7	2,7	2,4	1,5	2,0	34,0%
<b>Production</b>							
Landings weight (tonnes)	150,7	116,3	116,3	122,4	112,0	110,5	-1,3%
Landings value (thousand €)	791,3	653,5	653,5	687,9	828,7	817,6	-1,3%

VARIABLE (thousand €)	2008	2009	2010	2011	2012	2013	Var. %
<b>Income</b>							
Landings income	791,3	653,5	653,5	687,9	828,7	817,6	-1,3%
Other income						2,0	
<b>Costs</b>							
Crew wages	270,8	270,8	252,2	280,2	280,2	205,5	-26,7%
Energy costs	423,9	312,2	312,2	296,4	167,6	221,7	32,2%
Repair and maintenance costs	103,9	103,9	94,6	108,9	108,9	88,8	-18,4%
Other variable costs	47,8	35,2	35,2	33,4	18,9	25,0	32,2%
Other fixed costs	50,5	50,5	46,0	52,9	52,9	43,2	-18,4%
Opportunity costs of capital	34,5	34,5	31,4	36,2	36,2	29,5	-18,4%
Depreciation costs	16,4	16,4	14,9	17,2	17,2	14,0	-18,4%
<b>Economic indicators</b>							
GVA	165,2	151,6	165,4	196,2	480,3	441,0	-8,2%
Gross profit	-105,6	-119,2	-86,8	-84,0	200,1	235,5	17,7%
Net profit	-156,5	-170,1	-133,1	-137,3	146,7	192,0	30,9%
<b>Capital value</b>							
Fleet depreciated replacement value	933,3	933,3	933,3	933,3	933,3	840,0	-10,0%
Investments						39,2	
<b>Profitability</b>							
Net profit margin (%)	-20%	-26%	-20%	-20%	18%	23%	32,3%
RoFTA (%)	-13%	-15%	-11%	-11%	20%	26%	34,6%
GVA per fisherman (€)	5.698,0	5.229,1	6.125,3	6.540,4	16.009,0	20.045,0	25,2%

Source: MONSTAT, the Ministry of Agriculture and Rural Development and Institute of Marine Biology



Source: MONSTAT, the Ministry of Agriculture and Rural Development and Institute of Marine Biology

**Demersal trawlers 12-18m** - 9 vessels make up this segment in 2013 which operates predominantly in the Montenegro territorial waters. The number of vessels which makes this segment was unchanged in analyzed period 2008-2012, when the segment consisted of 10 vessels. This decrease of -10% in 2013 is related to one vessel whose LOA is exactly 18 m, so it was transferred to another segment (DTS\_VL1824). Most of these vessels are poorly equipped and unable to operate outside of territorial waters. The fleet targets a variety of species but in particular hake, red mullet, deep-water pink shrimp, anglerfish, and European squid. The level of employment decreased -26.7% compared to 2012. The main factor causing this decrease is related to the activity state of the vessels, because in the previous years the number of total fishers employed both on active and inactive vessels was taken into account. Fishing effort of this segment in 2013 was increased above 30% compared to 2012. In 2013, the total value of landings was €817.6 thousands contributing 24.84% to the total income but decreased 1.3% compared to 2012. The economic indicators Gross Value Added (GVA) decreased by 8.2% compared to 2012 while gross profit and net profit generated by this segment in 2013 showed an increase from 2012. Based on this socioeconomic survey through interviews with fishermen, this fleet segment was profitable, with a reported net profit of €192 thousands in 2013.

## MNE - Demersal trawlers 06-12 m

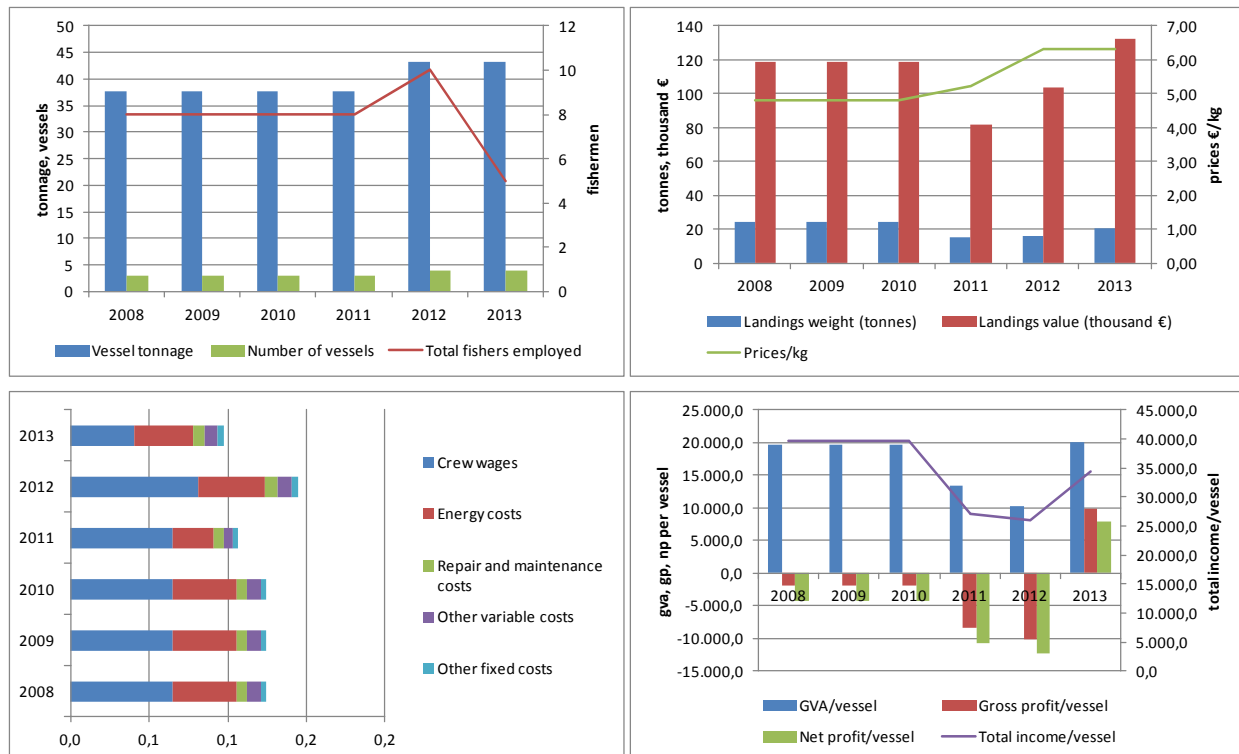
<b>COUNTRY</b>	MNE
<b>GSA</b>	18
<b>FLEET SEGMENT</b>	DTS_VL0612

VARIABLE	2008	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>							
Number of vessels	3	3	3	3	4	4	0,0%
Average vessel age	28	29	30	31	32	33	3,1%
GT (tonnes)	37,7	37,7	37,7	37,7	43,1	43,1	0,0%
Engine power (kW)	441,7	441,7	441,7	441,7	518,7	518,7	0,0%
<b>Employment</b>							
Total fishers employed	8	8	8	8	10	5	-50,0%
<b>Fishing effort</b>							
Days at sea	197	197	197	125	205	180	-12,2%
Energy consumption (thousand litres)	43,8	43,8	43,8	27,8	45,6	40,0	-12,2%
Fuel consumption per kg landed (litre/kg)	1,8	1,8	1,8	1,8	2,8	1,9	-31,1%
<b>Production</b>							
Landings weight (tonnes)	24,8	24,8	24,8	15,6	16,5	21,0	27,4%
Landings value (thousand €)	118,8	118,8	118,8	81,6	103,9	132,3	27,4%

VARIABLE (thousand €)	2008	2009	2010	2011	2012	2013	Var. %
<b>Income</b>							
Landings income	118,8	118,8	118,8	81,6	103,9	132,3	27,4%
Other income						5,0	
<b>Costs</b>							
Crew wages	65,0	65,0	65,0	65,0	81,3	40,7	-50,0%
Energy costs	40,8	40,8	40,8	25,9	42,5	37,3	-12,2%
Repair and maintenance costs	6,6	6,6	6,6	6,6	7,6	7,6	0,0%
Other variable costs	8,7	8,7	8,7	5,5	9,1	8,0	-12,2%
Other fixed costs	3,5	3,5	3,5	3,5	4,0	4,0	0,0%
Opportunity costs of capital	3,4	3,4	3,4	3,4	3,9	3,9	0,0%
Depreciation costs	3,8	3,8	3,8	3,8	4,3	4,3	0,0%
<b>Economic indicators</b>							
GVA	59,2	59,2	59,2	40,0	40,8	80,5	97,5%
Gross profit	-5,8	-5,8	-5,8	-25,0	-40,5	39,8	
Net profit	-13,0	-13,0	-13,0	-32,1	-48,7	31,7	
<b>Capital value</b>							
Fleet depreciated replacement value	82,5	82,5	82,5	82,5	110,0	110,0	0,0%
Investments						7,3	
<b>Profitability</b>							
Net profit margin (%)	-11%	-11%	-11%	-39%	-47%	23%	
RoFTA (%)	-12%	-12%	-12%	-35%	-41%	32%	
GVA per fisherman (€)	7.400,9	7.400,9	7.400,9	5.005,2	4.075,9	16.097,8	

Source: MONSTAT, the Ministry of Agriculture and Rural Development and Institute of Marine Biology





Source: MONSTAT, the Ministry of Agriculture and Rural Development and Institute of Marine Biology

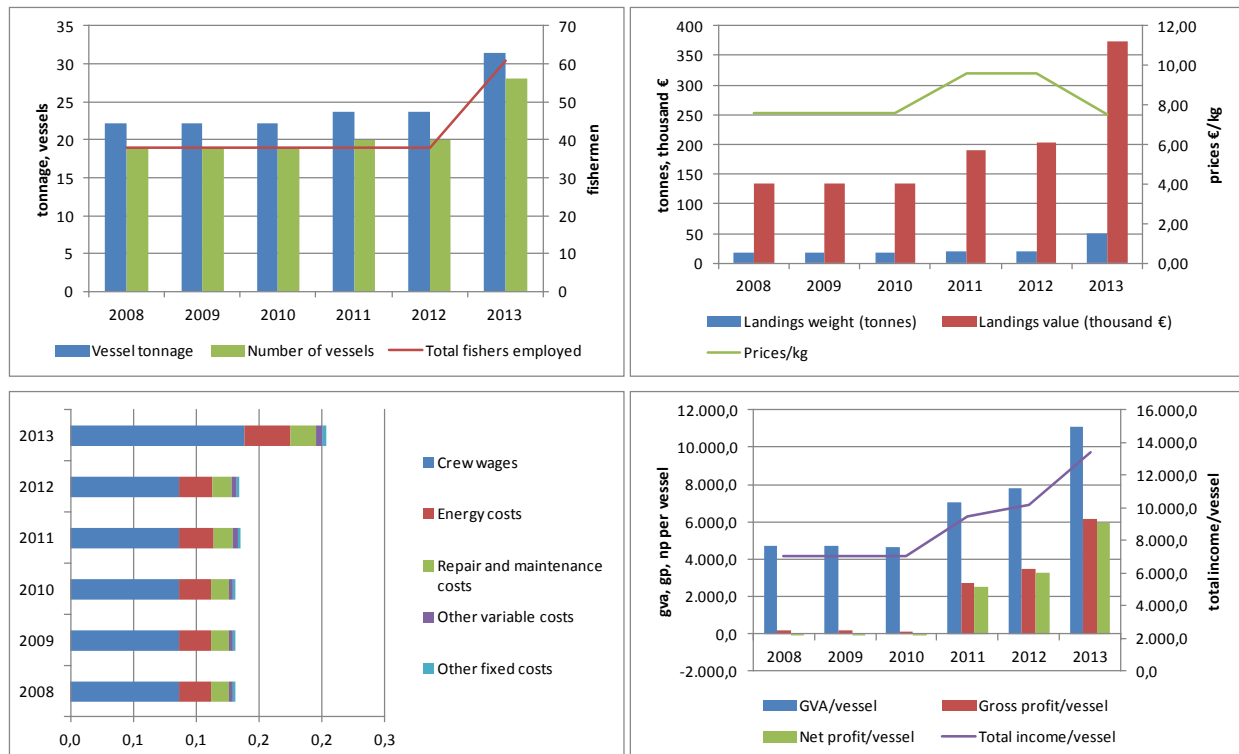
**Demersal trawlers 06-12m** – 4 vessels make up this segment in 2013 which operates only in the Montenegro territorial waters. These vessels target demersal species, such as hake, red mullet, deep-water pink shrimp, anglerfish, starry ray, European squid, bogue. The level of employment decreased - 50% compared to 2012. The main factor causing this decrease is related to number of fisherman engaged only on active vessels. Fishing effort of this segment in 2013 was decreased compared to 2012. Crew costs, energy costs and other variable costs decreased in 2013. while other operational costs stay unchanged compared to 2012. The total weight of landings increased 27.4% compared to 2012 as well as the total value of landings which was €132.3 thousands contributing to 4.02% of the total income and increased 27.4% compared to 2012. In terms of economic indicators, between 2012 and 2013 estimated Gross Value Added (GVA), gross profit and net profit generated by this segment showed an improvement from 2012 results. This fleet segment was profitable.

## MNE - Drift and fixed nets < 6 m

VARIABLE	2008	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>							
Number of vessels	19	19	19	20	20	28	40,0%
Average vessel age	23,8	24,8	25,8	28,31	29,31	32,2	9,9%
GT (tonnes)	22,1	22,1	22,1	23,7	23,7	31,5	32,5%
Engine power (kW)	124,79	124,79	124,79	129,94	129,94	174,78	34,5%
<b>Employment</b>							
Total fishers employed	38	38	38	38	38	61	60,5%
<b>Fishing effort</b>							
Days at sea	2.565	2.565	2.565	2.800	2.680	3.700	38,1%
Energy consumption (thousand litres)	12,0	12,0	12,0	13,1	12,6	17,3	38,1%
Fuel consumption per kg landed (litre/kg)	0,7	0,7	0,7	0,7	0,6	0,3	-41,1%
<b>Production</b>							
Landings weight (tonnes)	17,7	17,7	17,6	19,8	21,2	49,7	134,2%
Landings value (thousand €)	134,4	134,5	134,1	189,7	203,8	372,9	83,0%

VARIABLE (thousand €)	2008	2009	2010	2011	2012	2013	Var. %
<b>Income</b>							
Landings income	134,4	134,5	134,1	189,7	203,8	372,9	83,0%
Other income						3,0	
<b>Costs</b>							
Crew wages	85,9	85,9	85,9	85,9	85,9	138,0	60,5%
Energy costs	25,4	25,4	25,4	27,7	26,5	36,6	38,1%
Repair and maintenance costs	14,4	14,4	14,4	15,4	15,4	20,5	32,5%
Other variable costs	3,6	3,6	3,6	3,9	3,8	5,2	38,1%
Other fixed costs	2,0	2,0	2,0	2,1	2,1	2,8	32,5%
Opportunity costs of capital	1,9	1,9	1,9	2,0	2,0	2,7	32,5%
Depreciation costs	2,2	2,2	2,2	2,4	2,4	3,1	32,5%
<b>Economic indicators</b>							
GVA	89,0	89,2	88,7	140,5	155,9	310,8	99,3%
Gross profit	3,1	3,2	2,8	54,6	70,0	172,8	146,9%
Net profit	-1,0	-0,9	-1,3	50,2	65,6	167,0	154,6%
<b>Capital value</b>							
Fleet depreciated replacement value	52,0	52,0	52,0	54,7	54,7	76,6	40,0%
Investments						8,1	
<b>Profitability</b>							
Net profit margin (%)	-1%	-1%	-1%	26%	32%	44%	38,0%
RoFTA (%)	2%	2%	1%	95%	124%	222%	79,3%
GVA per fisherman (€)	2.342,7	2.346,7	2.334,7	3.698,6	4.103,6	5.095,2	24,2%

Source: MONSTAT, the Ministry of Agriculture and Rural Development and Institute of Marine Biology



Source: MONSTAT, the Ministry of Agriculture and Rural Development and Institute of Marine Biology

**Drift and fixed nets < 6 m**— 28 vessels made up this segment in 2013, which operates in the Boka Kotorska Bay and along the Montenegro coast. They represent 24% of the entire Montenegro fishing fleet. Total employment in 2013 was estimated at 61 jobs, increasing 60.5% compared to 2012. This was caused by the increasing in vessel numbers. The fleet targets species such as atlantic bonito, common pandora, chub mackerel, tub gurnard and greater amberjack. In 2013, this segment made €372.9 thousands in total landings income contributing to 11.33% of the total income. This fleet segment was profitable with a reported gross profit of €172.8 thousands and net profit of €167 thousands in 2013, increasing by 146.9% and 154.6% respectively between 2012 and 2013.

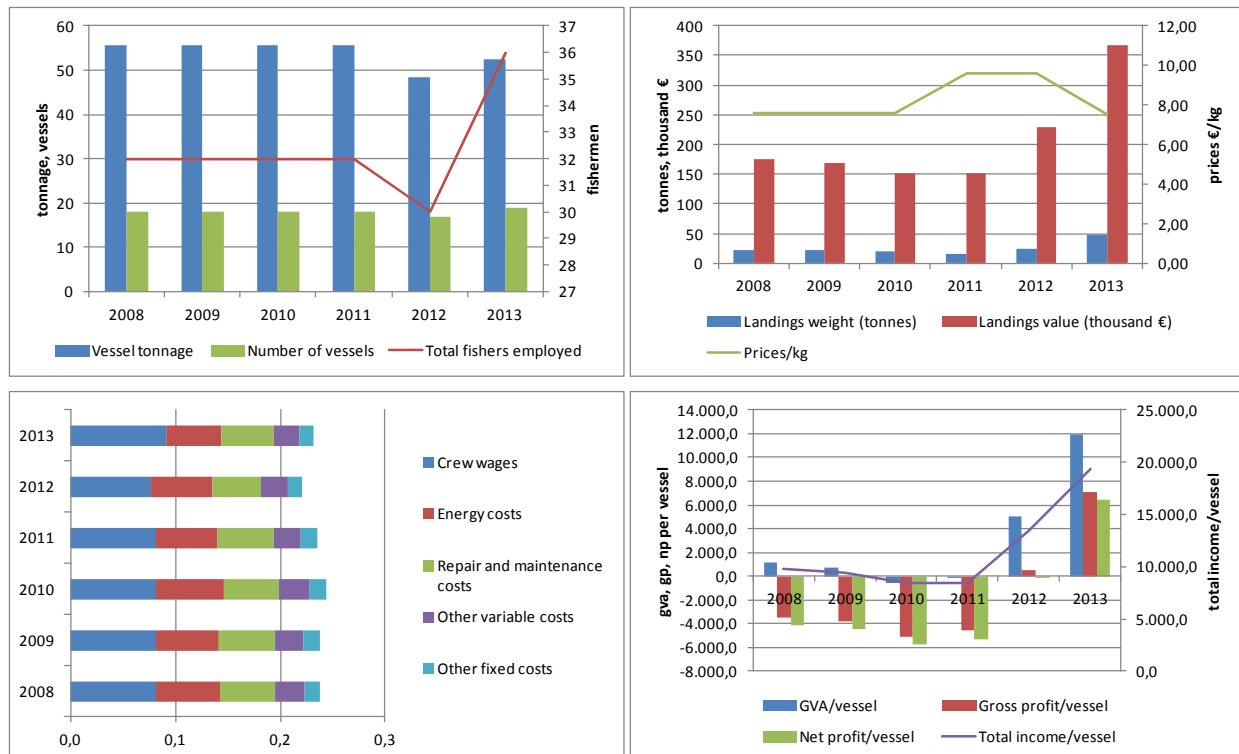
## MNE - Drift and fixed nets 06-12 m

<b>COUNTRY</b>	MNE
<b>GSA</b>	18
<b>FLEET SEGMENT</b>	DFN_VL0612

VARIABLE	2008	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>							
Number of vessels	18	18	18	18	17	19	11,8%
Average vessel age	24,3	25,3	26,3	27,3	24,1	58	140,7%
GT (tonnes)	55,7	55,7	55,7	55,7	48,4	52,3	8,1%
Engine power (kW)	931,01	931,01	931,01	931,01	882,01	893,12	1,3%
<b>Employment</b>							
Total fishers employed	32	32	32	32	30	36	20,0%
<b>Fishing effort</b>							
Days at sea	2.700	2.670	2.862	2.610	2.601	2.333	-10,3%
Energy consumption (thousand litres)	45,4	44,9	48,1	43,9	43,8	39,3	-10,3%
Fuel consumption per kg landed (litre/kg)	2,0	2,0	2,4	2,8	1,8	0,8	-56,2%
<b>Production</b>							
Landings weight (tonnes)	23,2	22,3	20,0	15,9	23,9	48,9	104,9%
Landings value (thousand €)	176,5	169,2	151,8	152,4	229,2	367,1	60,1%

VARIABLE (thousand €)	2008	2009	2010	2011	2012	2013	Var. %
<b>Income</b>							
Landings income	176,5	169,2	151,8	152,4	229,2	367,1	60,1%
Other income						0,2	
<b>Costs</b>							
Crew wages	81,6	81,6	81,6	81,6	76,5	91,8	20,0%
Energy costs	60,8	60,1	64,4	58,7	58,5	52,5	-10,3%
Repair and maintenance costs	53,4	53,4	53,4	53,4	46,3	50,1	8,1%
Other variable costs	27,3	27,0	28,9	26,4	26,3	23,6	-10,3%
Other fixed costs	15,2	15,2	15,2	15,2	13,2	14,2	8,1%
Opportunity costs of capital	7,0	7,0	7,0	7,0	6,1	6,6	8,1%
Depreciation costs	5,6	5,6	5,6	5,6	4,8	5,2	8,1%
<b>Economic indicators</b>							
GVA	19,9	13,6	-10,0	-1,3	84,9	226,9	167,3%
Gross profit	-61,7	-68,0	-91,6	-82,8	8,4	135,1	
Net profit	-74,3	-80,6	-104,2	-95,4	-2,6	123,3	
<b>Capital value</b>							
Fleet depreciated replacement value	178,1	178,1	178,1	178,1	168,2	188,0	11,8%
Investments						8,4	
<b>Profitability</b>							
Net profit margin (%)	-42%	-48%	-69%	-63%	-1%	34%	
RoFTA (%)	-38%	-41%	-55%	-50%	2%	69%	
GVA per fisherman (€)	621,0	425,0	-313,6	-39,2	2.829,0	6.301,9	122,8%

Source: MONSTAT, the Ministry of Agriculture and Rural Development and Institute of Marine Biology



Source: MONSTAT, the Ministry of Agriculture and Rural Development and Institute of Marine Biology

**Drift and fixed nets 6-12m**—19 vessels made up this segment in 2013, which operates in the Boka Kotorska Bay and along the Montenegro coastal areas. They represent 16% of the entire Montenegro fishing fleet. Total employment in 2013 was estimated at 36 jobs, increasing 20% compared to 2012. This was caused by the increasing in vessel numbers which is increased 11.8% compared to 2012. The fleet targets species such as atlantic bonito, common pandora, chub mackerel, tub gurnard and greater amberjack. In 2013, this segment made €367.1 thousands in total landings income contributing to 11.15% of the total income. In terms of economic performance, based on the data submitted, Gross Value Added (GVA), gross profit and net profit generated by the this fleet segment in 2013 were €226.9 thousands, €135.1 thousands and €123.3 thousands, respectively. Data for 2013 received through interviews with fishermen in the frame of socioeconomic study are inconsistent with data from period 2008-2012.

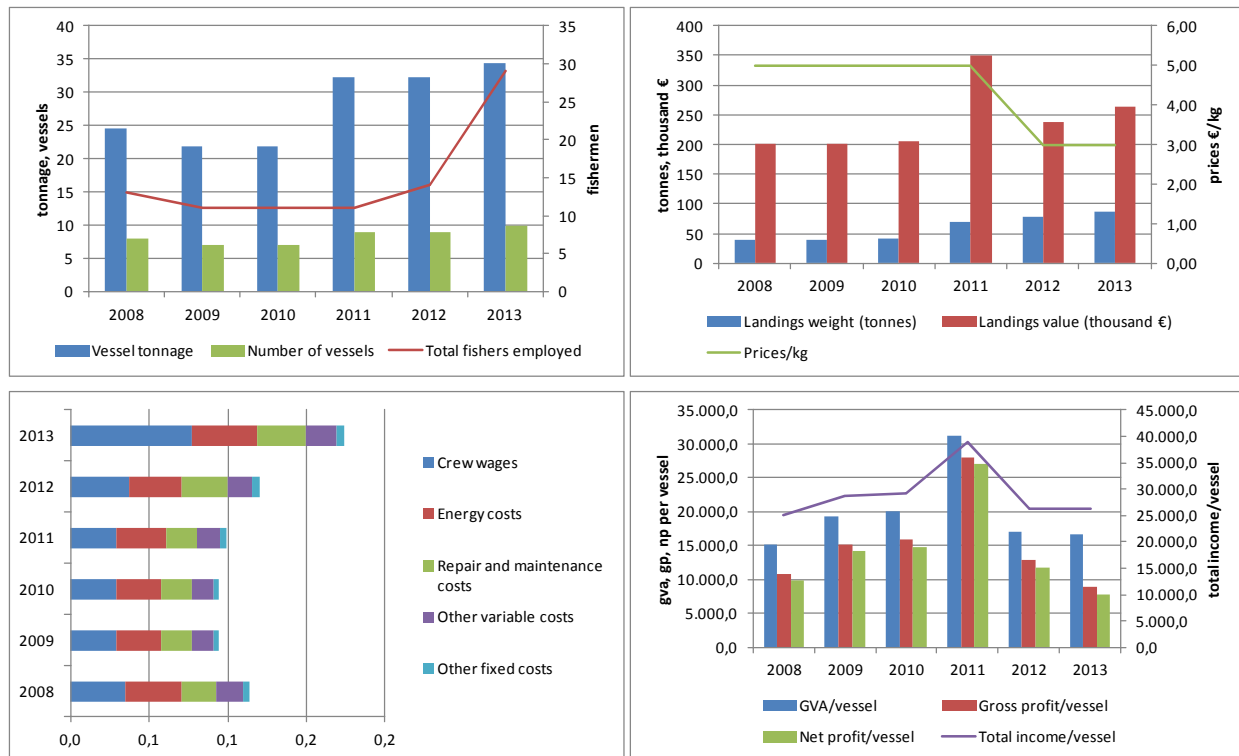
## MNE - Purse seiners 06-12 m

<b>COUNTRY</b>	MNE
<b>GSA</b>	18
<b>FLEET SEGMENT</b>	PS_VL0612

VARIABLE	2008	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>							
Number of vessels	8	7	7	9	9	10	11,1%
Average vessel age	24,17	24	25	26	29,13	32,66	12,1%
GT (tonnes)	24,6	21,8	21,8	32,3	32,3	34,4	6,6%
Engine power (kW)	401,71	366,71	366,71	441,43	441,43	452,43	2,5%
<b>Employment</b>							
Total fishers employed	13	11	11	11	14	29	107,1%
<b>Fishing effort</b>							
Days at sea	960	756	756	840	891	1.100	23,5%
Energy consumption (thousand litres)	22,1	17,4	17,4	19,3	20,5	25,3	23,5%
Fuel consumption per kg landed (litre/kg)	0,6	0,4	0,4	0,3	0,3	0,3	10,8%
<b>Production</b>							
Landings weight (tonnes)	40,1	40,1	41,0	70,0	79,0	88,0	11,4%
Landings value (thousand €)	200,4	200,4	205,0	350,0	237,0	264,0	11,4%

VARIABLE (thousand €)	2008	2009	2010	2011	2012	2013	Var. %
<b>Income</b>							
Landings income	200,4	200,4	205,0	350,0	237,0	264,0	11,4%
Other income						0,0	
<b>Costs</b>							
Crew wages	34,6	29,3	29,3	29,3	37,2	77,2	107,1%
Energy costs	35,9	28,3	28,3	31,4	33,3	41,1	23,5%
Repair and maintenance costs	22,3	19,8	19,8	19,8	29,3	31,2	6,6%
Other variable costs	17,1	13,5	13,5	15,0	15,9	19,6	23,5%
Other fixed costs	3,8	3,3	3,3	3,3	4,9	5,3	6,6%
Opportunity costs of capital	5,7	5,1	5,1	5,1	7,5	8,0	6,6%
Depreciation costs	2,5	2,2	2,2	2,2	3,2	3,4	6,6%
<b>Economic indicators</b>							
GVA	121,4	135,5	140,1	280,5	153,6	166,8	8,6%
Gross profit	86,8	106,3	110,8	251,2	116,4	89,7	-22,9%
Net profit	78,6	99,0	103,6	243,9	105,6	78,2	-25,9%
<b>Capital value</b>							
Fleet depreciated replacement value	182,4	159,6	159,6	159,6	205,2	228,0	11,1%
Investments						11,6	
<b>Profitability</b>							
Net profit margin (%)	39%	49%	51%	70%	45%	30%	-33,5%
RoFTA (%)	46%	65%	68%	156%	55%	38%	-31,4%
GVA per fisherman (€)	9.335,1	12.321,2	12.737,6	25.497,8	10.971,7	5.752,4	-47,6%

Source: MONSTAT, the Ministry of Agriculture and Rural Development and Institute of Marine Biology



Source: MONSTAT, the Ministry of Agriculture and Rural Development and Institute of Marine Biology

**Purse seiners 06-12m** – 10 vessels made up this segment in 2013, which operates at the entrance of Boka Kotorska Bay. They represent 8.5% of the entire Montenegro fishing fleet. The number of fishers employed increased 107.1% compared to 2012. This was caused by the increasing in vessel numbers (11.1% compared to the 2012). The fleet targets pelagic species such as anchovy, sardines, bogue, Mediterranean horse mackerel, chub mackerel. The crew wages have improved in 2013 and showed a significant increase (107.1%) relative to 2012. Fishing effort, in terms of days at sea and energy consumption increased 23.5%. In 2013, this segment made €264 thousands in total landings income contributing to 8.02% of the total income. The total amount of Gross Value Added generated by this fleet segment in 2013 was €166.8 thousands. This fleet segment was not profitable with a reported gross profit of €89.7 thousands and net profit of €78.2 thousands in 2013, decreasing by 22.9% and 25.9% respectively between 2012 and 2013.

## MNE - Polyvalent active vessels 6-12 m

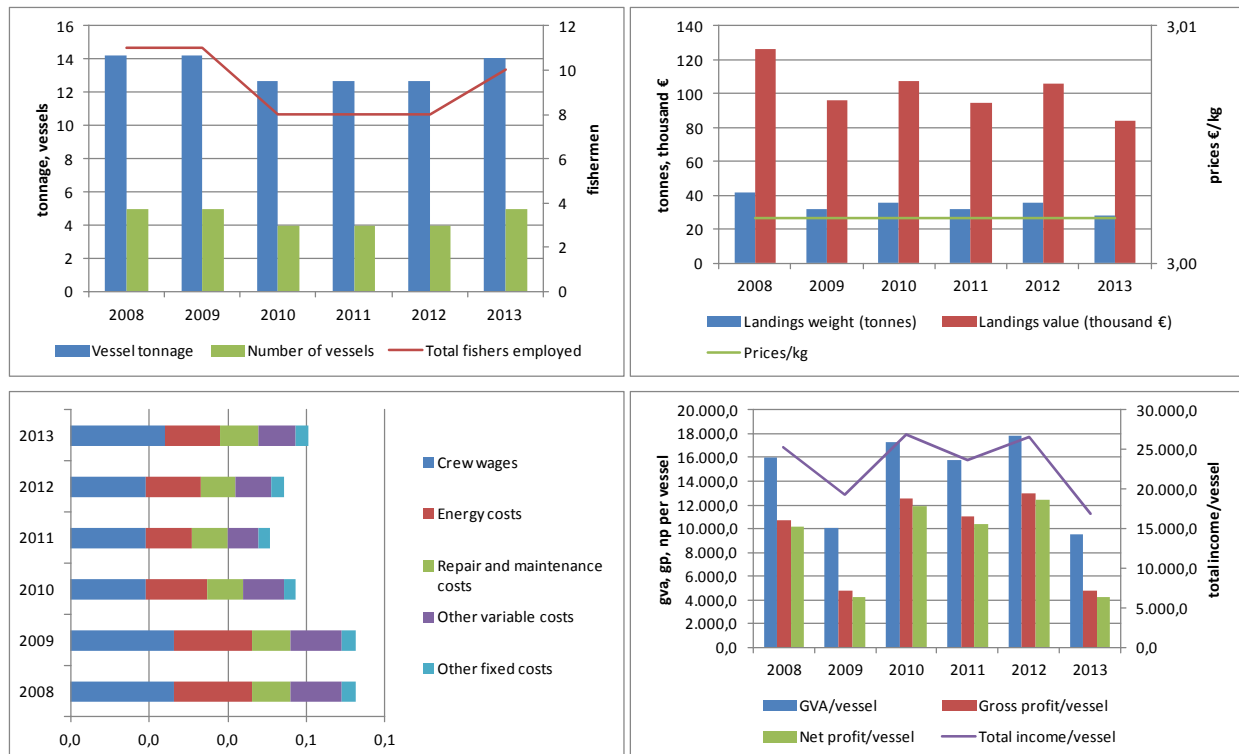
<b>COUNTRY</b>	MNE
<b>GSA</b>	18
<b>FLEET SEGMENT</b>	MGO_VL0612

VARIABLE	2008	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>							
Number of vessels	5	5	4	4	4	5	25,0%
Average vessel age	38,25	39,25	43	44	45	46	2,2%
GT (tonnes)	14,2	14,2	12,7	12,7	12,7	14,0	10,6%
Engine power (kW)	49,18	49,18	44,03	44,03	44,03	62,03	40,9%
<b>Employment</b>							
Total fishers employed	11	11	8	8	8	10	25,0%
<b>Fishing effort</b>							
Days at sea	600	600	480	331	424	430	1,4%
Energy consumption (thousand litres)	11,7	11,7	9,4	7,0	8,3	8,4	1,4%
Fuel consumption per kg landed (litre/kg)	0,3	0,4	0,3	0,2	0,2	0,3	28,4%
<b>Production</b>							
Landings weight (tonnes)	42,0	32,1	35,8	31,6	35,4	28,0	-21,0%
Landings value (thousand €)	126,0	96,4	107,4	94,8	106,2	83,9	-21,0%

VARIABLE (thousand €)	2008	2009	2010	2011	2012	2013	Var. %
<b>Income</b>							
Landings income	126,0	96,4	107,4	94,8	106,2	83,9	-21,0%
Other income						0,6	
<b>Costs</b>							
Crew wages	26,4	26,4	19,2	19,2	19,2	24,0	25,0%
Energy costs	19,7	19,7	15,7	11,8	13,9	14,1	1,4%
Repair and maintenance costs	9,9	9,9	8,9	8,9	8,9	9,8	10,6%
Other variable costs	13,1	13,1	10,4	7,8	9,2	9,4	1,4%
Other fixed costs	3,4	3,4	3,1	3,1	3,1	3,4	10,6%
Opportunity costs of capital	1,2	1,2	1,0	1,0	1,0	1,2	10,6%
Depreciation costs	1,4	1,4	1,3	1,3	1,3	1,4	10,6%
<b>Economic indicators</b>							
GVA	79,9	50,3	69,3	63,2	71,2	47,8	-32,8%
Gross profit	53,6	24,0	50,1	44,1	52,0	23,8	-54,1%
Net profit	51,0	21,4	47,8	41,8	49,7	21,3	-57,1%
<b>Capital value</b>							
Fleet depreciated replacement value	33,0	33,0	26,4	26,4	26,4	33,0	25,0%
Investments						1,0	
<b>Profitability</b>							
Net profit margin (%)	40%	22%	45%	44%	47%	25%	-46,1%
RoFTA (%)	158%	68%	185%	162%	192%	68%	-64,6%
GVA per fisherman (€)	7.267,9	4.574,2	8.659,0	7.906,0	8.894,6	4.781,2	-46,2%

Source: MONSTAT, the Ministry of Agriculture and Rural Development and Institute of Marine Biology





Source: MONSTAT, the Ministry of Agriculture and Rural Development and Institute of Marine Biology

**Polyvalent active vessels 06-12 m** – This segment is consisted of 5 vessels which used only the beach seines and operate only in the Boka Kotorska Bay. The number of vessels which makes this segment was increased 25% in 2013 compared to 2012. The target species are main composed by anchovy, sardine, round sardinella and atlantic bonito. The most important species for this segment are sardine with 12.9 tonnes landed and an anchovy with landings totalling 9.1 tonnes. The level of employment increased 25% compared to 2012. As a consequence of the slight increase in fishing activity, the quantity of fuel consumed by this segment in 2013 increased by around 1.5% compared to 2012, at around 8.4 thousands litres. In 2013, the total volume of landings landed by this segment in 2013 was 28 tonnes, with a landed value of €83.9 thousands. The total volume and value of landings decreased 21% between 2012 and 2013. This fleet segment generated a gross profit of €23.8 thousands and a net profit of €21.3 thousands, with a reduction of 54.1% and 57.1% respectively compared to 2012.

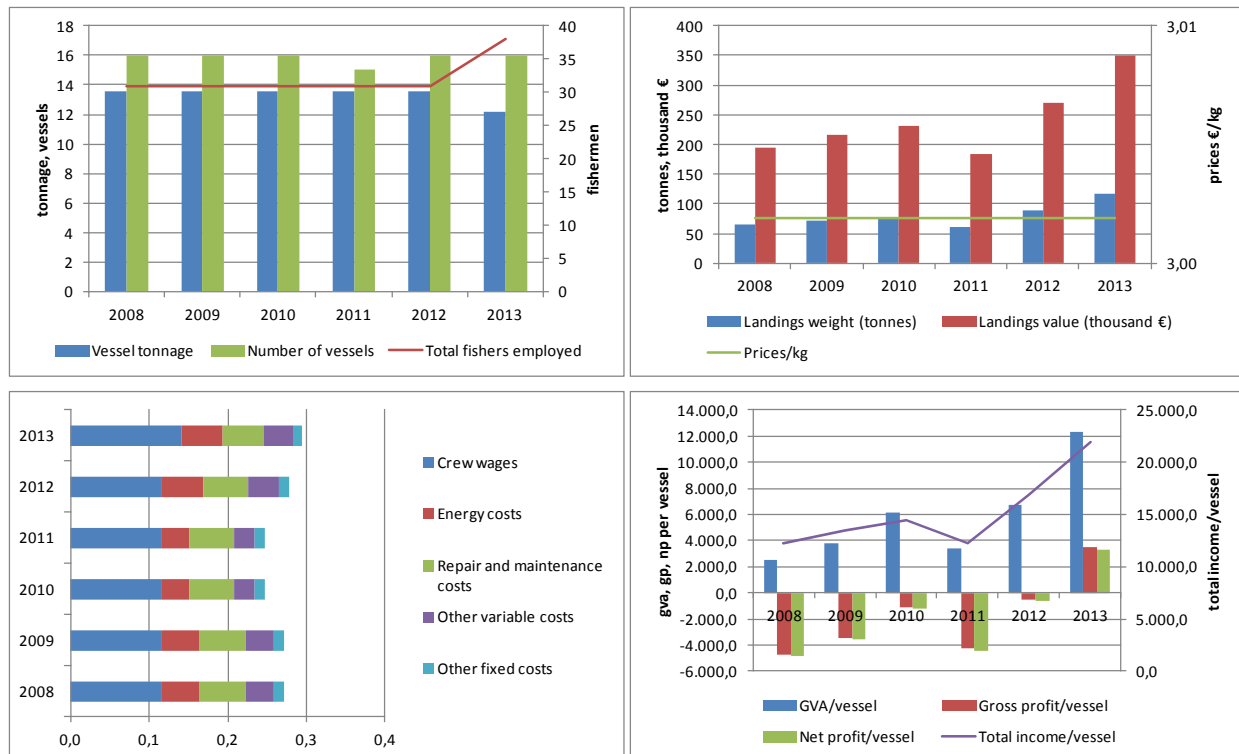
## MNE - Polyvalent active vessels<6 m

<b>COUNTRY</b>	MNE
<b>GSA</b>	18
<b>FLEET SEGMENT</b>	MGO_VL0006

VARIABLE	2008	2009	2010	2011	2012	2013	Var. %
<b>Structure</b>							
Number of vessels	16	16	16	15	16	16	0,0%
Average vessel age	46,35	47,35	48,35	49,85	50,85	51,85	2,0%
GT (tonnes)	13,6	13,6	13,6	13,6	13,6	12,2	-10,1%
Engine power (kW)	56,86	56,86	56,86	56,86	56,86	51,06	-10,2%
<b>Employment</b>							
Total fishers employed	31	31	31	31	31	38	22,6%
<b>Fishing effort</b>							
Days at sea	1.584	1.584	1.152	1.077	1.704	1.667	-2,2%
Energy consumption (thousand litres)	30,9	30,9	22,5	22,5	33,2	32,5	-2,2%
Fuel consumption per kg landed (litre/kg)	0,5	0,4	0,3	0,4	0,4	0,3	-24,6%
<b>Production</b>							
Landings weight (tonnes)	65,3	72,0	76,8	61,1	89,9	116,7	29,7%
Landings value (thousand €)	195,8	216,0	230,4	183,2	269,8	350,1	29,7%

VARIABLE (thousand €)	2008	2009	2010	2011	2012	2013	Var. %
<b>Income</b>							
Landings income	195,8	216,0	230,4	183,2	269,8	350,1	29,7%
Other income						0,3	
<b>Costs</b>							
Crew wages	115,2	115,2	115,2	115,2	115,2	141,2	22,6%
Energy costs	49,7	49,7	36,1	36,1	53,5	52,3	-2,2%
Repair and maintenance costs	57,1	57,1	57,1	57,1	57,1	51,3	-10,1%
Other variable costs	36,2	36,2	26,4	26,4	39,0	38,1	-2,2%
Other fixed costs	12,6	12,6	12,6	12,6	12,6	11,3	-10,1%
Opportunity costs of capital	1,4	1,4	1,4	1,4	1,4	1,3	-10,1%
Depreciation costs	1,4	1,4	1,4	1,4	1,4	1,2	-10,1%
<b>Economic indicators</b>							
GVA	40,2	60,4	98,2	51,0	107,7	197,3	83,2%
Gross profit	-74,9	-54,8	-17,0	-64,2	-7,5	56,1	
Net profit	-77,7	-57,6	-19,7	-67,0	-10,3	53,6	
<b>Capital value</b>							
Fleet depreciated replacement value	36,7	36,7	36,7	36,7	36,7	36,7	0,0%
Investments						10,4	
<b>Profitability</b>							
Net profit margin (%)	-40%	-27%	-9%	-37%	-4%	15%	
RoFTA (%)	-208%	-153%	-50%	-179%	-24%	150%	
GVA per fisherman (€)	1.297,8	1.948,1	3.168,6	1.645,0	3.473,9	5.192,3	49,5%

Source: MONSTAT, the Ministry of Agriculture and Rural Development and Institute of Marine Biology



Source: MONSTAT, the Ministry of Agriculture and Rural Development and Institute of Marine Biology

**Polyvalent active vessels < 6m** – This segment consisted of 16 vessels which used only the beach seines and operate only in the Boka Kotorska Bay where this fishery is traditional for centuries. The number of vessels which makes this segment was the same in the whole analyzed period 2008-2013. The fleet targets a variety of species but in particular anchovy, sardine, round sardinella and atlantic bonito. The main species for this segment is sardine with 26.3 tonnes landed at a value of €105.2 thousands in 2013. The anchovy is the second most important species landed in terms of weight, with landings totalling 18.4 tonnes. The level of employment increased 22.6% compared to 2012. Due to small size of vessels, fishing activities are mainly affected by weather conditions; the total number of days at sea in 2013 decreased by 2.2% compared to 2012. Effort, in energy consumption, decreased approximately 2% between 2012 and 2013. In 2013, the total weight of landings was 116.7 tonnes, increased almost 30% compared to 2012. Prices obtained for these species remain stable between 2008 and 2013. The main economic indicators show a high profitability compared to 2012. This fleet segment was profitable with a reported gross profit of around €56.1 thousands and a net profit of €53.6 thousands.

## Albania

### National fleet

A specific survey aimed at estimating economic and social data for 2013 has been implemented in Albania with the support of Adriamed. Final estimates were made available to SEDAF project and they have been included in WP2 database. However, these data have been considered as preliminary and the process of validation was not finished on time to allow their inclusion in the present analysis that therefore focuses only on time series from 2009 to 2012.

In 2012, the Albanian fleet consisted of 562 vessels with a total tonnage of 11 thousand tons and around 85 thousand kW. The size of this fleet was stable over the period under analysis.

The number of fishermen employed in this fleet was equal, in 2012 to 2,264 units, very close to the values of the previous 2 years. This means that around 4 persons are on average working on board of each vessel, in 2012. The average wage for crew members working on board of the Albanian vessels has been equal, in 2012, to 660 €.

The total production was equal, in 2012, to 2.9 thousand tonnes (+7% compared to 2011) and 21.6 million € (+6% compared to 2011).

Total operating costs incurred by the Albanian fleet in 2012 were equal to around €13.3 million. Crew cost and fuel costs, the two major fishing items, were respectively equal to around 1.5 million € and 9 million €, in 2012. If compared to 2011, labour costs show an increase of around 21%. Energy costs increased of around 8%, mainly due to the increase in fishing activity that increased of 5% between 2011 and 2012.

In 2012 the total gross value added produced by this fleet was around €11 million (equal to around 19 thousand euro per vessel), increasing of 3% compared to 2012. Even if all the operational costs increased, gross profit registers a slight increase (+1%) in 2012 thanks to the increase in landings income.

VARIABLE	2009	2010	2011	2012	%P 2012-2011
<b>Structure</b>					
Number of vessels	554	561	512	562	10%
Average vessel age	37	40	42	44	6%
GT (thousand tonnes)	10.3	11.1	10.9	11.0	1%
Engine power (thousand kW)	56.4	61.7	65.4	84.7	30%
<b>Employment</b>					
Total fishers employed	1,526	2,313	2,418	2,264	-6%
Full Time Equivalent	1,015	1,892	2,117	2,191	3%
Average wage per fisherman (thousand €)	674.5	488.2	508.4	659.2	30%
<b>Fishing effort</b>					
Days at sea	79,874	87,285	82,344	86,461	5%
Energy consumption (million litres)	14.7	14.9	13.6	14.9	10%
Fuel consumption per kg landed (litre/kg)	5.3	5.2	5.1	5.2	2%
<b>Production</b>					
Landings weight (thousand tonnes)	2.8	2.9	2.7	2.9	7%
Landings value (million €)	20.6	21.8	20.4	21.6	6%

VARIABLE (thousand €)	2009	2010	2011	2012	%P 2012-2011
<b>Income</b>					
Landings income	20,587	21,765	20,383	21,600	6%
Other income	1,029	1,088	1,019	1,080	6%
<b>Costs</b>					
Crew wages	1,029	1,129	1,229	1,492	21%
Energy costs	8,546	9,101	8,443	9,118	8%
Repair and maintenance costs	1,908	1,932	1,763	1,936	10%
Other variable costs	598	606	546	599	10%
Other fixed costs	197	199	182	199	10%
Opportunity costs of capital	997	835	3,419	2,041	-40%
Depreciation costs	2,739	2,774	3,039	3,336	10%
<b>Economic indicators</b>					
GVA	10,368	11,015	10,469	10,829	3%
Gross profit	9,338	9,885	9,240	9,336	1%
Net profit	5,602	6,276	2,781	3,959	42%
<b>Capital value</b>					
Fleet depreciated replacement value	2,564	2,744	3,027	4,336	43%
Investments	5,367	3,744	3,439	5,436	58%
<b>Profitability</b>					
Net profit margin (%)	26%	27%	13%	17%	34%
RoF TA (%)	257%	259%	205%	138%	-32%
GVA per fisherman (thousand €)	6.8	4.8	4.3	4.8	10%

Source: Fisheries Directorate Ministry of Environment, Forestry and Water Management, FAO AdriaMed socio-economic survey and University of Tirana

## Methodology and data issues

### Italy

In Italy a cost and earnings data collection program started in 1988 with a systematic survey for the collection of technical and economic parameters of the Italian fishing fleets . This first initiative was followed by a large concerted action funded by the European Commission which gathered research institutes from more than 20 countries and started to produce a yearly "Economic Assessment of European Fisheries" between 1996 and 2005.

Since 2001 the economic survey is included in the National Program of the EU Data Collection Framework (DCF), which obliges EU Member States to collect yearly cost and earnings data for commercial fishing vessels at national level.

In particular, regarding the economic data, the following variables are collected within the DCF National Program through a Probability Sample Survey:

1. Income (Income from leasing out quota or other fishing rights, Direct subsidies, Other income)
2. Personnel costs (Wages and salaries of crew, Imputed value of unpaid labour)
3. Energy costs
4. Repair and maintenance costs
5. Other operational costs (Variable costs, Non-variable costs, Lease/rental payments for quota or other fishing rights)
6. Investments in physical capital
7. Financial position

These data are collected in face to face questionnaire interviews of a selection of vessel owners, stratified by area (administrative regions and FAO GSA) and vessel characteristics (size, gears). The vessel sampling strategy is proportional random with some vessels being kept in the sample for several years to increase the response rate.

Economic data are available by year, FAO/GSA and fleet segment.

They are stored in the Italian database of the data collected within the DCF NPs, managed by MIPAAF. Data are available upon request to the Italian National Correspondent and according to article 18 of EU Regulation 199/08.

### Croatia

The economic data on the fishing sector were collected mostly in cooperation with Directorate of Fisheries of the Ministry of Agriculture. Some of the data from 2009 to 2011, especially the ones concerning the socio-economic, were missing but we manage to make some estimations:

- for investigated DFN segment we assumed that the fleet did not change so the data for 2011 was applied to previous years;
- for PS segments in mentioned years (2009, 2010) we had some of the data (number of vessels, their age, length, kW and landings) and according to increase/decrease (percentage) socioeconomic data were assumed.

Further on, as some inconsistency in obtained data sets were noticed, scientists make some corrections in correspondence with some of the active commercial fisherman. As landing weight was an official data that we consider to be true in order to obtained good landing value data for DTS segments VL0612, VL1218 and VL1824 we assumed that price for landed demersal organisms was on average 5€/kg. Some changes were made also concerning fuel consumption per kg landed (liter/kg) that for demersal segments VL1824 and VL1218 was put as 2.5 liter/kg, while for demersal segment VL0612 was 2.0 liter/kg. Mentioned assumptions were made according to some preliminary results obtained throughout project DEMMON within which monitoring of demersal species and some demersal fishery segments were done.

Direct subsidies were defined as landing income multiplied by 0.1 for pelagic segments and by 0.24 for other segments. Here should be stress that direct subsidies were absent in 2013 for every segment except pelagic ones. Other incomes were calculated as multiplication of energy consumption (million liters) and 0.132 (the difference in the price of fuel partly covered by Ministry). Economy cost were defined as energy consumption (million liters) multiplied by fuel price which was around 0.75€ per liter.

## Slovenia

The economic data on the fishing sector were collected mostly from accounting records – AJPES, from data base 'InfoRib', through questionnaires and sales notes. In the monitoring programme all fishing vessels were included (approximately 180 units). The data collected from all sources were combined in such a way that a complete set of accounting items is compared for each business enterprise. The target population was all fishing sector in Slovenia. There were approx. 100 companies or fishermen in Slovenia. In March 2013 the questionnaires for 2012 were sent to all users of fishing vessels in Slovenia. Where the questionnaire was the only source used, the response rate was more than 60%. Where the data from annual accounts of business enterprises was used the response rate was 100%, because there are economic reports for all investigated companies or fishermen.

## Montenegro

The socio-economic data on the fishing sector were collected from three institutions: MONSTAT, the Ministry of Agriculture and Rural Development and Institute of Marine Biology.

In the data collection of all institutions there were some gaps: MONSTAT collects only the data on number of fishermen and fishing vessels engaged in fishing and total catch for some species, Logbooks and Monthly reports were not submitted to MARD for all the vessels and IMBK monitoring were not covering all vessels from the fleet. To fulfil this goal, data collected by these three institutions were combined in order to obtain the best result possible. Available data from Logbooks, monthly reports and interviews with fishermen, were crosschecked in cases where data from one of the sources was not reliable.

Regarding the socio-economic surveys in the fishery sector, three economic surveys have been carried out in Montenegro until 2014.

The first economic survey has been carried out from September 2007 to August 2008, but data are available only for September 2007 to May 2008. Economic survey was executed in cooperation with the Ministry of Agriculture, Forestry and Water Management of Montenegro, AdriaMed and the Institute for Economic Research in Fishery and Aquaculture (IREPA) with the major aim of contributing to create the basis for the establishment of a national monitoring system covering all the dimensions of fishing activities (social, biological and economic) in the view of an ecosystem approach to fisheries.

The second project through which the socio-economic data has been collected is EU IPA project "Sustainable Management of Marine Fishery" (Europeaid/128947/C/SER/ME). Within the framework of this project a Socio-economic Study of the Montenegrin Fishery Sector has been conducted. The aim of

that study was to perform a socio-economic analysis of the Montenegrin fishery sector covering all sub-sectors (capture fisheries, mariculture, aquaculture, sports fisheries, processing, marketing and distribution, and ancillary sectors (e.g. boat building and repairs, service industry, feed supply etc.).

In 2014, the third socio-economic sample survey was undertaken with the support of AdriaMed and of SEDAF project in order to examine the socio-economic situation of the fisheries in Montenegro referred to the year 2013. The information on the fishing fleet was obtained from the official national vessel register. The fishing fleet was classified and stratified according to the Data Collection Framework of the European Union and the GFCM Task 1 Statistical Matrix. The survey has been conducted following the methodology and high professional standards applied in similar projects. The completion of the defined Terms of Reference and set goals included application of the quantitative data collection method – direct interviewing (face-to-face) of fishermen. This method is used to comprehend the target group needs and to create strategies and plans related to the subject of the research and with aim to consider cause and consequential relationship between events defined by project activities. This method is being implemented by the use of questionnaire on a target group in order to receive accurate and valid data. The survey has been conducted by means of structured questionnaire, with prevailing closed-type and few open-type questions. The final questionnaires contained 71 questions, including five parts such as: Effort; Social; Demographic, Economic/commercial/Costs and Landings. The starting basis for sample creation was data from Ministry of Agriculture and Rural Development on the number of fishermen who have license. During the survey the data collectors contacted 78 fishermen, of which 63 had fishing days during 2013, while 15 fishermen were not participating in the research for different reasons.

Although this survey has many advantages compared to the previous two, it must be taken with some caution because it was based on questionnaires with fishermen who sometimes give inaccurate and non reliable data.

Fishing logbooks are also a problem; a lot of fishermen will deliver logbooks to the Ministry in order to get regressed fuel prices even when they have not been at sea. This can only be checked by comparing VMS data with logbooks data to verify whether the vessel in question actually went to sea.

Through this survey all socio-economic data referred to the year 2013 were collected. For the previous analyzed period 2008-2012, only transversal data (capacity, landings and effort) as well as data on employment were available. In order to get the picture of socio-economic data for the previous period, backward economic performance projection model was applied.

In line with the disaggregation level requested in the EU Data Collection Framework (DCF), all variables are aggregated at the level fleet segment and are requested for at least five years. When time series are not available, missing data are computed using linear functions based on a number of functional relationships between economic and transversal variables, which have been already identified in the BEMTOOL model and applied in "The 2013 Annual Economic Report on the EU Fishing Fleet" (STECF-13-15).

## Albania

From 1999 to 2013 the Fisheries Directorate has been part of the Ministry of Environment, Forestry and Water Management, from 2014 there is a Fisheries Units at the Ministry of Agriculture. In the Geographical Sub Areas 18, the Albanian coastline is 480 km long, there are 4 main ports: Shengjini, Durrës, Vlore, Sarande. Fishing activity is almost exclusively on continental shelf.

Effort and landing data are collected using logbooks. Biological data are collected with MEDITS surveys, MEDIAS surveys and DEPM survey. Economic and social data were collected in 2004 with a FAO AdriaMed social survey, in 2004 with a FAO AdriaMed/MedFisis Catch and effort survey, in 2012 and 2013 with FAO AdriaMed socio-economic survey and in the last year with the support of SEDAF project. For the aim of the socio-economic analysis, 2013 data have not been used because they present high variations with respects to previous years.



## Glossary of terms

CAPACITY	Number of vessels	The capacity variables refers to the average activity over the year
	Average vessel age	
	Gross Tonnage (GT)	
	Power (kW)	
EFFORT	Days at sea	all the days spent at sea by the vessel, including the fishing days and the time spent in navigation
	Maximum number of days at sea	The vessel with the highest observed number of days at sea in the fleet segment
	Energy consumption	Consumption in liters of fuel
EMPLOYMENT	Total Employed	Number of jobs on board, equal to the average number of persons working for and paid by the vessel. This includes temporary crew as well as rotation crew.
	FTE	Full-time equivalent (FTE) based on the reference level (2000 hours) for FTE working hours of the crew members on board the vessel (excluding resting time) and the working hours onshore. If the annual working hours per crew member exceed the reference level, the FTE equals 1 per crew member. If not, the FTE equals the ratio between the hours worked and the reference level (2000 hours)
LANDING	Weight	volume of landed product
		value of landed product calculated on the basis of the ex-vessel (first sale) price of the product

Value

	Weight by target species	volume of landed product by target species
	Value by target species	value of landed product calculated on the basis of the ex-vessel (first sale) price of the product by target species
INCOME	Landings income	value of landed product calculated on the basis of the ex-vessel (first sale) price of the product
	Direct subsidies	Includes direct payments, e.g., compensation for stopping fishing, refunds of fuel duty or similar lump sum compensation payments.  Excludes social benefit payments, indirect subsidies, e.g., reduced duty on inputs such as fuel, investment subsidies.
	Other income	Includes other income from use of the vessel, e.g., recreational fishing, tourism, oil rig duty, etc., also insurance payments for damage/loss of gear/vessel.
EXPENDITURE	Crew wages	Including social security costs and imputed value of unpaid  Labour (for example, the vessel owner's own labour)
	Energy costs	the total energy cost of the vessel. This is generally obtained by multiplying the average annual cost of fuel (petrol, diesel, oil) per liter by the total amount of liters used
	Other variable costs	the costs related to the selling of the production of the vessel, which include fish market or wholesaler's fees, transportation of the production, purchasing of the ice, purchasing of boxes and packages PLUS all the purchased inputs (good and services) related directly or indirectly to fishing effort (for instance the bait, the food consumed during the fishing operation) PLUS the purchasing of components of the assets (gear or vessel) but only if they don't improve the lifetime of the asset itself (consumed within the given year).

	Repair and maintenance costs	costs for maintenance and repairs of fishing equipment, gears and vessel parts
	Other fixed costs	the costs not directly connected with operational activities (effort and catch/landings), which include insurance premiums, administration costs, book keeping, legal expenses, bank expenses, annual quota for fishers associations, dock expenses, renewal of fishing licenses
	Depreciation costs	Consumption of fixed capital represents the reduction in the value of the fixed assets used in production during the accounting period resulting from physical deterioration, normal obsolescence or normal accidental damage. It is generally assumed that engine is renovated every 10 years, electronics every 5 years, other equipment every 7 years and hull never
	Opportunity costs of capital	The capital value is related to the opportunity cost of capital or the required rate of return that is, the rate of return that a company would otherwise be able to earn at the same risk level as the investment that has been selected. The opportunity cost of production is the value of the firm's best alternative use of its resources.
CAPITAL VALUE	Fleet depreciated replacement value	Value of the vessel, i.e., the hull, engine, all onboard equipment and the gear. Different value indicators can be used: Price of new constructed vessels, Second hand prices, Insurance value, Book value, Scrapping value
	Investments	Improvements to existing vessel/gear during the given year.
	Financial position (%)	% debt in relation to total capital value

Performance Indicators	
Gross value added (GVA)	Income from landings + other income – energy costs – repair costs – other variable costs – non variable costs

Gross profit (GRP)	Income from landings + other income – crew costs – unpaid labour - energy costs – repair and maintenance costs – other variable costs – non variable costs
Net profit (with or without direct subsidies)	Income from landings + other income – crew costs – unpaid labour - energy costs – repair costs – other variable costs – non variable costs – depreciation cost – opportunity cost of capital
Gross profit margin	Gross profit as a percentage of total income
Net profit margin	Net profit as a percentage of total income
<b>Economic and Social Indicators</b>	
Return on fixed tangible assets (ROFTA)	(profits + opportunity cost )/ fixed tangible assets
Current Revenues/Break Even Revenue (CR/BER)	(income from landings + other income)/revenue point at which the gross cash flow equals the fixed costs
GVA per fisherman	Gross value added dived by number of fishermen

## Fleet segment codification

### FISHING\_TECHNIQUE

DFN	=	Drift and/or fixed netters
DRB	=	Dredgers
DTS	=	Demersal trawlers and/or demersal seiners
FPO	=	Vessels using pots and/or traps
HOK	=	Vessels using hooks
MGO	=	Vessel using other active gears
MGP	=	Vessels using polyvalent active gears only
PG	=	Vessels using passive gears only for vessels < 12m
PGO	=	Vessels using other passive gears
PGP	=	Vessels using polyvalent passive gears only
PMP	=	Vessels using active and passive gears
PS	=	Purse seiners
TM	=	Pelagic trawlers
TBB	=	Beam trawlers

### VESSEL\_LENGTH classes

VL0006	=	Vessel less than 6 meters in length.
VL0612	=	Vessel between 6 meters and 12 meters in length.
VL1218	=	Vessel between 10 meters and 18 meters in length.
VL1824	=	Vessel between 18 meters and 24 meters in length.
VL2440	=	Vessel between 24 meters and 40 meters in length.
VL40XX	=	Vessel greater than 40 meters in length.