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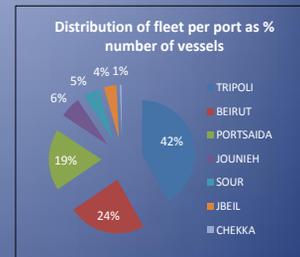
The Socio-economic situation of the small scale fishery in Lebanon

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The licensed fishing fleet (2011)

Size class	Number	HP (1000)	Age class	Number	HP (1000)
<5 m	166	3.3	2010-2011	18	0.6
5 - 5.99 m	195	4.0	2008-2009	35	1.4
6 - 6.99 m	278	5.3	2006-2007	27	0.9
7 - 7.99 m	323	8.9	2004-2005	36	1.4
8 - 8.99 m	197	6.4	2002-2003	63	2.7
9 - 9.99 m	159	5.5	2000-2001	56	2.0
10 - 10.99 m	84	4.4	1998-1999	76	2.9
11 - 11.99 m	30	3.3	1996-1997	86	3.0
>10.99 m	28	2.2	older	1,063	28.4
Total	1,460	43.3	Total	1,460	43.3

Main Gear	No. of vessel	Percentage (%)
Longlines	488	33
Trammel Net	444	30
Hand Lines & Trolling Lines	309	21
Pots and Traps	95	7
Set Gillnet	55	4
Purse Seine	48	3
Lampara Nets	12	1
Other gears	8	1
Combined Gillnets / Trammel Nets	1	<1
Total	1,460	100



- The Lebanese fleet is clearly **small scale artisanal** in nature
- The average length of the vessel was 7.3 m long with 29.7 hp, and the average age was 22 years;

The characteristics of the Lebanese fishing fleet (2011)

Fleet characteristics	Minor gear < 6 m	Minor gear 6 - 12 m	Purse Seine 6 - 12 m	Total fleet
Capacity				
Number of vessels	355	1,045	60	1,460
Total engine power (hp)	7,261	32,531	3,538	43,330
Total length overall (m)	1,750	8,386	584	10,720
Mean technical characteristics of the vessels				
Mean power (hp)	22.0 (± 0.93)	31.4 (± 1.04)	62.1 (± 9.17)	30.5 (± 0.89)
Mean length (m)	4.9 (± 0.04)	8.0 (± 0.05)	9.7 (± 0.29)	7.3 (± 0.05)
Mean vessel age	20.8 (± 0.61)	23.1 (± 0.38)	17.0 (± 0.99)	22.3 (± 0.31)
Total Landings				
Volume of landings (tons)	528	2,210	2,112	4,850
Value of landings (1000\$)	4,632	19,398	2,949	26,979
Mean landing variables per vessel				
Mean landings (tons)	1.5 (± 0.16)	2.1 (± 0.14)	35.2 (± 8.12)	3.3 (± 0.26)
Mean landings (1000\$)	13.1 (± 1.9)	18.6 (± 1.10)	49.2 (± 8.59)	18.5 (± 0.82)

The characteristics of the Lebanese fishing fleet (2011)

Fleet characteristics	Minor gear < 6 m	Minor gear 6 - 12 m	Purse Seine 6 - 12 m	Total fleet
Total Effort				
Fishing days	53,822	217,244	10,221	281,287
Fuel consumption (1000 L)	642	3,414	307	4,363
Mean effort variables per vessel				
Mean fishing days	152 (± 11)	208 (± 5)	170 (± 16)	192 (± 4)
Mean Fuel consumption (1000 L)	1.81 (± 0.18)	3.27 (± 0.16)	5.11 (± 0.56)	3.07 (± 0.13)
Total Crew or Employment				
Employment on board (Total)	513	2,312	403	3,229
Employment on board (PT)	355	1,145	2	1,502
Mean employment variables per vessel				
Mean Employment on board (Total)	1.45 (± 0.08)	2.21 (± 0.06)	6.72 (± 0.89)	2.40 (± 0.05)
Mean Employment on board (PT)	1.00 (± 0.00)	1.10 (± 0.02)	0.04 (± 0.03)	0.57 (± 0.01)

Economic performance

	Minor gear < 6 m	Minor gear 6 - 12 m	Purse Seine 6 - 12 m	Total fleet
Revenue (1000\$)				
Value of landings	4,632	19,398	2,949	26,979
Employment				
Employment on board (Total)	513	2,312	403	3,229
Employment on board (PT)	355	1,145	2	1,502
Costs (1000\$)				
Energy costs	763	3,130	267	4,159
Maintenance costs	173	1,002	120	1,295
Operational costs	293	1,044	447	1,784
Commercial costs	248	1,341	381	1,969
Fixed costs	19	55	3	78
Crew share (salary)	1,674	7,269	891	9,834
<i>Total operating costs</i>	<i>3,170</i>	<i>13,840</i>	<i>2,109</i>	<i>19,119</i>
Depreciation	192	942	74	1,207
Interest (opportunity costs)	63	123	11	197
Economic performance (1000\$)				
Gross cash flow	1,462	5,558	840	7,860
Net profit	1,207	4,493	755	6,455
Gross value added	3,136	12,826	1,731	17,694
Return on Investment (ROI)	63%	44%	83%	50%
Break-even revenues	4,474	18,759	2,878	26,106
Salary per crew member	3.3	3.1	2.2	3.0
Capacity				
Volume of landings (ton)	528	528	2,112	4,850
Effort (fishing days)	53,822	53,822	10,221	281,287
Fleet - number of vessels	355	355	60	1,460
Fleet - total HP	7,261	7,261	3,538	43,330
Fleet - total LOA	1,750	1,750	584	10,720
Invested capital (1000\$)	2,022	2,022	927	13,410

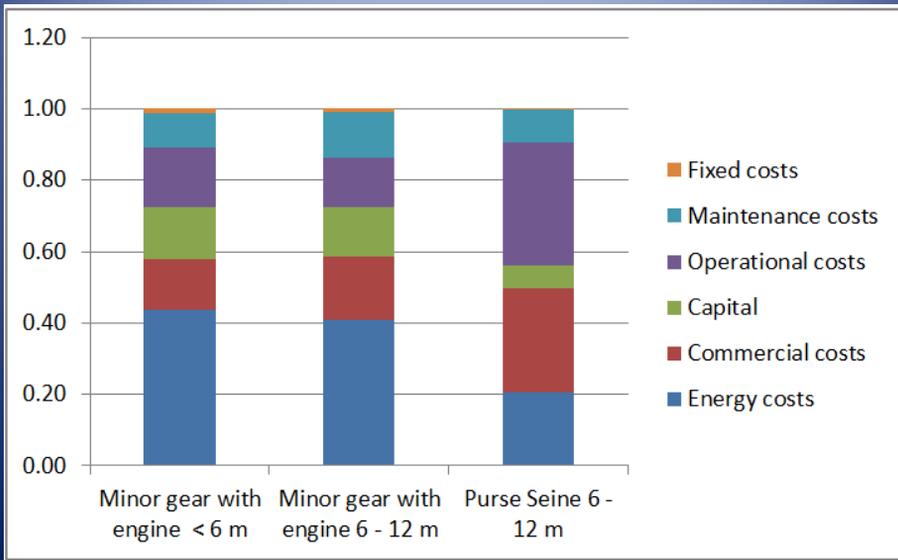
Economic performance – average per vessel

	Minor gear < 6 m	Minor gear 6 - 12 m	Purse Seine 6 - 12 m	Total fleet
Revenue (1000\$)				
Value of landings	13.0	18.6	49.2	18.5
Employment				
Employment on board (Total)	1.4	2.2	6.7	2.2
Employment on board (PT)	1.0	1.1	0.0	1.0
Costs (1000\$)				
Energy costs	2.1	3.0	4.4	2.8
Maintenance costs	0.5	1.0	2.0	0.9
Operational costs	0.8	1.0	7.5	1.2
Commercial costs	0.7	1.3	6.3	1.3
Fixed costs	0.1	0.1	0.1	0.1
Crew share (salary)	4.7	7.0	14.9	6.7
<i>Total operating costs</i>	<i>8.9</i>	<i>13.2</i>	<i>35.2</i>	<i>13.1</i>
Depreciation	0.5	0.9	1.2	0.8
Interest (opportunity costs)	0.2	0.1	0.2	0.1
Economic performance (1000\$)				
Gross cash flow	4.1	5.3	14.0	5.4
Net profit	3.4	4.3	12.6	4.4
Gross value added	8.8	12.3	28.9	12.1
Return on Investment (ROI)	63%	44%	83%	50%
Break-even revenues	12.6	18.0	48.0	17.9
Salary per crew member	3.3	3.1	2.2	3.0
Capacity				
Volume of landings (ton)	1.5	2.1	35.2	3.3
Effort (fishing days)	152	208	170	193
Fleet - number of vessels	355	1,045	60	1,460
Fleet - total HP	20.5	31.1	59.0	29.7
Fleet - total LOA	4.9	8.0	9.7	7.3
Invested capital (1000\$)	5.7	10.0	15.4	9.2

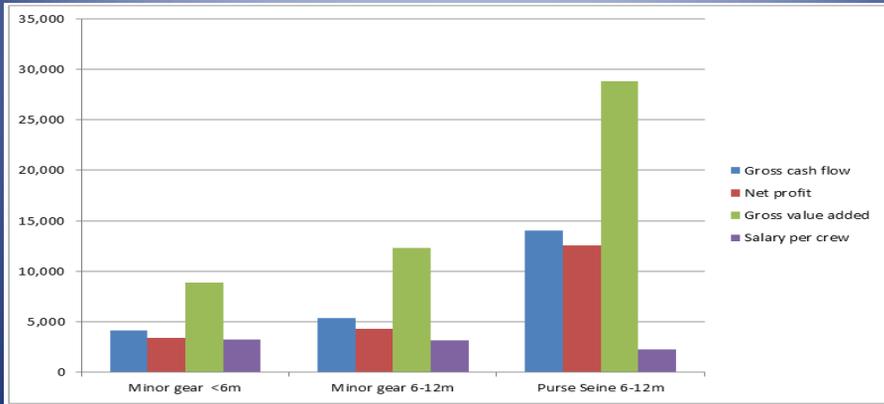
The fishery sector at a glance

FISHERY	Minor gear < 6 m 	Minor gear 6 - 12 m 	Purse Seine 6 - 12 m 
BENEFITS			
Revenues (value of landings)	\$\$ 4.6 million	\$\$\$\$\$\$\$\$ 19.3 million	\$\$ 2.9 million
Number of fishers employed	 513	 2,312	 403
Annual catch for human consumption	 528 tons	 2,210 tons	 2,112 tons
Salary per crew	\$\$ 3,261	\$\$ 3,143	\$ 2,210
Annual fuel oil consumption	 641,840 l	 3,414,205 l	 306,869 l
Catch per tonne of fuel consumed	 =  0.8 t	 =  0.6 t	 =  6.9 t
Catch per Unit of Effort (CPUE)	 9.8 Kg/day	 10.2 Kg/day	 206.6 Kg/day

The breakdown of the costs per fishing segment (excluding the crew share)

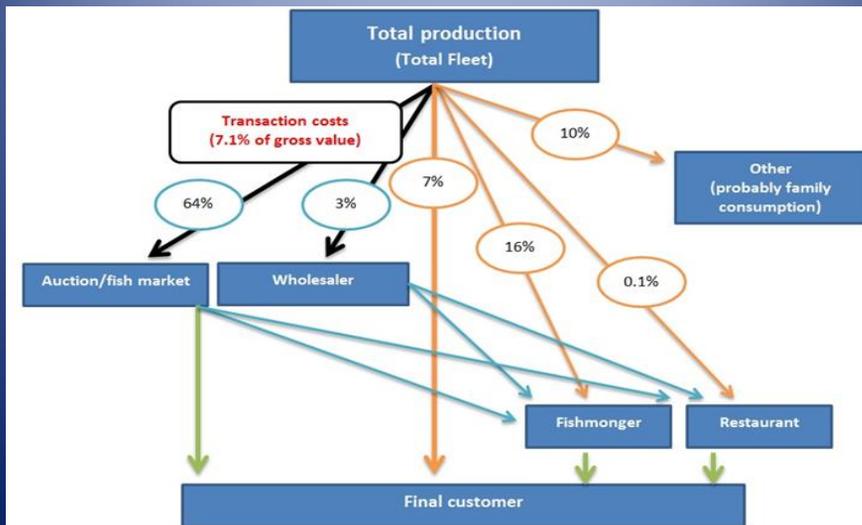


Some economic performance indicators (US\$)

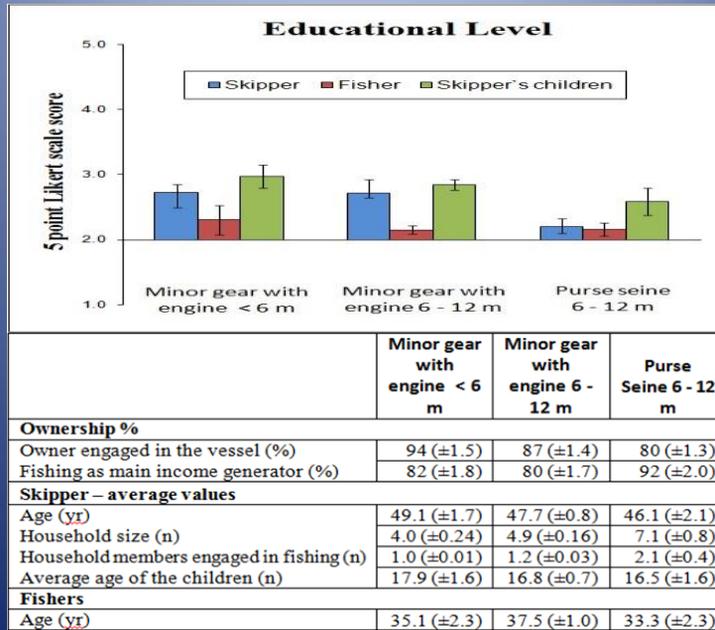


- All the segments capable of making a profit
- PS 6 – 12 yielded the major profit and the minor salary, as opposite to the MGs

First sale market dynamics



Social characteristics of the fishers



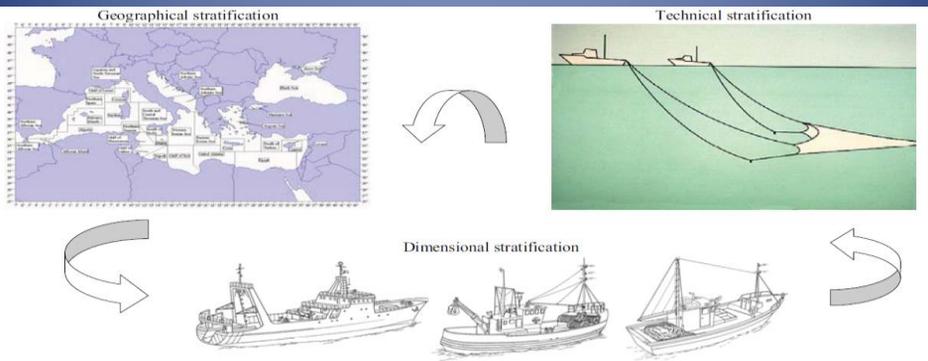
Conclusions

- The sector is adequately profitable;
- The backbone of the sector is minor gear with engine 6-12 m;
- High average price of the production;
- The income per fisher-owner is about 20% lower than the national GDP per capita
- Fisher which is not an owner earns about 70% less than the GDP per capita and about 45% less than the minimum wage of the country
- Purse seiner are the best performing segment for the owner but the least attractive for the labour force
- The owner engaged in the fishing activities in most of the vessels (88%);
- The fishing activity represents also the main income generator for the 81% of the vessels owner
- **The main need for the sector in Lebanon is to increase the salary of the fishers.**

Thank you for your
attention!

Methodology followed for the collection of data

The sampling design is based on a single stage sample stratified over three variables. Stratification is carried out in order to create strata as homogeneous as possible, using characteristics correlated to the variables under estimation.



Collection of the data

The selected vessels were surveyed by means of direct interviews in April/May 2012

A questionnaire was designed and tested and a two days training course was undertaken (1st day lecture + 2nd day on-the-field)

13 data collectors have been trained

