

INDIAN SEAFARING OFFICERS

Compensation and Benefits Survey 2013



Conducted by

ISF HR Services





Foreign Owners Representatives and Ship Managers Association (FOSMA) is the pioneer Association of Foreign Ship-owners Representatives, Foreign Ship Managers, Ship Manning Agents in India. Established in 1989, FOSMA has today risen to its present eminent position comprising of thirty two member companies representing majority of Indian Seafarers working on foreign flag vessels.

FOSMA is actively involved in representing the views of the industry, and working along with the maritime administration of India in matters relating to Recruitment and Placement of Seafarers, Merchant Shipping, Maritime Education and Training, Assessment, Examination and Certification Matters, Maritime Labour Conventions, STCW matters, etc.

FOSMA has also been running its own maritime training institutes for the general benefit of all seafarers at Kolkata, Delhi, Haldia and Mumbai, with a spread of courses from pre-sea to Master / Chief Engineer.



ISF HR Services, established in 2003, is a company actively involved in Training and Consultancy in Human Resource and Management areas and is a part of the ISF Group (www.isfgroup.in). Other activities of the Group include maritime training, distance learning programmes, maritime audits and surveys, software development and E-learning (www.ispelearning.com).

The following members of the ISF HR Services have been involved in the survey, statistical analysis and authoring the **“ISF Seafaring Officers Wages Benchmarking Report – 2013”**.

Pawan Kapoor is the Chief Executive of ISF HR Services. He is a marine engineer, with career spanning 31 years, during which he has sailed for 10 years and has worked ashore in the maritime education sector for 20 years. With over 12 years experience in developing and managing training organizations, he has used his experience in writing several project/feasibility reports for institutes in India.

Poonam Kapoor has a Masters degree in Economics and is currently pursuing her doctorate in **“International Trade in Services with special focus on Maritime Trade”** at the Mumbai University.

Vinal Bhuvra, a PG in Business Management and a PG Diploma holder in Training and Development, is the HR Manager at the ISF Group of companies.

Participating Companies

The following FOSMA member companies have participated in 2013 benchmarking exercise:

1. Andromeda Shipping (India) Pvt. Ltd.
2. Bibby Ship Management (India) Pvt.Ltd
3. Chellaram Shipping Pvt. Ltd.
4. Confidence Shipping Co. Pvt. Ltd.
5. Dockendale Ship Management (India) Pvt Ltd.
6. Dynacom Tankers Management Ltd.
7. ELITE Mariners Pvt. Ltd.
8. Genoa Maritime (Cyprus) Ltd.
9. Herald Maritime Services Pvt. Ltd.
10. IMS Ship Management Pvt. Ltd.
11. K Line Ship Management Co. Ltd. (KLSM)
12. K Steamship Agencies Pvt. Ltd
13. Medallion Marine Pvt. Ltd.
14. MMS Maritime (India) Pvt. Ltd.
15. Nortrans Maritime Services
16. NYK Shipmanagement PTE Ltd.
17. Orient Ship Management & Manning Pvt. Ltd.
18. Scorpio Marine Management (India) Pvt. Ltd
19. Sea Team Management (India) Pvt. Ltd.
20. Seaspan Crew Management India Pvt. Ltd.
21. Selandia Crew Management(India) Pvt. Ltd.
22. V. Ships India Pvt. Ltd
23. Wallem Shipmanagement (India) Pvt. Ltd.
24. Wilhelmsen Ship Management (India) Pvt. Ltd.
25. World Tankers Management Pte. Ltd.

Abbreviations Used

- CAGR – Compound Annual Growth Rate
- FSO - Floating Storage and Offloading unit
- LNG – Liquefied Natural Gas
- LPG – Liquefied Petroleum Gas
- Max – Highest value in a set of data
- Min – lowest value in a set of data
- P10 – 10th percentile in the set of data
- P25 – 25th percentile in the set of data
- P75 - 75th percentile in the set of data
- P90 – 90th percentile in the set of data
- PCC – Pure Car Carrier
- RORO – Roll-on/roll-off ship
- SD – Standard Deviation
- USD – United States Dollars

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1. Wages Benchmarking – 2013

This section presents the analysis of 2013 wages for the seafarers derived from the data shared by the participating companies. The outcomes have been presented in form of tables for various ship types as well as each rank under different ship types. The tables display statistical analysis like Mean, Median, Percentiles and Standard Deviations etc. for each rank for efficient decision making. A brief explanation of the various statistical tools used has been included in the appendices.

1.1. Oil Tankers

Total respondents: 19 companies (79.16%). However the actual number of sea faring officers could not be determined from the data made available.

Master									
Figures in \$ per month									
Components	Market								
	Min	P10	P25	Median	Mean	P75	P90	Max	SD
First Year Wages	10000	10500	10960	11600	11628	12450	12500	13000	848
Final Year Wages	11500	12720	13150	13495	13451	13900	14300	14560	705
Chief Engineer									
Figures in \$ per month									
Components	Market								
	Min	P10	P25	Median	Mean	P75	P90	Max	SD
First Year Wages	9800	10421	10869	11400	11444	12250	12300	12900	827
Final Year Wages	10900	12530	13008	13349	13278	13638	14200	14310	761
Chief Officer / Second Engineer									
Figures in \$ per month									
Components	Market								
	Min	P10	P25	Median	Mean	P75	P90	Max	SD
First Year Wages	7000	8231	8525	9100	8892	9250	9520	9750	614
Final Year Wages	8200	9480	9795	10030	10059	10500	10705	11110	608
Second Officer / Third Engineer									
Figures in \$ per month									
Components	Market								
	Min	P10	P25	Median	Mean	P75	P90	Max	SD
First Year Wages	3995	4179	4375	4504	4537	4806	4841	5000	285
Final Year Wages	4250	4500	4806	4916	4938	5117	5370	5500	328
Electrical Officer									
Figures in \$ per month									
Components	Market								
	Min	P10	P25	Median	Mean	P75	P90	Max	SD
First Year Wages	3500	4000	4474	4600	4543	4825	5000	5130	412
Final Year Wages	4250	4825	5000	5200	5205	5500	5521	6000	378
Third Officer / Fourth Engineer									
Figures in \$ per month									
Components	Market								
	Min	P10	P25	Median	Mean	P75	P90	Max	SD
First Year Wages	2800	3034	3338	3600	3544	3806	3843	4421	376
Final Year Wages	3200	3507	3800	3825	3884	4063	4410	4620	353
Deck Cadet									
Figures in \$ per month									
Components	Market								
	Min	P10	P25	Median	Mean	P75	P90	Max	SD
First Year Wages	281	350	400	450	464	532	607	615	96
Final Year Wages	321	450	450	500	512	600	615	650	92
Trainee / Jr. Engineer									
Figures in \$ per month									
Components	Market								
	Min	P10	P25	Median	Mean	P75	P90	Max	SD
First Year Wages	350	523	600	700	747	766	1307	1387	288
Final Year Wages	350	561	650	700	787	800	1387	1387	281

1.2. Chemical Tankers

Total respondents: 11 companies (45.83%). However the actual number of sea faring officers could not be determined from the data made available

Master									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	10500	10500	11210	11750	11784	12500	12700	12750	858
Final Year Wages	13150	13500	13500	13800	13888	14300	14300	14400	438
Chief Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	10400	10473	10875	11525	11573	12325	12490	12550	835
Final Year Wages	12900	13346	13400	13625	13719	14155	14200	14300	444
Chief Officer / Second Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	8200	8500	8598	9300	9223	9775	10000	10300	704
Final Year Wages	9800	9950	10033	10400	10472	10650	11205	11800	586
Second Officer / Third Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	3995	4210	4353	4450	4472	4650	4800	4800	251
Final Year Wages	4595	4620	4800	4950	4969	5103	5371	5500	281
Electrical Officer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	3700	3824	4384	4600	4661	4925	5000	6500	726
Final Year Wages	4900	5005	5125	5400	5581	5550	5970	8100	850
Third Officer / Fourth Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	3000	3069	3188	3600	3513	3800	3845	3900	327
Final Year Wages	3250	3584	3800	3850	3922	4125	4290	4500	336
Deck Cadets									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	350	350	388	450	457	523	550	615	90
Final Year Wages	350	360	450	475	502	604	647	650	106
Trainee / Jr. Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	350	519	590	650	728	763	1160	1362	285
Final Year Wages	350	514	606	700	753	775	1200	1362	291

1.3. LPG

Total respondents: 7 companies (29.16%). However the actual number of sea faring officers could not be determined from the data made available.

Master									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	11100	11490	11875	12200	12125	12413	12655	13000	598
Final Year Wages	13000	13075	13163	13600	13646	14169	14263	14300	592
Chief Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	10900	11260	11655	12000	11927	12289	12460	12700	594
Final Year Wages	12800	12850	12928	13405	13465	14008	14139	14200	632
Chief Officer / Second Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	8700	9060	9350	9500	9433	9650	9752	9830	369
Final Year Wages	10100	10125	10163	10300	10318	10400	10528	10655	208
Second Officer / Third Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	4170	4368	4500	4600	4621	4750	4911	5078	283
Final Year Wages	4395	4598	4850	5000	4999	5225	5399	5498	386
Electrical Officer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	4600	4600	4600	4800	4819	5000	5052	5130	226
Final Year Wages	5000	5075	5200	5375	5388	5498	5715	5900	313
Third Officer / Fourth Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	3150	3240	3450	3800	3672	3901	4021	4050	342
Final Year Wages	3250	3525	3850	4050	3956	4213	4294	4337	394
Deck Cadets									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	400	400	413	475	475	538	550	550	69
Final Year Wages	400	425	463	500	508	538	600	650	86
Trainee / Jr. Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	600	625	663	700	822	762	1141	1500	338
Final Year Wages	650	670	700	700	706	700	749	782	47

1.4. LNG

Total respondents: 4 companies (16.66%). However the actual number of sea faring officers could not be determined from the data made available.

Master									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	15150	15194	15260	15369	16020	16455	17106	17540	1321
Final Year Wages	15369	15627	16014	16660	16660	17305	17692	17950	1825
Chief Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	14625	14688	14783	14940	15535	15990	16620	17040	1313
Final Year Wages	14625	14937	15404	16183	16183	16961	17429	17740	2203
Chief Officer / Second Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	10275	10496	10827	11378	11231	11709	11908	12040	892
Final Year Wages	11378	11558	11827	12277	12277	12726	12995	13175	1271
Second Officer / Third Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	4723	4826	4982	5240	5213	5459	5590	5677	478
Final Year Wages	5323	5358	5412	5500	5500	5589	5642	5677	250
Electrical Officer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	4623	4795	5053	5483	5483	5913	6171	6343	1216
Final Year Wages	5673	5740	5841	6008	6008	6176	6276	6343	474
Third Officer / Fourth Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	3453	3570	3747	4040	4017	4299	4454	4557	552
Final Year Wages	3953	4013	4104	4255	4255	4406	4497	4557	427
Deck Cadets									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	450	450	450	450	450	450	450	450	0
Final Year Wages	450	450	450	450	450	450	450	450	0
Trainee / Jr. Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	650	870	1200	1750	1750	2299	2629	2849	1555
Final Year Wages	650	870	1200	1750	1750	2299	2629	2849	1555

1.5. Bulk Carriers / Self Unloaders

Total respondents: 13 companies (54.16%). However the actual number of sea faring officers could not be determined from the data made available.

Master									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	8000	8003	8188	8375	8456	8725	8963	9000	352
Final Year Wages	8700	9222	9413	9595	9567	9752	9800	10440	372
Chief Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	7950	7993	8073	8285	8345	8458	8885	9000	336
Final Year Wages	8600	9156	9300	9470	9440	9529	9750	10240	345
Chief Officer / Second Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	6000	6565	6758	6940	6953	7205	7441	7500	406
Final Year Wages	7235	7358	7475	7670	7662	7815	7947	8250	269
Second Officer / Third Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	2500	3650	3848	3988	3926	4180	4354	4400	448
Final Year Wages	3500	3983	4197	4263	4253	4375	4569	4730	287
Electrical Officer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	2300	2827	3995	4301	4111	4581	4793	5200	801
Final Year Wages	3700	4325	4529	4675	4761	5030	5268	5800	482
Third Officer / Fourth Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	1200	2653	2775	3063	3039	3413	3795	4000	655
Final Year Wages	1500	3000	3125	3303	3278	3648	3707	4240	617
Deck Cadets									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	300	350	376	450	485	540	615	1000	172
Final Year Wages	352	450	450	500	540	585	615	1000	147
Trainee / Jr. Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	352	490	581	750	857	1025	1387	1650	380
Final Year Wages	352	490	606	750	880	1100	1387	1750	398

1.6. Ro Ro / PCCs

Total respondents: 6 companies (25%). However the actual number of sea faring officers could not be determined from the data made available.

Master									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	7830	7899	7982	8150	8736	8873	9900	12000	1385
Final Year Wages	8925	8929	9133	9470	10063	10130	11550	14000	1680
Chief Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	7600	7771	7924	8075	8588	8817	9720	11400	1229
Final Year Wages	8700	8711	9041	9395	9860	9966	11270	13300	1499
Chief Officer / Second Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	6190	6582	6803	6925	7171	7164	7939	9300	923
Final Year Wages	6715	7112	7371	7540	8026	8197	9540	10800	1298
Second Officer / Third Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	3200	3620	3800	3840	3896	4053	4276	4500	372
Final Year Wages	3300	3818	4059	4200	4255	4310	4786	5500	610
Electrical Officer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	2647	2647	3663	4061	4260	4515	5472	7600	1543
Final Year Wages	4337	4500	4593	4700	5340	5183	6870	8900	1524
Third Officer / Fourth Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	2700	2700	2850	3060	3097	3415	3471	3500	337
Final Year Wages	3000	3000	3300	3460	3530	3706	3956	4500	479
Deck Cadets									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	350	350	388	405	412	455	468	468	47
Final Year Wages	410	438	450	450	456	468	478	500	25
Trainee / Jr. Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	350	498	590	650	697	782	907	1200	245
Final Year Wages	450	517	606	700	732	782	949	1200	238

1.7. Container Vessels

Total respondents: 9 companies (37.5%) in case of the top four ranks. However the actual number of sea faring officers could not be determined from the data made available.

Master									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	7830	7958	8000	8000	8231	8450	8801	8900	381
Final Year Wages	8930	8953	9200	9200	9333	9555	9800	9800	315
Chief Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	7600	7820	7912	8000	8092	8185	8700	8750	357
Final Year Wages	8700	8741	9053	9175	9166	9288	9506	9650	295
Chief Officer / Second Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	6190	6379	6750	6805	6815	7075	7155	7200	325
Final Year Wages	6715	7242	7334	7490	7476	7675	7815	7950	342
Second Officer / Third Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	3200	3800	3820	3903	3925	4140	4180	4200	288
Final Year Wages	4065	4070	4125	4200	4311	4448	4704	4740	251
Electrical Officer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	2647	2647	3875	4031	3950	4400	4560	4700	702
Final Year Wages	4000	4330	4603	4725	4740	4908	5210	5300	380
Third Officer / Fourth Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	2500	2700	2750	3000	3110	3475	3610	3800	434
Final Year Wages	3000	3160	3400	3550	3512	3700	3902	3910	302
Deck Cadets									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	350	350	351	425	417	464	500	500	64
Final Year Wages	352	440	450	450	457	492	500	500	43
Trainee / Jr. Engineer									
Figures in \$ per month									
Components	Market								SD
	Min	P10	P25	Median	Mean	P75	P90	Max	
First Year Wages	350	352	506	600	610	700	782	1000	191
Final Year Wages	352	440	478	606	591	700	708	782	139

1.8. FSO / FPSO

There were only two sets of data available for this category. Hence the figures cannot be given out in view of maintaining confidentiality of participants. The tables of statistical figures could not be created as it is not possible to generate valid conclusions with minimal data.

The average wages in this category are as below:

- Master USD 12160.
- Chief Engineer USD 12110.
- Chief Officer and Second Engineer USD 9481.
- Second Officer and Third Engineer USD 6560.
- Electrical Officer USD 5010.

1.9. Off Shore Vessels

There was only one set of data available for this category. Hence the figures cannot be given out in view of maintaining confidentiality. The tables of statistical figures could not be created as it is not possible to generate valid conclusions with minimal data.

The range in which wages are offered to various ranks are:

- Master USD 14500 – 16000.
- Chief Engineer USD 11500 - 13500.
- Chief Officer and Second Engineer USD 9400 - 10300.
- Second Officer and Third Engineer USD 5000-7000.
- Electrical Officer USD 4500-6000.
- Third Officer and Fourth Engineer USD 4000-5500

2. Additional Benefits for Seafarers - The Industry Trends

This section presents the benchmarking for additional benefits offered to seafarers for 2013. The data analysis has been presented in tables for each rank. The tables display the percentage of companies offering the particular benefit. It also shows the amount of benefits offered. Additional remarks have been made for better understanding and utility.

2.1. Master/Chief Engineer

S.N.	Benefit Head	%age Respondents offering the Benefit	Quantum/Range of Benefit in USD terms	Remarks
1	Standby Wages	48	USD 0-3500	Most companies offer 15 days of standby wages at 50% of basic. In some cases the standby amount is paid irrespective of person being on standby or not.
2	Hardship Allowance	8	USD 200-250	Paid per month for ships more than 13 years of age
3	Family Carriage, Air Travel, Travel Insurance on company account	64	On actual	The limit on the travel expenditure varies from company to company. Some have a cap on the maximum expenditure towards travel while some have no limit but may restrict the travel to once in a year.
4	Wages during Training Days	52	Basic Wages/fixed allowances (ranging between 20-45 USD) during training days.	Some companies also offer standby wages during training days. One ship owner also offers full wages during training days as the staff in on round the year wages. Additionally Travel and Boarding and lodging costs are paid by all companies.
5	Family Medical Coverage	40		Medicare or similar coverage is offered in general, especially for the families round the year and for seafarers when they are on leave. Most companies go for floater coverage.
6	Loyalty	32	USD 20- 650 per month.	Paid basis number of years of service with company or a lumpsum amount per year.

2.2. Chief Officer/Second Engineer

S.N.	Benefit Head	%age Respondents offering the Benefit	Quantum/Range of Benefit in USD terms	Remarks
1	Superior Certificate Allowance	76	USD 100-400	Offered per month to those with Class I (Masters or Chief Engineers) license.
2	Standby Wages	48	USD 0-2500	Most companies offer 15 days of standby wages at 50% of basic.
3	Hardship Allowance	8	USD 200-250	Paid for ships more than 13 years of age
4	Family Carriage, Air Travel, Travel Insurance on company account	60	On actual	The limit on the travel expenditure varies from company to company. Some have no limit but may restrict the travel to once in a year.
5	Wages during Training Days	48	Basic Wages/fixed allowances (ranging between 20-45 USD) during training days.	Some companies also offer standby wages during training days. One ship owner also offers full wages during training days as the staff in on round the year wages. Additionally Travel and Boarding and lodging costs are paid by all companies.
6	Family Medical Coverage	36		Medicare or similar coverage is offered in general, for families round the year and for seafarers when they are on leave. Most companies go for floater coverage.
7	Loyalty	28	USD 20- 650 per month.	Paid basis number of years of service with company or a lumpsum amount per year.

2.3. Second Officer/Third Engineer

S.N.	Benefit Head	%age Respondents offering the Benefit	Quantum/Range of Benefit in USD terms	Remarks
1	Superior Certificate Allowance	76	50-300	For Holding Class II COC
2	Standby Wages	40	0-1800	Most companies offer 15 days of standby wages at 50% of basic.
3	Family Carriage, Air Travel, Travel Insurance on company account	48	On actual	While family carriage is allowed by most companies, the airfare, travel insurance, etc is to be borne by the officer. There is however a limit to the number of families onboard ships.
4	Wages during Training Days	40	Basic Wages/fixed allowances (ranging between 20-45 USD) during training days.	Additionally Travel and Boarding and lodging costs are paid by all companies.
5	Paid Study Leave/ Examination Subsidy	4		In one case two months basic to 6 months total wages is paid while in another case one month basic after 3 months of service
6	Family Medical Coverage	28		Medicare or similar coverage is offered in general. Most companies go for floater coverage.
7	Loyalty	20	20-300	Paid basis number of years of service with company or a lumpsum amount per year.

2.4. Electrical Officer

S.N.	Benefit Head	%age Respondents offering the Benefit	Quantum/Range of Benefit in USD terms	Remarks
1	Standby Wages	36	0-1800	Most companies offer 15 days of standby wages at 50% of basic.
2	Family Carriage, Air Travel, Travel Insurance on company account	48	On actual	While family carriage is allowed by most companies, the airfare, travel insurance, etc is to be borne by the officer. Only in 10% cases the company pays for the airfare of junior officers once in two contracts.
3	Wages during Training Days	40	20-80	Additionally Travel and Boarding and lodging cost is paid by all companies.
4	Family Medical Coverage	28		Medicare or similar coverage is offered in general. Most companies go for floater coverage.
6	Loyalty	20	20-300	Paid basis number of years of service with company or a lumpsum amount per year.

2.5. Third Officer/Fourth Engineer

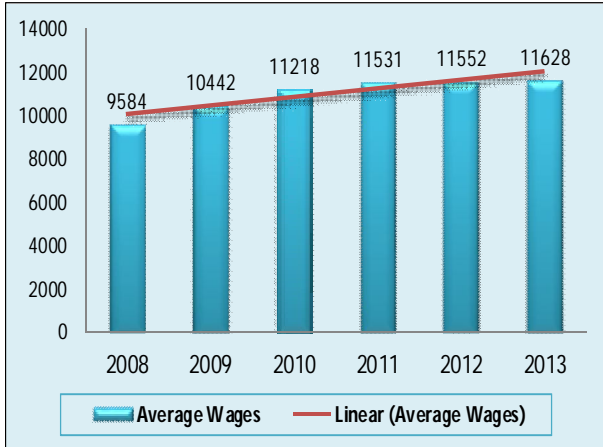
<u>S.N.</u>	<u>Benefit Head</u>	<u>%age Respondents offering the Benefit</u>	<u>Quantum/Range of Benefit in USD terms</u>	<u>Remarks</u>
1	Superior Certificate Allowance	12	50-200	For Holding Class II COC.
2	Standby Wages	32	0-1400	Most companies offer 15 days of standby wages at 50% of basic.
3	Family Carriage, Air Travel, Travel Insurance on company account	40	On actual	While family carriage is allowed by most companies, the airfare, travel insurance, etc is to be borne by the officer.
4	Wages during Training Days	40	20-80	Additionally Travel and Boarding and lodging costs are paid by all companies.
5	Paid Study Leave/ Examination Subsidy	4		In one case two months basic to 6 months total wages is paid while in another case one month basic after 3 months of service
6	Family Medical Coverage	28		Medicare or similar coverage is offered in general. Most companies go for floater coverage.
7	Loyalty	20	20-300	Paid basis number of years of service with company or a lumpsum amount per year.

3. Wage Trends over the Years (2008-2013)

This section represents the trends of the rate of increase in average wages for the seafaring officers from 2008 – 2013. First year wages for each rank have been taken for computation. The data has been presented in the form of graphs for various ship types as well as each rank under different ship types. Trend lines have been displayed for better understanding. In addition, tables of Year - On - Year increase in wages have been included to display the increase in average wages as compared to the previous years. The CAGR (Compounded Annual Growth Rate) as a percentage has also been mentioned.

3.1. Oil Tankers

Master



CAGR: 3.84%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
8.95	7.43	2.79	0.18	0.66

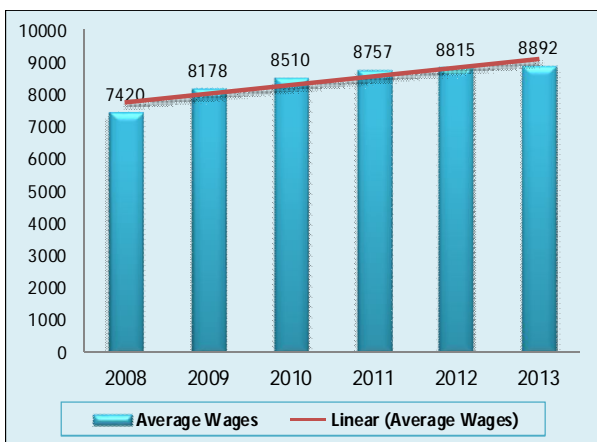
Chief Engineer



CAGR: 3.71%

Year on Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
9.13	7.10	2.44	0.13	0.78

Chief Officer / Second Engineer



CAGR: 3.43%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
10.22	4.05	2.91	0.66	0.87

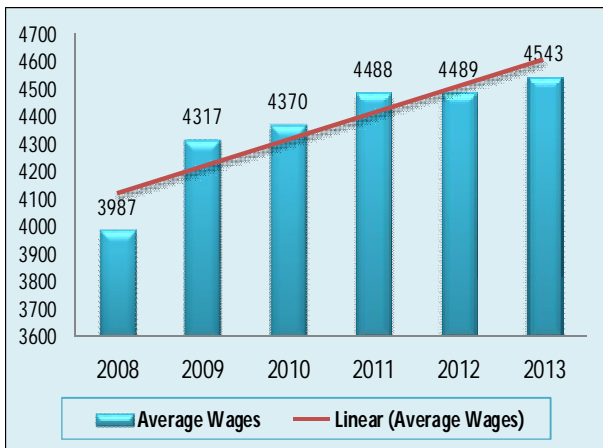
Second Officer / Third Engineer



CAGR: 2.37%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
7.82	2.67	1.98	0.21	0.22

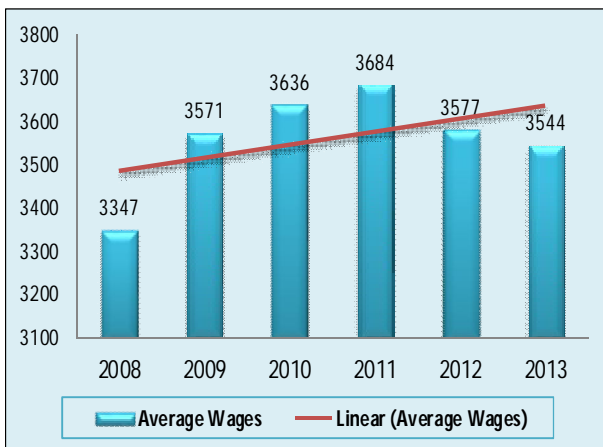
Electrical Officer



CAGR: 2.38%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
8.26	1.24	2.69	0.02	1.22

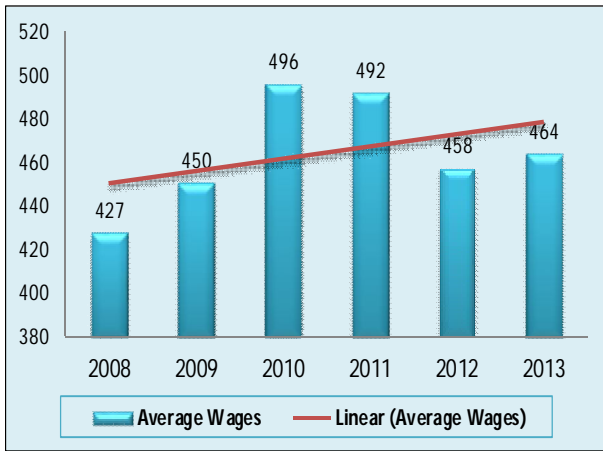
Third Officer / Fourth Engineer



CAGR: 0.93%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
6.69	1.82	1.30	-2.89	-0.93

Deck Cadet



CAGR: 1.32%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
5.38	10.12	-0.83	-6.97	1.35

Trainee / Jr. Engineer



CAGR: -0.47%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
3.58	4.78	1.52	-11.16	1.92

3.2. Chemical Tankers

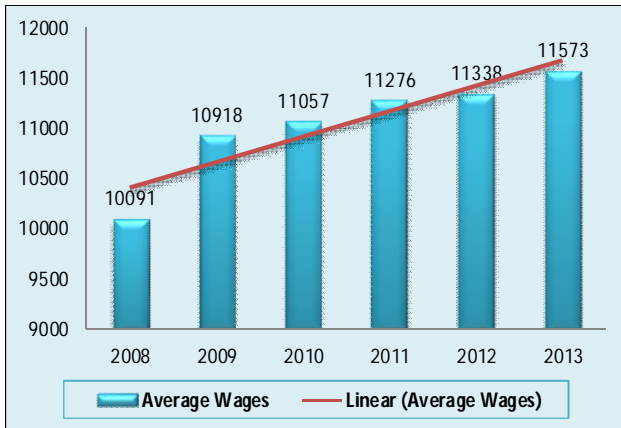
Master



CAGR: 2.32%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
6.84	1.34	4.10	-1.11	1.87

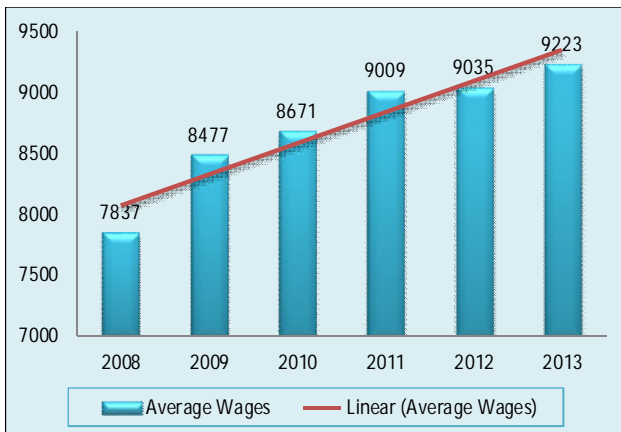
Chief Engineer



CAGR: 2.36%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
8.19	1.28	1.98	0.55	2.07

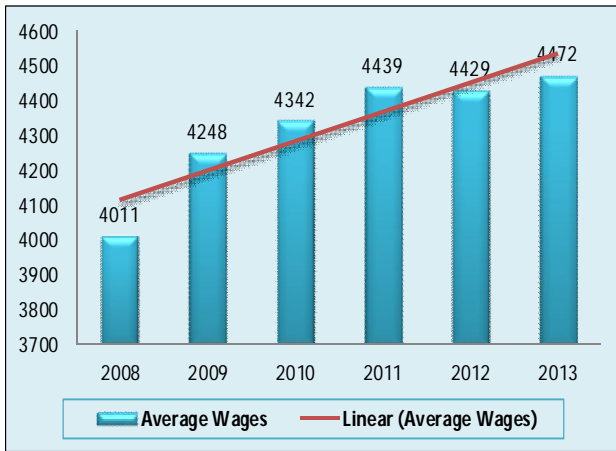
Chief Officer / Second Engineer



CAGR: 3.03%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
8.16	2.30	3.89	0.28	2.09

Second Officer / Third Engineer



CAGR: 1.99%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
5.91	2.21	2.23	-0.23	0.98

Electrical Officer



CAGR: 2.83%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
12.91	-0.23	3.40	0.08	1.66

Third Officer / Fourth Engineer



CAGR: 0.01%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
6.47	-0.22	0.18	-4.22	0.75

Deck Cadet



CAGR: -1.27%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
16.49	4.50	-7.00	-13.42	4.96

Trainee / Jr. Engineer



CAGR: 1.68%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
4.98	1.08	9.84	-11.34	7.66

3.3. LPG

Master



CAGR: 3.26%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
10.87	0.81	2.64	3.02	0.00

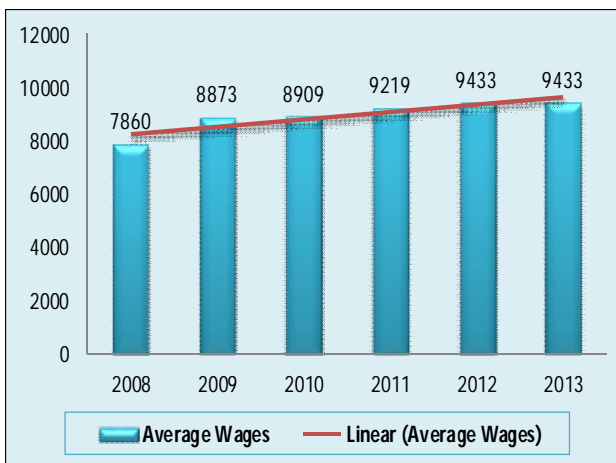
Chief Engineer



CAGR: 3.23%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
11.20	0.78	2.76	2.16	0.60

Chief Officer / Second Engineer



CAGR: 3.48%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
12.89	0.40	3.48	2.32	0.00

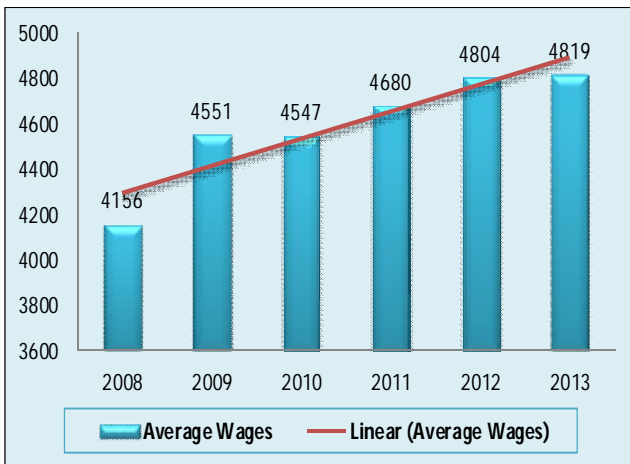
Second Officer / Third Engineer



CAGR: 3.10%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
12.96	-0.55	2.28	2.72	-0.15

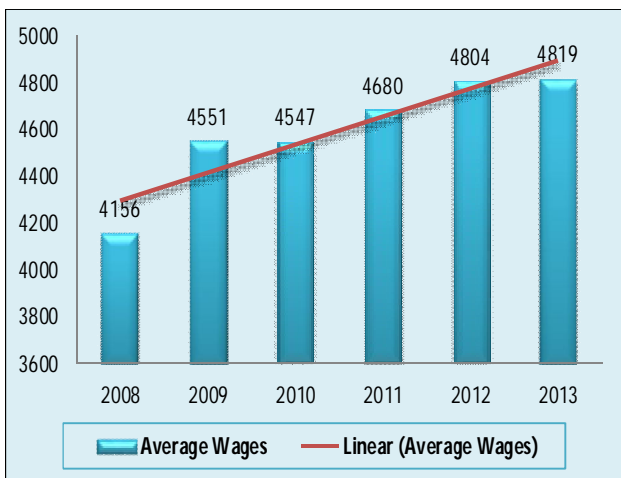
Electrical Officer



CAGR: 2.95%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
9.50	-0.10	2.93	2.66	0.30

Third Officer / Fourth Engineer



CAGR: 2.07%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
9.05	-1.52	1.91	3.43	-1.81

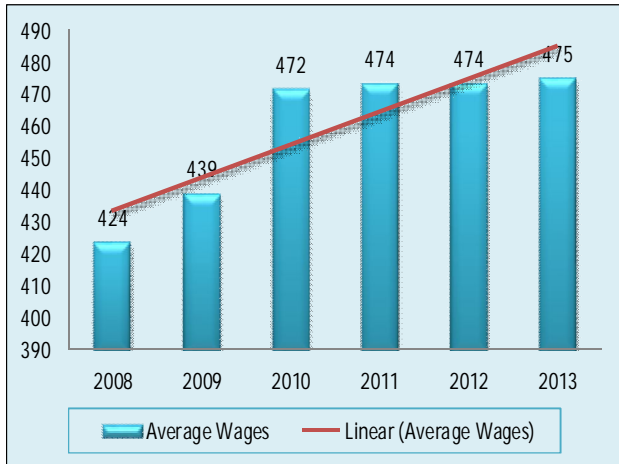
Deck Cadet



CAGR: 2.32%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
3.63	7.38	0.42	0.00	0.30

Trainee / Jr. Engineer



CAGR: 4.31%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
2.46	2.67	0.29	7.61	11.28

3.4. LNG

Master



CAGR: 5.02%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
0.00	0.71	5.41	15.23	6.00

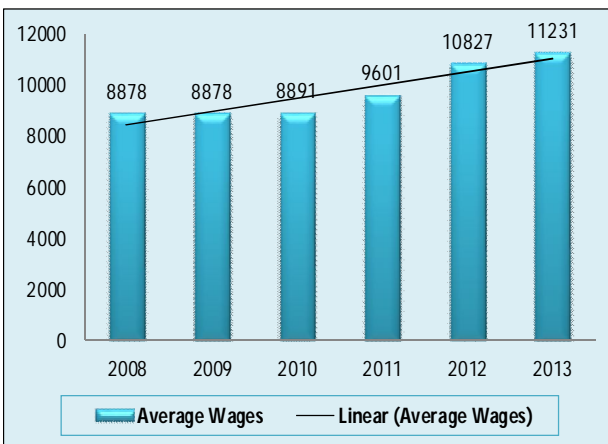
Chief Engineer



CAGR: 4.86%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
0.00	-0.18	5.98	15.49	5.09

Chief Officer / Second Engineer



CAGR: 4.87%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
0.00	0.15	7.98	12.77	3.74

Second Officer / Third Engineer



CAGR: 4.23%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
0.00	1.40	4.64	12.36	0.26

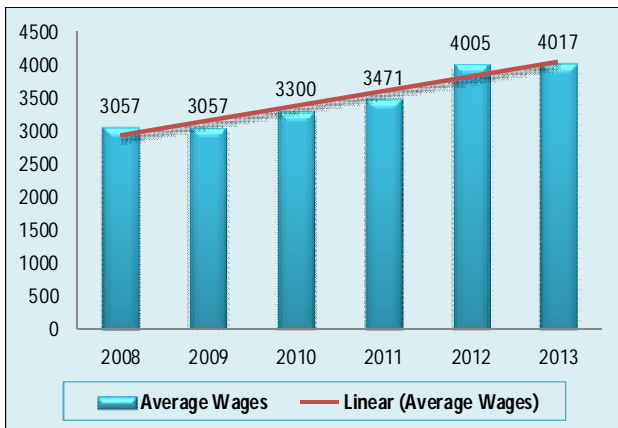
Electrical Officer



CAGR: 5.79%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
0.00	15.30	5.07	4.97	0.00

Third Officer / Fourth Engineer



CAGR: 6.52%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
0.00	7.96	5.18	15.40	0.29

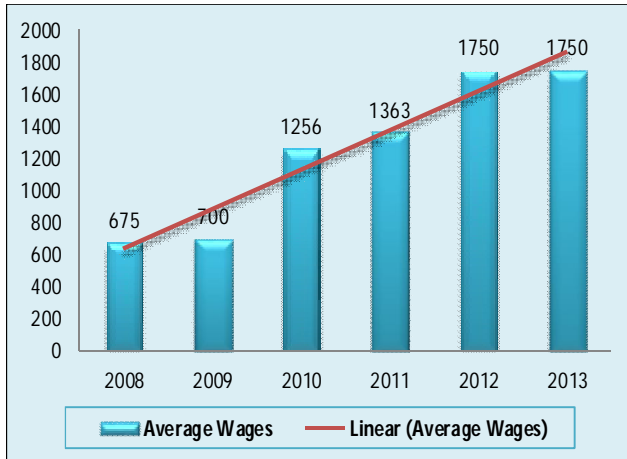
Deck Cadet



CAGR: 1.04%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
0.00	0.00	0.00	4.65	0.00

Trainee / Jr. Engineer

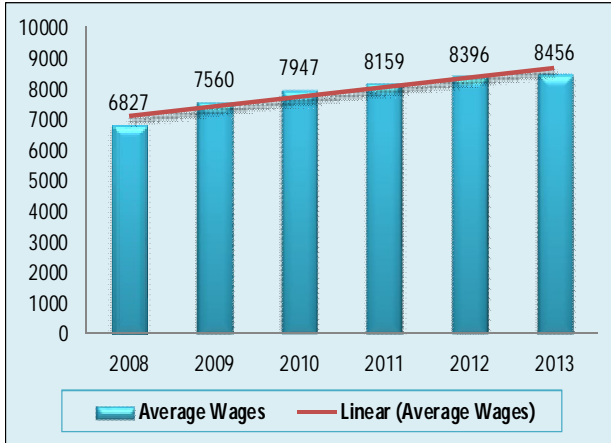


CAGR: 24.23%

Year On Year Increase in Wages for the industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
3.70	79.38	8.52	28.39	0.00

3.5. Bulk Carriers / Self Unloaders

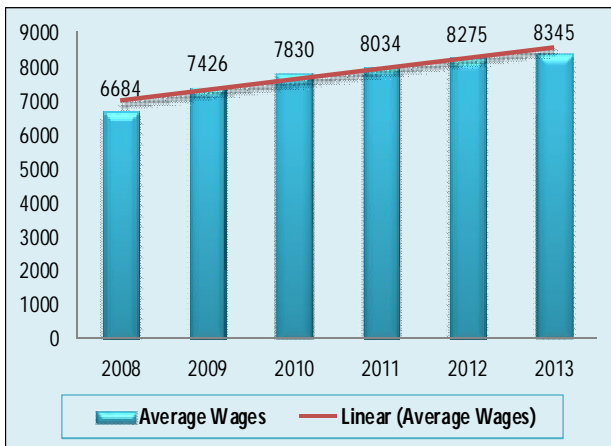
Master



CAGR: 4.07%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
10.74	5.12	2.68	2.90	0.71

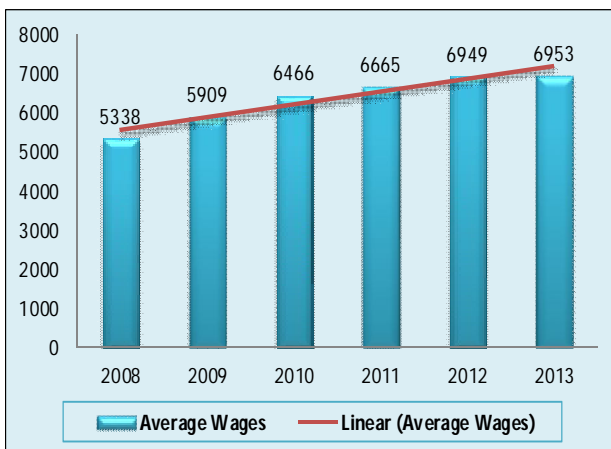
Chief Engineer



CAGR: 4.22%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
11.10	5.44	2.61	3.00	0.85

Chief Officer / Second Engineer



CAGR: 5.37%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
10.71	9.42	3.08	4.27	0.05

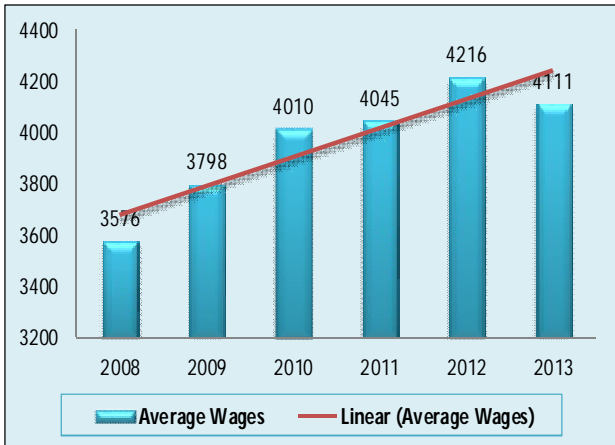
Second Officer / Third Engineer



CAGR: 2.46%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
5.49	5.54	0.41	3.67	-3.17

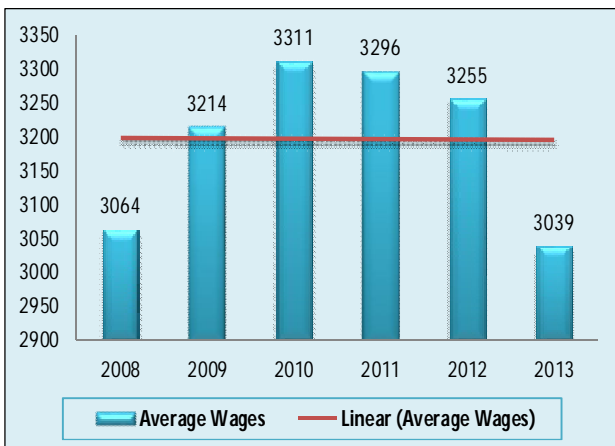
Electrical Officer



CAGR: 2.64%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
6.21	5.56	0.89	4.22	-2.50

Third Officer / Fourth Engineer



CAGR: -0.12%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
4.90	3.03	-0.47	-1.23	-6.65

Deck Cadet



CAGR: 3.82%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
12.71	5.53	1.91	4.26	-2.63

Trainee / Jr. Engineer



CAGR: 1.47%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
3.26	-1.58	3.78	3.57	1.14

3.6. Ro Ro / PCCs

Master



CAGR: 4.53%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
17.08	2.60	0.62	3.69	4.34

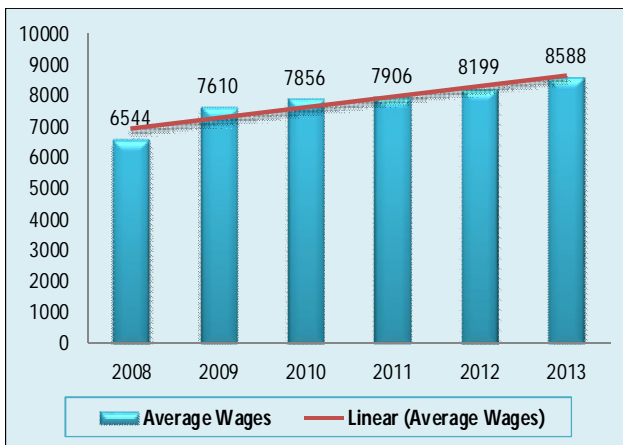
Chief Engineer



CAGR: 4.64%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
16.28	3.23	0.63	3.71	4.74

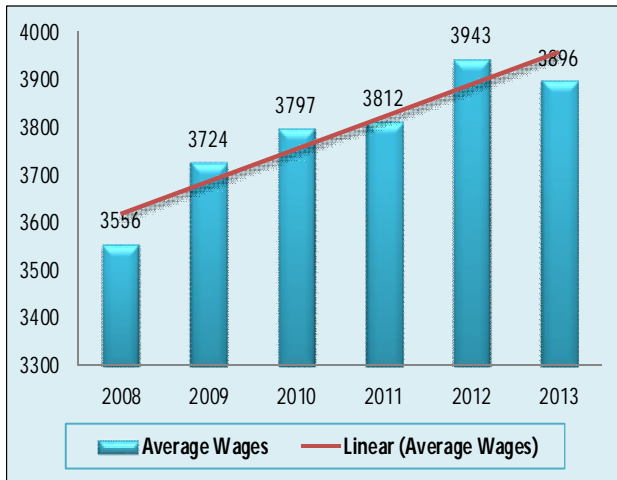
Chief Officer / Second Engineer



CAGR: 4.78%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
14.53	4.03	0.97	4.73	3.71

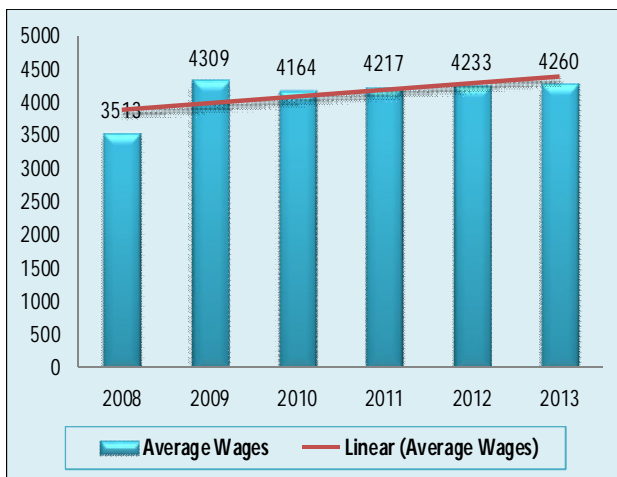
Second Officer / Third Engineer



CAGR: 1.82%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
4.75	1.94	0.40	3.45	-1.19

Electrical Officer



CAGR: 2.67%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
22.67	-3.38	1.28	0.37	0.64

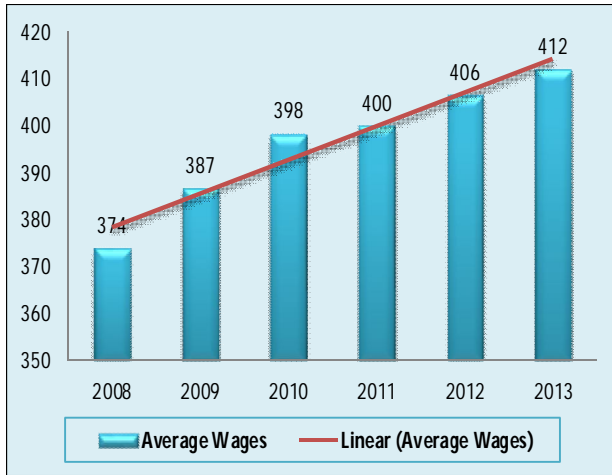
Third Officer / Fourth Engineer



CAGR: -0.35%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
3.33	-2.78	-0.83	1.16	-1.54

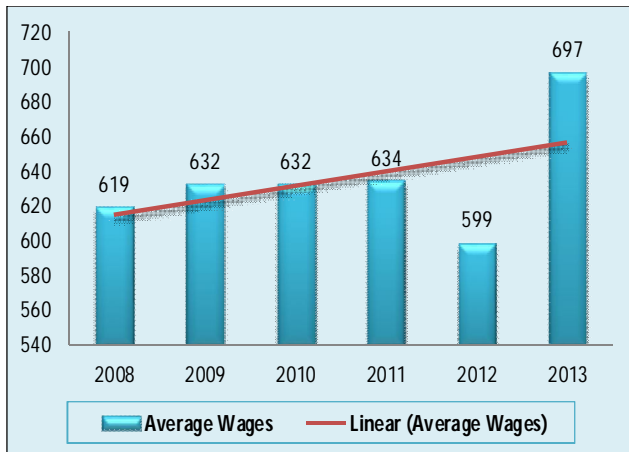
Deck Cadet



CAGR: 1.82%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
3.43	2.97	0.42	1.63	1.39

Trainee / Jr. Engineer



CAGR: 1.25%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
2.15	0.00	0.26	-5.55	16.37

3.7. Container Vessels

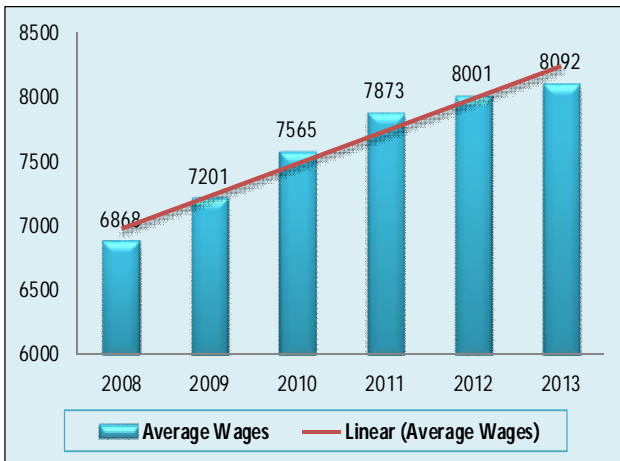
Master



CAGR: 5.04%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
6.57	11.83	2.83	2.49	0.94

Chief Engineer



CAGR: 3.47%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
4.86	5.05	4.07	1.64	1.13

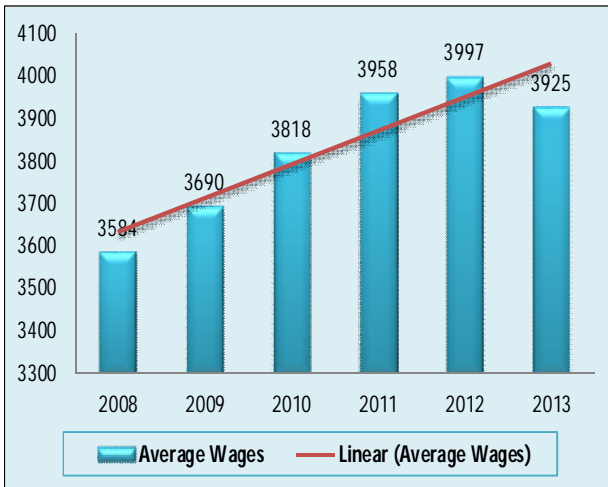
Chief Officer / Second Engineer



CAGR: 3.75%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
1.98	7.54	5.11	1.26	1.31

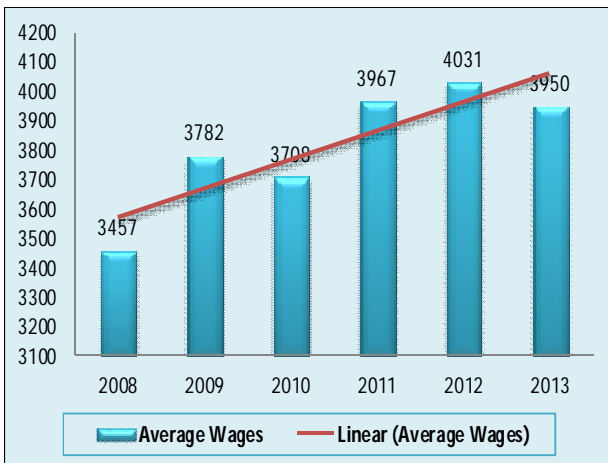
Second Officer / Third Engineer



CAGR: 2.03%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
2.96	3.46	3.67	0.99	-1.81

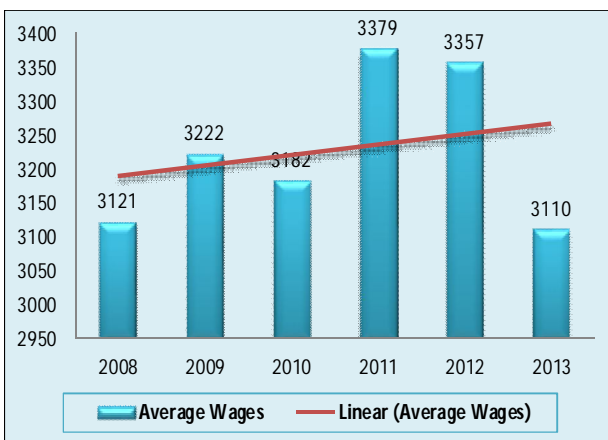
Electrical Officer



CAGR: 2.55%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
9.40	-1.95	6.97	1.61	-1.99

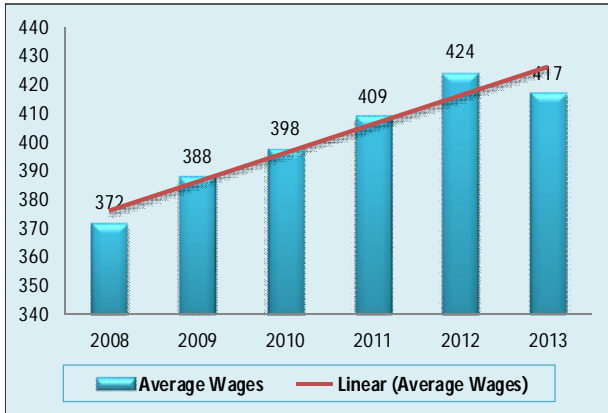
Third Officer / Fourth Engineer



CAGR: 0.24%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
3.22	-1.24	6.20	-0.66	-7.35

Deck Cadet



CAGR: 2.18%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
4.32	2.55	2.87	3.75	-1.70

Trainee / Jr. Engineer



CAGR: -0.43%

Year On Year Increase in Wages for the Industry				
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
8.56	-5.63	2.86	-4.89	2.48

4. Overview of Indian Seafarers' Status & Conclusions.

4.1. 2013 Benchmarking Report Sampling

This benchmarking report is now in its 5th year. Over the years the participation has largely been from the FOSMA members companies with a few companies from other associations joining in from time to time. This year a total of 25 companies with 6742 on board positions have participated. The average participation during the previous years from 2008 to 2013 has been around 6779 positions.

It may not be incorrect to assume the total on board positions of all Indian seafaring officers, including those of trainees, to be around three times this number which is close to 20000. Including an approximate 50% of this number as those on leave, takes the total active seafaring officers to be around 30000.

However if we include the number of those who may have passed out of pre sea institutions in the last few years and are without jobs, the numbers could reach the figure of 35000+.

A study of INDOS numbers database available in 2012, excluding the cadets, shows the total number to be in the range of 34032.

FOREIGN GOING OFFICERS	2012
MASTER OF A FOREIGN GOING SHIP	6857
MATE OF A FOREIGN GOING SHIP	2295
SECOND MATE OF A FOREIGN GOING SHIP	7163
MARINE ENGINEER OFFICER CLASS I	5081
MARINE ENGINEER OFFICER CLASS II	3783
MARINE ENGINEER OFFICER CLASS IV	6490
ELECTRICAL OFFICERS	2363
Total	34032

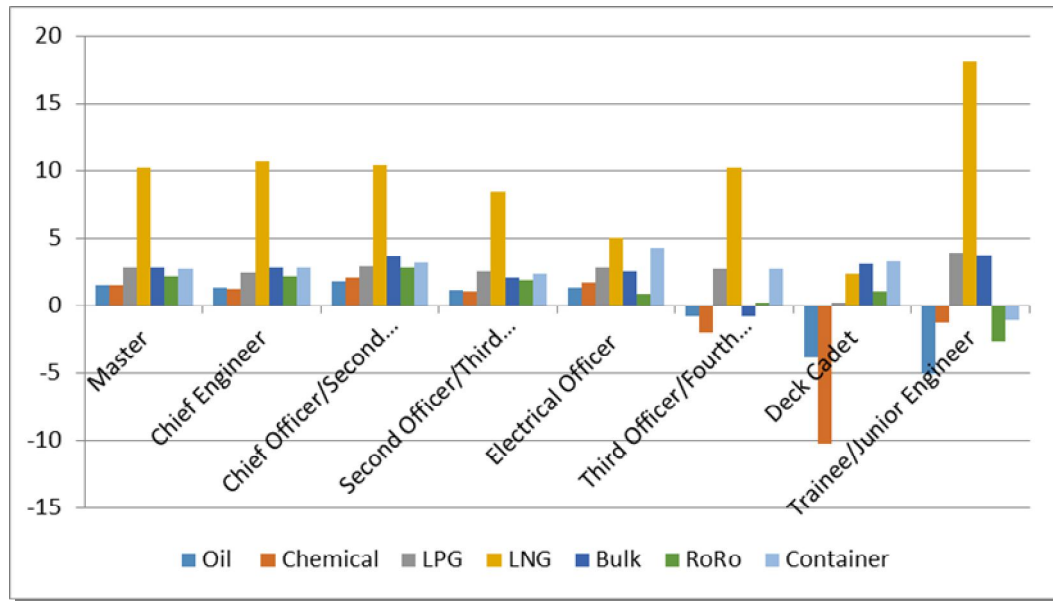
4.2. Overview of Wage Trends:

In any profession the cost of human resource depends on supply and demand forces along with the market conditions at the national and global levels. The global nature of shipping makes it highly prone to global economic conditions. Changing dynamics of supply and demand situation at the global level affect the trends in wages.

The recessionary trends of the last 3 years have resulted in the seafarers' wages almost being frozen. The study of last three years CAGR are shown in the table below. Barring LNG vessels where there has been an increase in wages, perhaps due to growth in the sector and lack of sufficiently training and qualified staff available, the other sectors have shown an almost flat line. In fact the junior officers show a drooping trend. An overall average increase for all ranks and all types of ships shows a CAGR of 2.41% largely contributed by the LNG sector increments.

Figure: Trends in CAGR of Wages from 2010-2012 for all ranks on Various Categories of Vessels (Percent)

CAGR: 2010 - 2012								
Ranks	Oil	Chem.	LPG	LNG	Bulk	Ro Ro	Cont.	Average of all types of vessels
Master	1.48	1.47	2.83	10.21	2.79	2.15	2.66	3.37
Chief Engineer	1.28	1.26	2.46	10.63	2.80	2.16	2.84	3.35
Chief Officer/Second Engineer	1.78	2.08	2.90	10.35	3.67	2.83	3.17	3.82
Second Officer/Third Engineer	1.09	1.00	2.50	8.43	2.02	1.90	2.32	2.75
Electrical Officer	1.35	1.72	2.79	5.02	2.54	0.83	4.26	2.64
Third Officer/Fourth Engineer	-0.81	-2.04	2.67	10.17	-0.85	0.16	2.71	1.71
Deck Cadet	-3.91	-10.25	0.21	2.30	3.05	1.00	3.21	-0.63
Trainee/Junior Engineer	-5.05	-1.31	3.94	18.04	3.68	-2.65	-1.07	2.23
								2.41



4.3. Impact of Wage Trends on the Number of Positions Occupied by Indians?

As the composition of companies who have participated in this survey has been changing over the years, data of those 14 companies who have consistently participated in the survey over the years was studied. Interestingly this shows that the total numbers of Indian on board positions have grown at the CAGR of 3.54% for the period of 2008 to 2013. These 14 companies include three large ship managers, six ship owners and five manning agencies.

The trend of growth in the number of Masters in the graphs on the following pages displays CAGR of 4.56 percent while number of chief engineers grew at 2.81 percent. Numbers of chief officers have recorded growth of 3.20 percent while in the second engineer have grown at the rate of 2.98 percent. Number of deck cadets and junior engineers has recorded negative CAGR of -6.14 and -2.18 percent during this period.

While the above numbers are averages of the 14 companies, looking at the growth of each one of them separately shows a mixed result. While the large ship managers have generally

clocked a growth of 10-15%, the smaller companies have in general either lost on board positions or clocked a marginal growth of between 2-5%.

However overall the Indians have clocked a 3.54% growth in on board berths. It may however be difficult to conclude that this growth is due to the wages remaining flat. General industry feel is that as the ship owners who went for new build during peak period defaulted on payments, the banks have taken over the vessels and passed on to the reputed ship managers.

As far as the wages of Indian seafarers are concerned, they are still higher than other nationalities whom we compete with. Even in the junior ranks where the wages of Indian seafarers have come down, we remain higher as revealed in the extract from our 2012 report.

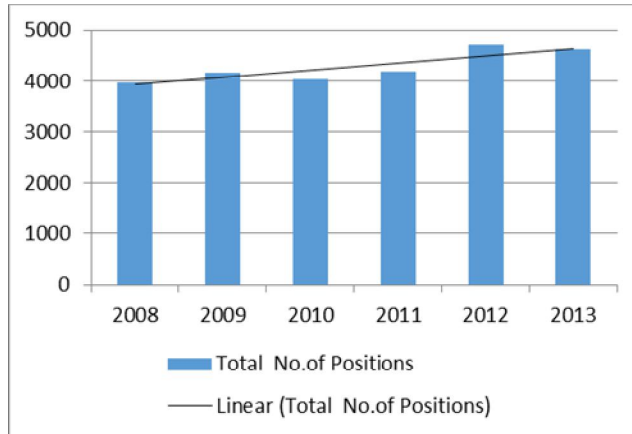
Wage Comparison of Indian Junior Officers with Foreign Nationalities was done with the data received from 4 companies.

As seen in the graphs, Indian junior officers' wages is higher than that of other nationalities except for following cases:

- ***Third Officer/Fourth Engineer in Oil and Gas wherein Estonians are the higher than Indians by 2.31%***
- ***Third Officer/Fourth Engineer in Chemical tankers wherein Indians are the third highest, followed by Estonians which are higher than Indians by 3.29% and Ukrainians higher than Indians by 5.44%.***

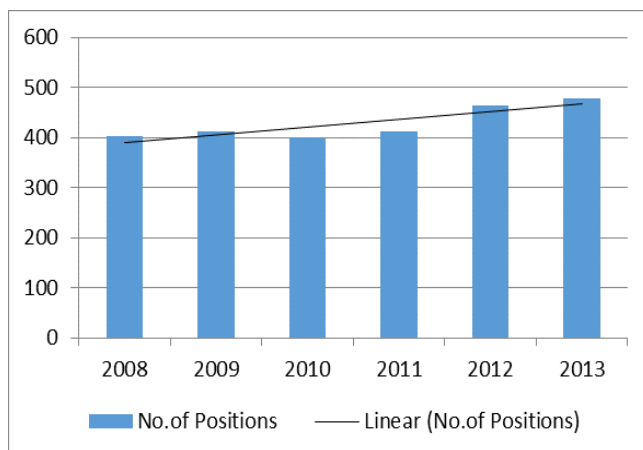
Figure: Trends of CAGR of number positions on board

a. Total Numbers of Seafarers:



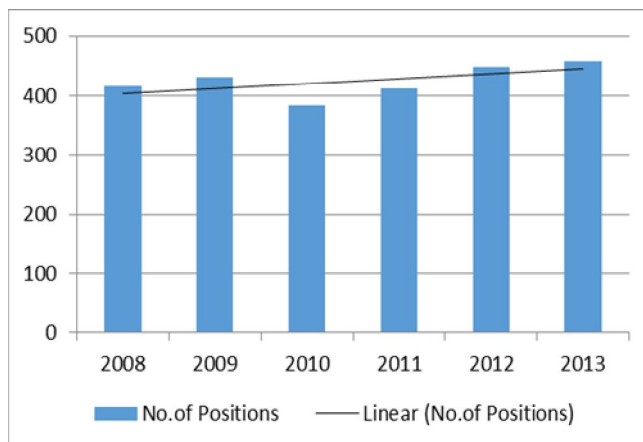
CAGR: 3.54%

a. Master



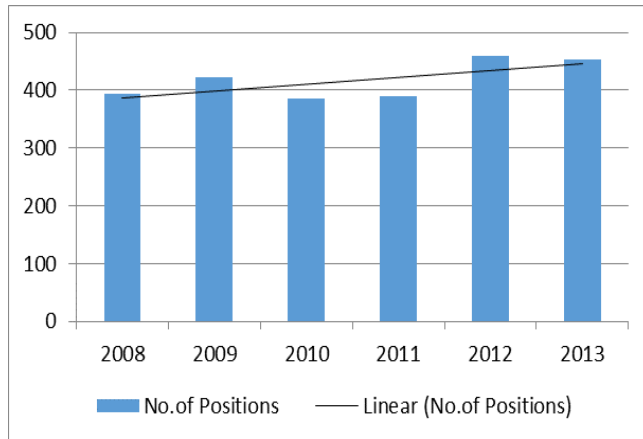
CAGR: 4.56%

b. Chief Engineers



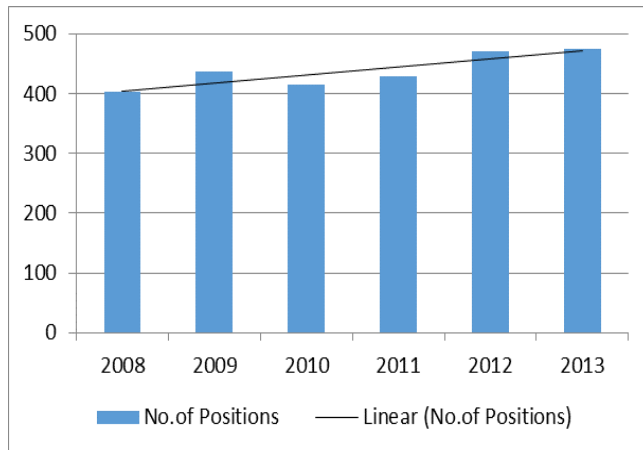
CAGR: 2.81%

c. Chief Officers



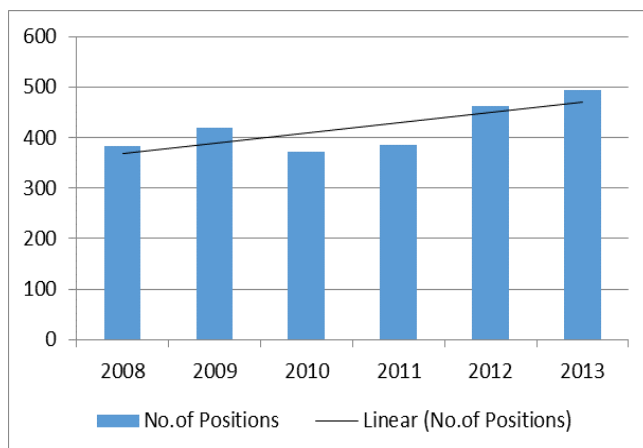
CAGR: 3.20%

d. Second Engineers



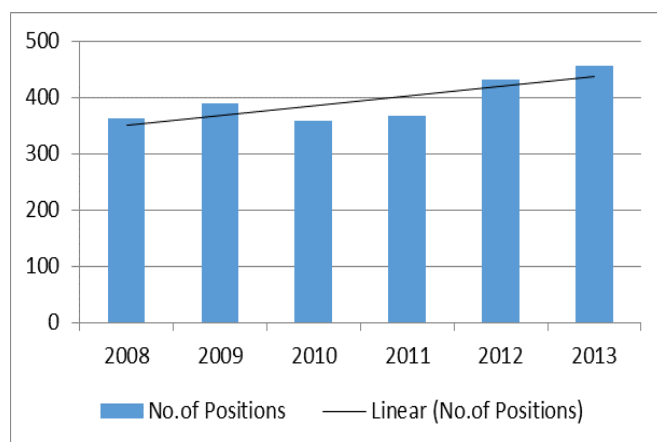
CAGR: 2.98%

e. Second Officers



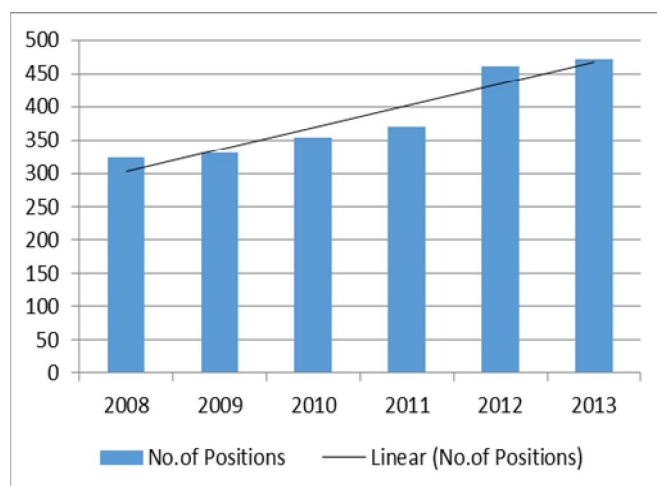
CAGR: 5.65%

f. Third Engineers



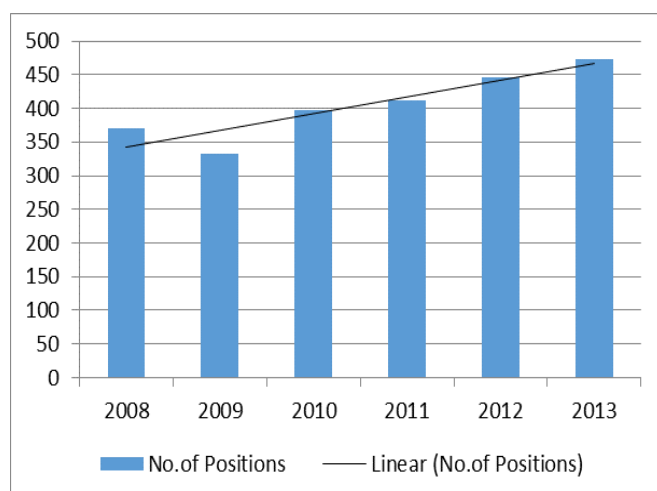
CAGR: 5.13%

g. Third Officers



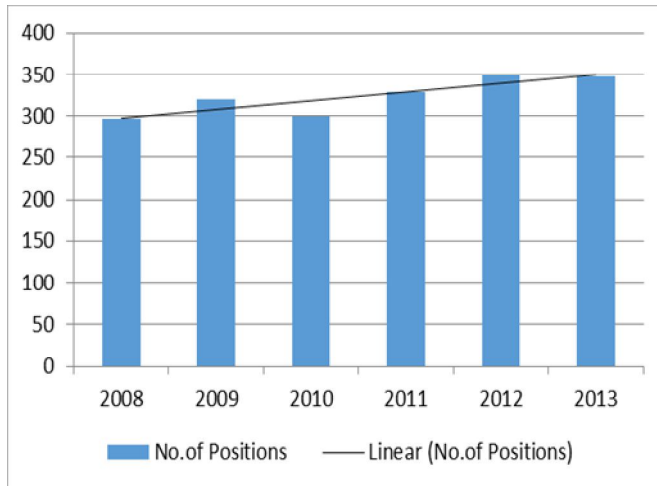
CAGR: 10.25%

h. Electrical Officers



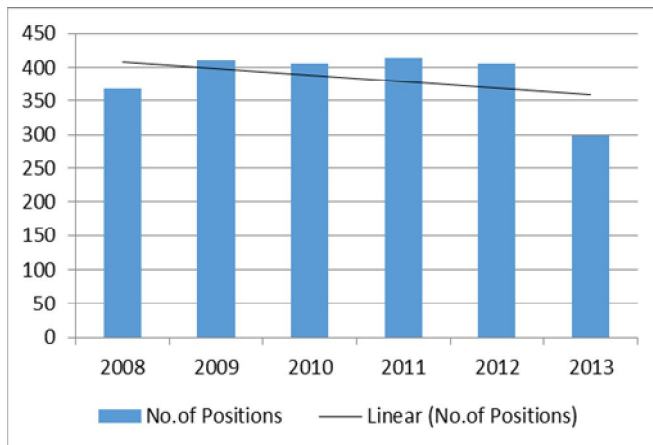
CAGR: 8.57%

i. Fourth Engineers



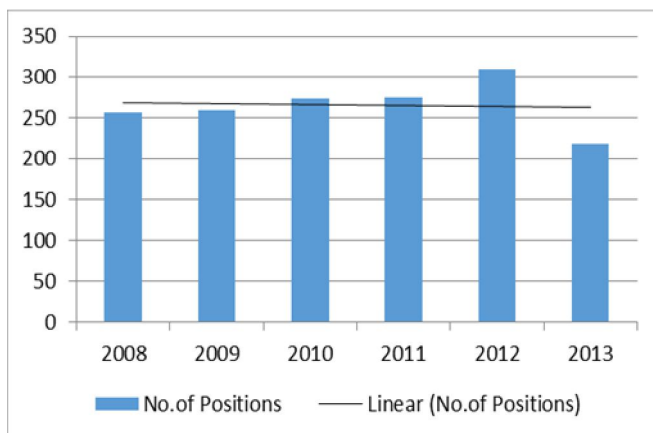
CAGR: 3.24%

j. Deck Cadets



CAGR: -6.16%

k. Trainee/Junior Engineers



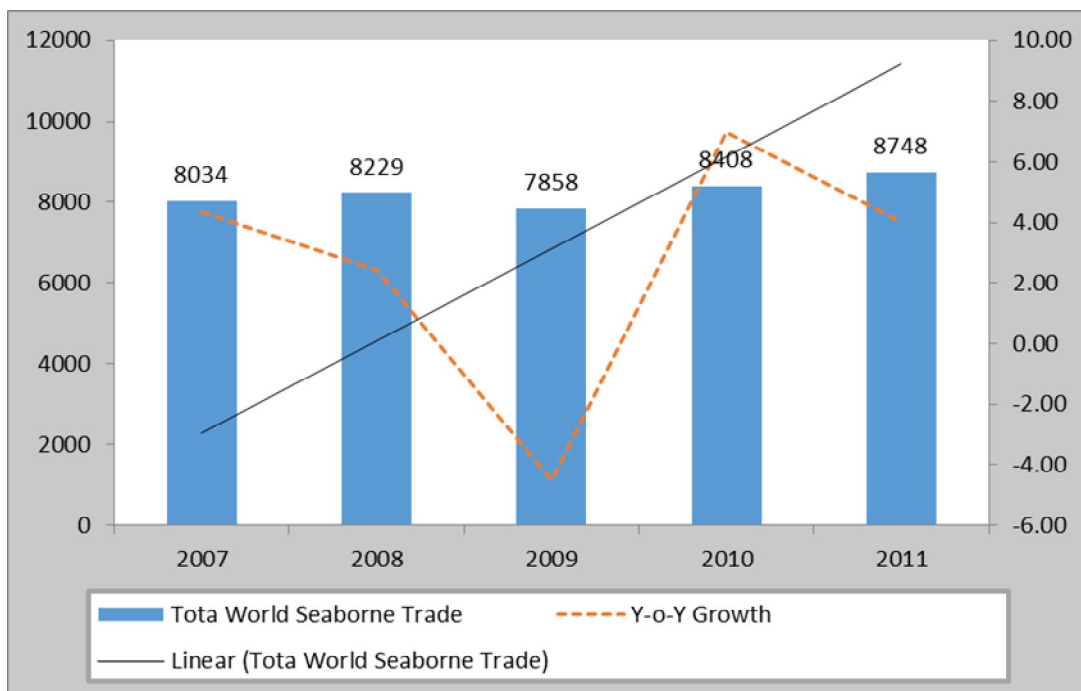
CAGR: -2.18%

4.4. Comparing Growth of Indian on board positions with the worldwide growth trends.

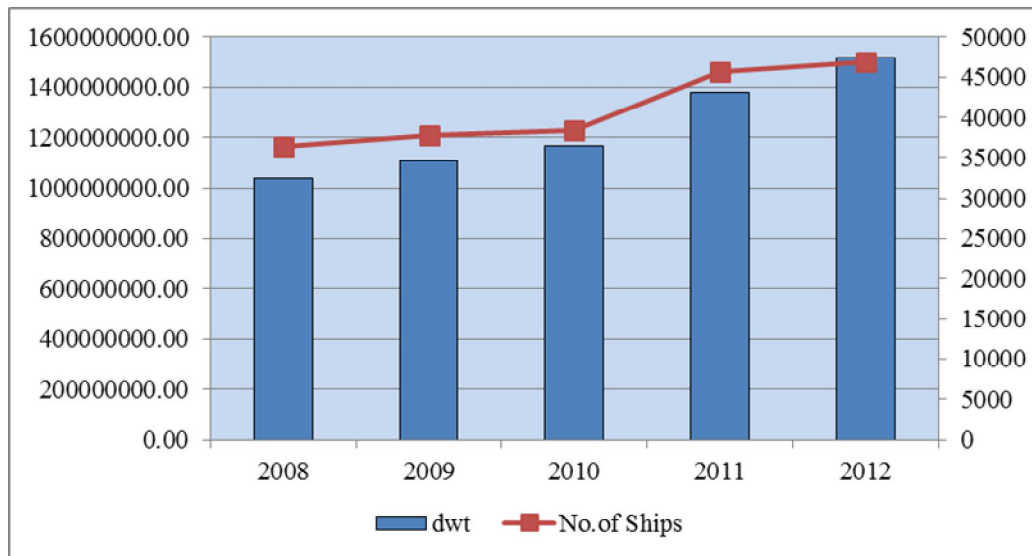
Even though the Indians show a growth of around 3.54% in the berths, it is important to know the market share of Indians occupying new berths that have been made available in the recent times.

To study this, we carried out an analysis of the macro aspects of shipping by studying the world seaborne trade and the rise in availability of ships.

Figure: Growth of World Seaborne Trade (2007-2011). Source: UNCTAD



The Seaborne trade (in terms of total million tonnes loaded) has grown at CAGR of 1.93 percent for the period of 2007 to 2011 as shown in the graph below.

Figure: Growth of DWT and Number of Vessels in World

A further look into the total tonnage growth reveals that Dwt has recorded 10.30 percent for the period of 2008 to 2012 while number of ships has grown at 7.24 percent.

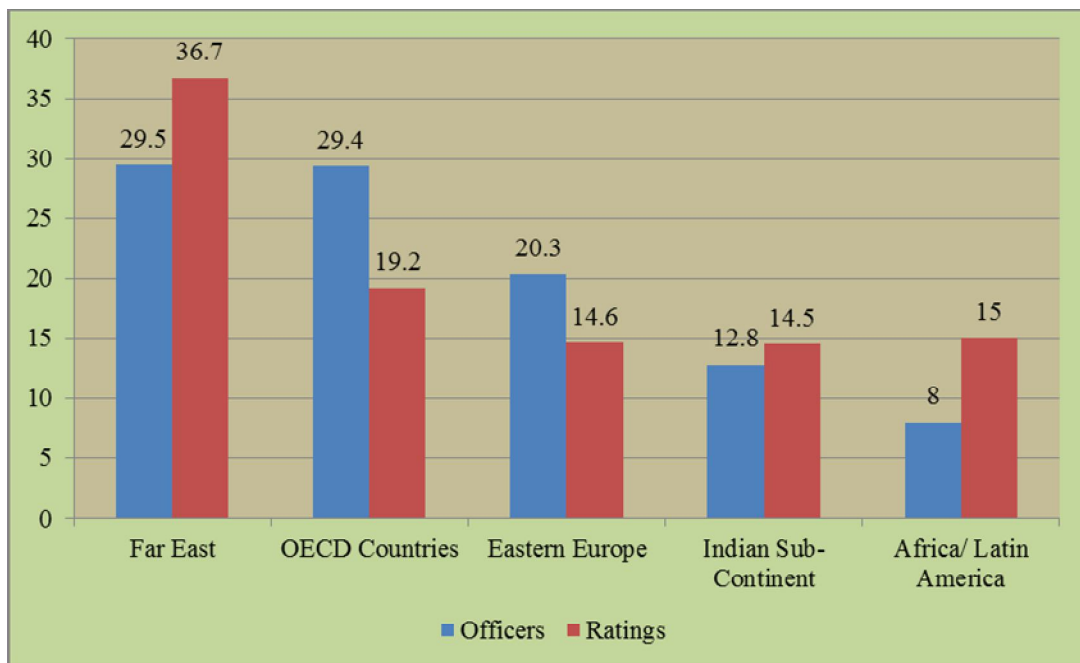
It has to be borne in mind that the 7.24% growth in number of ships is on the 35000+ ships in 2010 to 45000+ vessels in 2012, whereas the 3.54% growth in our study is only on the number of officers from the 14 companies which is around a total 4000+ positions. Even if we consider the total Indian officer positions of 20000, the 3.54% translates into just around 700 on board positions increase which is a very small percentage of the 10000+ ships on board officer positions.

The above clearly indicates that the growth of Indians on board positions is rather miniscule and we have not been able to capture the opportunities available to us.

4.5. Supply Situation of Seafarers in the World:

To supplement our findings we analyzed the results of study by other key research bodies across the globe involved in manpower studies.

Figure 5: Percentage Share of Supply of Officer and Rating by Broad Geographical Area. Source: BIMCO/ISF Manpower 2010 Update



According to BIMCO/ISF manpower 2010 update, the supply and demand for ratings for various vessels is somewhat balanced. However, there is still shortage in supply for senior rank officers especially for tankers and offshore support vessels. According to the study, far-east emerges as the most prominent supplier of officer and ratings.

Figure 4: Supply of Different Nationalities of Officers to Various Regions (Percent) Others* Including North Americans and Japanese. Source: Deloitte, 2011

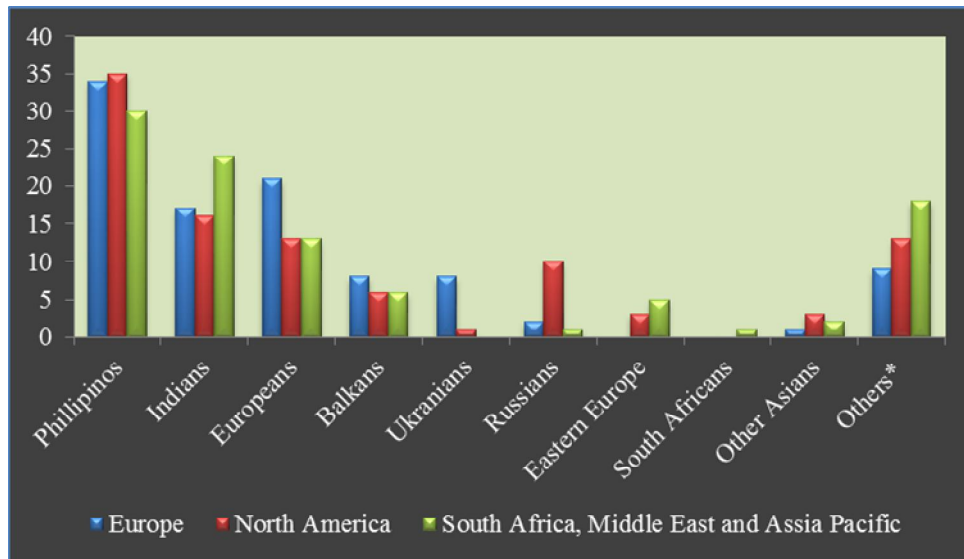
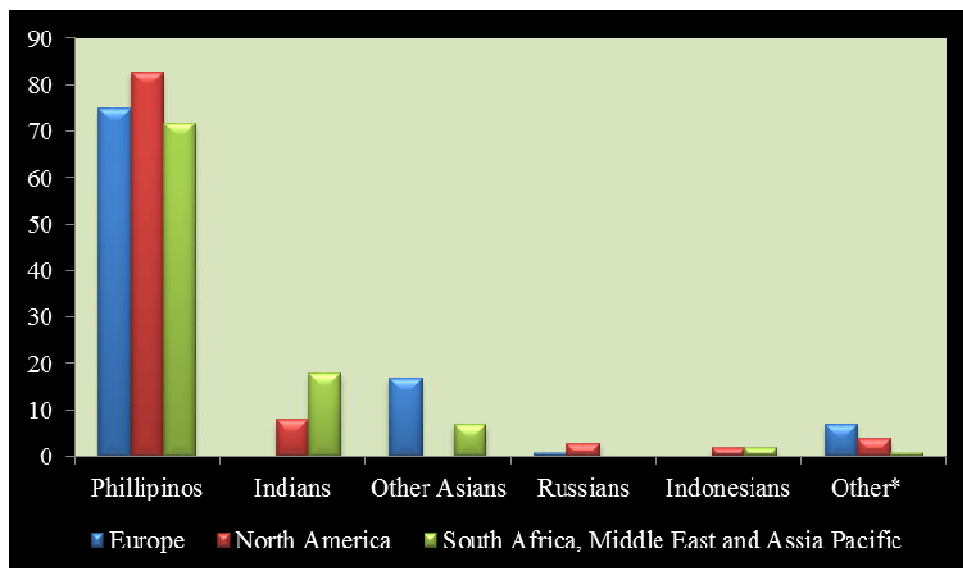


Figure 5: Supply of Different Nationalities of Ratings to Various Regions (Percent). Other* including Scandinavians and South Africans. Source: Deloitte, 2011



According to Deloitte's 2011 study, Philippines has emerged as the major supplier of manpower for both officer and ratings level. India is on second position for the supply of officers while on fifth position for the ratings.

Although the data obtained from the participating companies in our report was insufficient, we did put together the data of the 3 companies who provided us with information. The prominence of Philippines is also reflected through the data of participating companies¹ for the period of 2011 to 2013, where number of positions occupied by the Philippines has grown at the CAGR of 10.51 percent while for total participation of the foreign nationals has grown at the CAGR of 5.26 percent. Other nationalities which are prominent are from CIS Countries and Ukraine with CAGR of 6.41 and 2.78 percent respectively.

Table 1: Growth in Number of On board Officers Position Occupied by Foreign Nationals in participating Companies

Sr. No	Nationalities	2011	2012	2013
1	Filipinos	425	442	519
2	Chinese	13	12	0
3	Bangladeshis	14	19	14
4	Indonesians	0	4	10
5	Ukraine	514	531	543
6	CIS Countries	491	543	556
7	Estonia/ Latvia/ Lithuania	135	133	86
8	Others: Bulgarian	15	22	34
9	Others: Croatian	15	32	31
10	Others: Georgian	39	38	54
11	Others: MYANMAR	16	6	9
12	Others:	0	0	2
Total		1677	1782	1858

¹ Three companies have provided data for positions occupied by foreign nationals.

4.6. Conclusion

During the first year of our study, i.e. 2009, when the recession had not really set in, there was a positive outlook towards the position of Indian Seafarers in the world scenario. Although the wages of Indian seafarers in the preceding 5 years had increased exponentially, we were still looking at ways and means of ensuring that we continued to hold the advantage and capitalize on it. We had studied the data of the number of COC being issued by the Indian administration, number of institutes and their produce, etc to explore the strategies that could help us clock a growth in the number of onboard positions worldwide and capture a larger share.

Unfortunately we seem to have lost that advantage. While most companies at individual level are experiencing this decline, our study too shows a loss of position.

In addition, the number of new maritime institutes which have mushroomed in the last few years churning out a large number of cadets and trainee engineers, have compounded the problem of joblessness. The increased supply and decreasing quality of manpower is certainly not a very positive thing to happen.

The way forward would be to explore ways and means of ensuring high level of operational competence and the right attitude so that we do not slip further. Training institutes and training centers should ensure that they produce a competent individual who operates the vessel well.

Additionally, we need to find ways of ensuring that the thousands of jobless trainees are employed in allied industries to improve the current situation. Offshore (Oil and Gas) is one sector which is still doing reasonably well and can absorb a sizable number of trainees provided they are oriented well to the operational aspects. The administration too needs to be proactive in reducing the restrictions that limits the availability of suitable openings for the young trainees.

5. Methodology

5.1. Aim of the study

To provide empirical evidence for supporting decision making for ship owners, managers and manning agencies while budgeting crew costs and for taking informed decisions pertaining to existing Indian manpower for their sustained marketability.

5.2. How was the study conducted?

The entire survey exercise was split into the following distinct activities:

- Interview/Survey Form was designed by ISF in close conjunction with the FOSMA appointed technical committee.
- Data Collection Process was carried out by ISF receiving individual company data through emails. Complete confidentiality with regards to data of each company has been maintained.
- Interview/Verification of the data received from companies was carried out by solely by Mr. Pawan Kapoor – Chief Executive of ISF HR Services. This included checking a few employment contracts at random. No names of the companies appeared in any formal document. Each company on completion of the data collection was assigned a code which was passed on to the team involved in data entry.
- Data sorting out, construction of tables in spread sheets, developing graphs, applying statistical tools for arriving at key results.
- Report writing and presentation.

5.3. Target population covered during survey

This study has been carried out on Indian deck and engineering officers on board ships of foreign companies having manning, management or liaison offices in India. The total number of Indian officer onboard positions covered in this survey is **6742** from **25** companies. Some of the ship management companies have several clients whose wage scales are different. In such cases the clients have been treated for the purpose of survey as separate companies. The total number of respondent companies/sub companies are **31**. The breakup of participating companies in various categories is given in below table. Category 1 companies are those which have less than 200 officer positions onboard,

Category 2 are between 200-500 officer positions on board and Category 3 are those with more than 500 officer positions onboard.

Company Type	Category 1	Category 2	Category 3	Total
	Less than 200 officers onboard	Between 200 to 500 officers on board	500 plus officers on board	
Ship Owning Companies	6	2	1	09
Ship Management Companies	6	1	2	09
Recruiting Agencies	4	0	2	6
				24

While the total number of companies participating in this survey is 25, one of the ships owning respondent company is provided manning by two recruiting agencies who are also participants in this benchmarking survey. For this reason the total number of respondents above is worked out as 24.

6. Appendix 1 - Statistical Data Analysis Tools

Arithmetic Mean

The arithmetic mean is the **Average** of a set of values. It is the sum of all the values in a set divided by the number of data in the set. The mean is not necessarily the middle value in a set of data. It is also not the most appearing value which is called **Mode**. The middle value in a set of data is called as **Median**. Half of the population lies above it while the other half of the population lies below it.

Percentile

Percentile is the value of a variable below which a certain [percent](#) of observations fall. So the 10th percentile is the value (or score) below which 10 percent of the observations may be found.

The 25th percentile is also known as the **First Quartile** (Q1); the 50th percentile as the **Median** or **Second Quartile** (Q2); the 75th percentile as the **Third Quartile** (Q3).

Standard Deviation

The standard deviation of a set of data is a computational representation of the variability of the population with regard to the variable. It shows the nature of the deviation of the data from the mean of all the data in the set. In [probability theory](#) and [statistics](#), standard deviation is a measure of the variability, a data set, or a [probability distribution](#). A low standard deviation indicates that the data points tend to be very close to the **Mean**, whereas high standard deviation indicates that the data are spread out over a large range of values.

Z - Score

In [statistics](#), a standard score indicates how many [standard deviations](#) an observation is above or below the mean. It is a [dimensionless quantity](#) derived by subtracting the [population mean](#) from an individual raw score and then dividing the difference by the [population standard deviation](#). This conversion process is called standardizing or normalizing.

A standard score or Z score is the measure of the position of the data under the normal distribution curve.

Trend line

In statistics, linear regression refers to any approach to modeling the relationship between variables denoted y and variables denoted X, such that the model depends linearly on the unknown parameters to be estimated from the data.

YOY Growth

The calculation is based on the straight-line growth rates method. The formula used for Straight line growth rate calculation is:

$$X = (1/N) * (E - B)/B$$

Where,

B = wages in previous year.

E = wages in following year.

N = number of years between beginning and ending year, which in the present study is 1.

CAGR

The compound annual growth rate (CAGR) is calculated by taking the nth root of the total percentage growth rate, where n is the number of years in the period being considered. The year-over-year growth rate of various sectors over a time series is calculated. The formula used is as follows:

$$\text{CAGR} = \{ \text{Ending Value} / \text{Beginning Value} \}^{1 / \# \text{ of years}} - 1$$

The compound annual growth rate (CAGR) is calculated by Semi log method.

The CAGR calculator is a useful tool when determining an annual growth rate of data whose value has fluctuated widely from one period to the next. CAGR is often used to describe the growth over a period of time.