



FISKERIDIREKTORATET

# Nøkkeltall fra norsk havbruksnæring

Key figures from aquaculture  
industry

2017



Livet i havet – vårt felles ansvar



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### Foreword:

In this publication, the Norwegian Directorate of Fisheries presents key figures from the Norwegian Aquaculture industry in 2017. The Directorate of Fisheries provide main part of the statistical material in this report, but some statistics is by external sources.

The report contains information about all species farmed in the Norwegian Aquaculture industry. Information is in four groups. One group contains information about Atlantic salmon and Rainbow trout. Another group contains information about other marine fish species, a third group contains information about molluscs, crustaceans and echinoderms and finally the fourth group contains information about algae.

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# Licences

Source: The Directorate of Fisheries

Figure 1. The number of licences 2007-2017

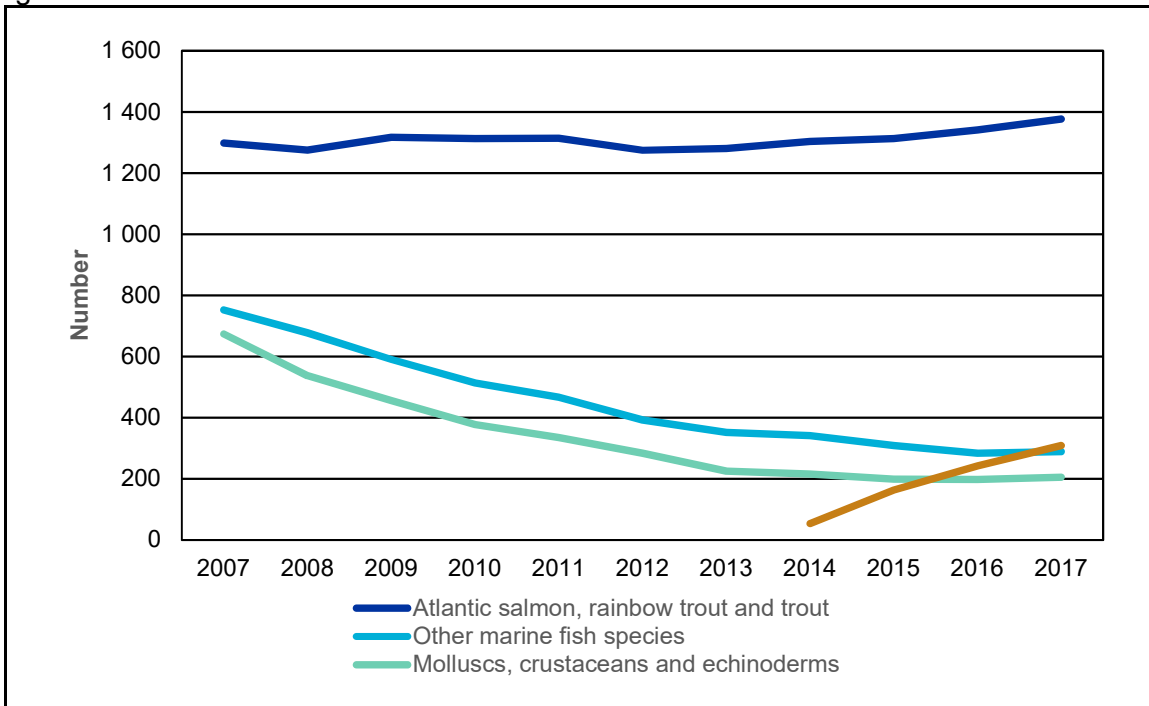
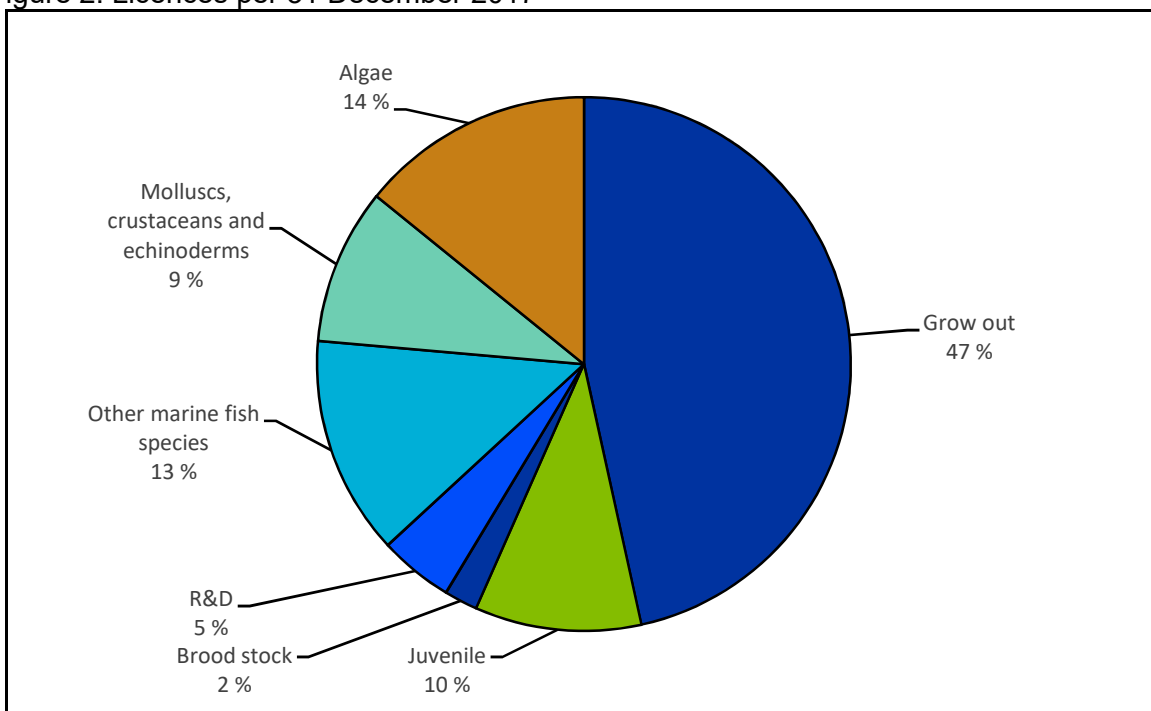


Figure 2. Licences per 31 December 2017



Be aware that grow out production, juvenile, brood stock and research (R&D) are licenses for production of Atlantic salmon, rainbow trout and trout.

Table 1. The number of licenses per 31 December 2017, Atlantic salmon, rainbow trout and trout

County	Juvenile Number of licenses	Grow out Number of licenses	Brood stock Number of licenses	R & D <sup>1)</sup> Number of licenses
Finnmark	6	98	0	4
Troms	13	104	2	8
Nordland	32	170	9	22
Nord-Trøndelag	16	71	2	11
Sør-Trøndelag	18	96	7	6
Møre og Romsdal	34	116	6	8
Sogn og Fjordane	20	89	4	5
Hordaland	56	164	6	14
Rogaland	17	59	5	17
Vest-Agder	3	18	0	0
Aust-Agder	1	3	1	0
Øvrige Fylker	4	27	2	3
<b>Total</b>	<b>220</b>	<b>1015</b>	<b>44</b>	<b>98</b>

1) Research (R&D)

Table 2. The number of licenses per 31 December 2017, other marine fish species, molluscs, crustaceans, echinoderms, sea ranching and algae

County	Fish Number of licenses	Molluscs, crustaceans and echinoderms Number of licenses	Sea Ranching Number of licenses	Algae Number of licenses
Finnmark	16	5	0	0
Troms	17	8	0	1
Nordland	44	34	0	123
Nord-Trøndelag	19	22	0	11
Sør-Trøndelag	20	19	3	8
Møre og Romsdal	29	11	1	3
Sogn og Fjordane	25	8	0	47
Hordaland	62	50	0	106
Rogaland	28	16	4	1
Vest-Agder	6	5	2	9
Aust-Agder	3	19	0	0
Øvrige Fylker	20	9	0	0
<b>Total</b>	<b>289</b>	<b>206</b>	<b>10</b>	<b>309</b>

Table 3. The number of licenses per 31 December 2017 for other marine fish species, molluscs, crustaceans and echinoderms and algae distributed by species

Other marine fish species		Molluscs, crustaceans and echinoderms		Algae	
Species	No.	Species	No.	Species	No.
Atlantic haddock	20	Blue mussel	129	Sea belts	55
Atlantic halibut	71	European lobster	28	Tangle	50
Turbot	30	Great Atlantic scallop	40	Dabber locks	52
Wrasse	164	Sea urchin	26	Dulse	42
Lumpfish	71	Flat and cupped oyster	52	Other species	176
Arctic char	54	Other species	232		
Wolf fish	54				
Atlantic cod	100				
Other species	376				

The licenses for marine fish species, molluscs, crustaceans and echinoderms are comprised of several species. In “Table 3” licenses are counted several times. The total number of licenses in “Table 3” is therefore higher than the total number presented in “Table 2”.

## 2. Sites

Source: The Directorate of Fisheries

Table 4. The number of sites in seawater per 31 December 2017

	Atlantic salmon and rainbow trout	Other marine fish species	Molluscs, crustaceans and echinoderms
County	Number	Number	Number
Finnmark	78	4	0
Troms	117	7	3
Nordland	209	13	32
Trøndelag	154	8	37
Møre og Romsdal	87	6	3
Sogn og Fjordane	86	6	10
Hordaland	176	9	38
Rogaland	67	5	6
Vest-Agder	10	0	2
Aust-Agder	2	0	18
Øvrige fylker	0	0	1
Total	986	58	150

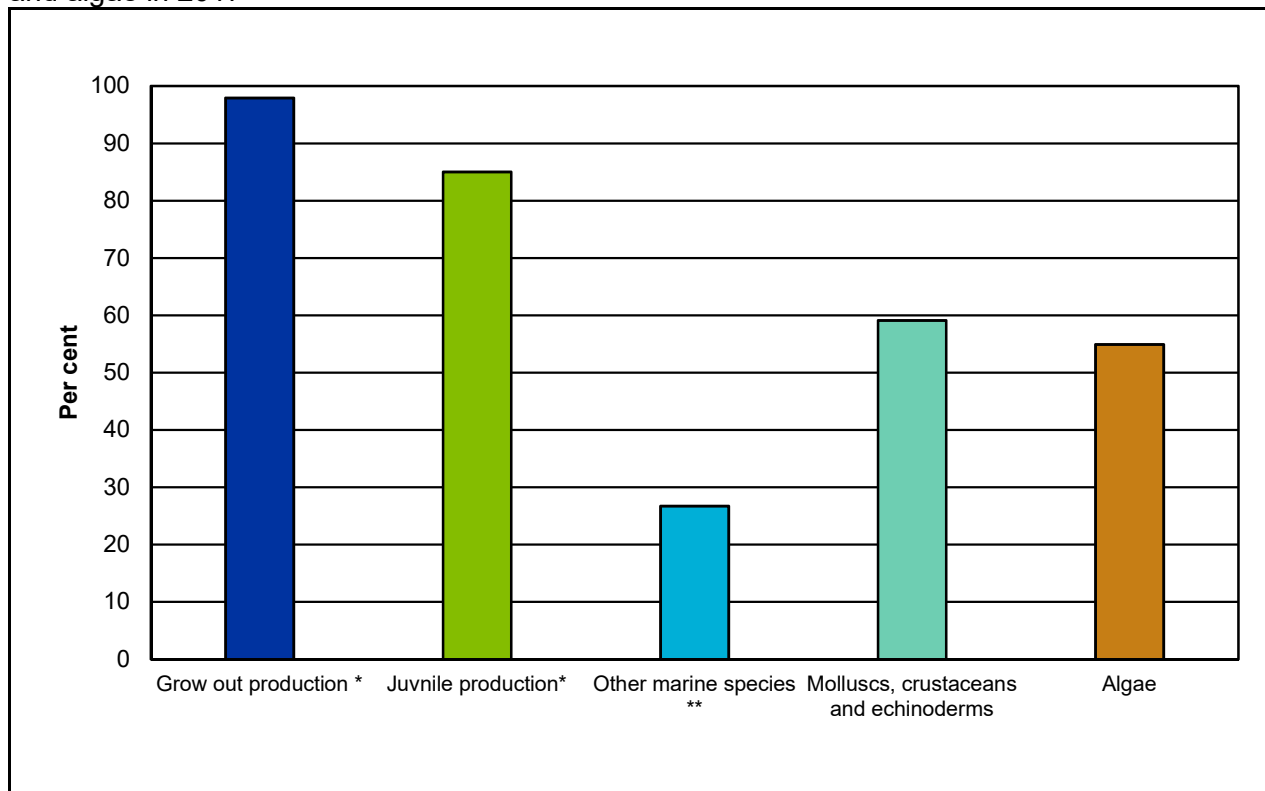


### 3. Licenses and companies with production

Source: The Directorate of Fisheries

Preliminary figures for 2017 (per May 2018)

Figure 3. The percentage of licenses with production of fish, molluscs, crustaceans, echinoderms and algae in 2017



\* Atlantic salmon, rainbow trout and trout

\*\* Grow out production

Table 5. The number of companies with production of fish in 2017

County	Atlantic salmon, rainbow trout and trout		Other marine fish species	
	Grow out	Juvenile	Grow out	Juvenile
Finnmark	5	4	2	1
Troms	20	9	2	5
Nordland	37	16	13	11
Nord-Trøndelag	11	10	4	2
Sør-Trøndelag	8	9	2	3
Møre og Romsdal	14	20	5	7
Sogn og Fjordane	16	13	5	3
Hordaland	31	26	5	6
Rogaland	14	12	2	2
Øvrige fylker	17	6	6	5
<b>Total</b>	<b>173</b>	<b>125</b>	<b>46</b>	<b>45</b>

Table 6. The number of companies with production of molluscs, crustaceans, echinoderms and algae in 2017

County	Molluscs, crustaceans and echinoderms	Algae
Finnmark	0	0
Troms	2	1
Nordland	5	5
Nord-Trøndelag	8	2
Sør-Trøndelag	6	1
Møre og Romsdal	3	1
Sogn og Fjordane	2	0
Hordaland	16	5
Rogaland	3	0
Øvrige fylker	7	0
<b>Total</b>	<b>52</b>	<b>15</b>

# 4. Employment

Source: The Directorate of Fisheries

Preliminary figures for 2017 (per May 2018)

Figure 4. Number of employees working with production of fish, molluscs, crustaceans and echinoderms 2007-2017

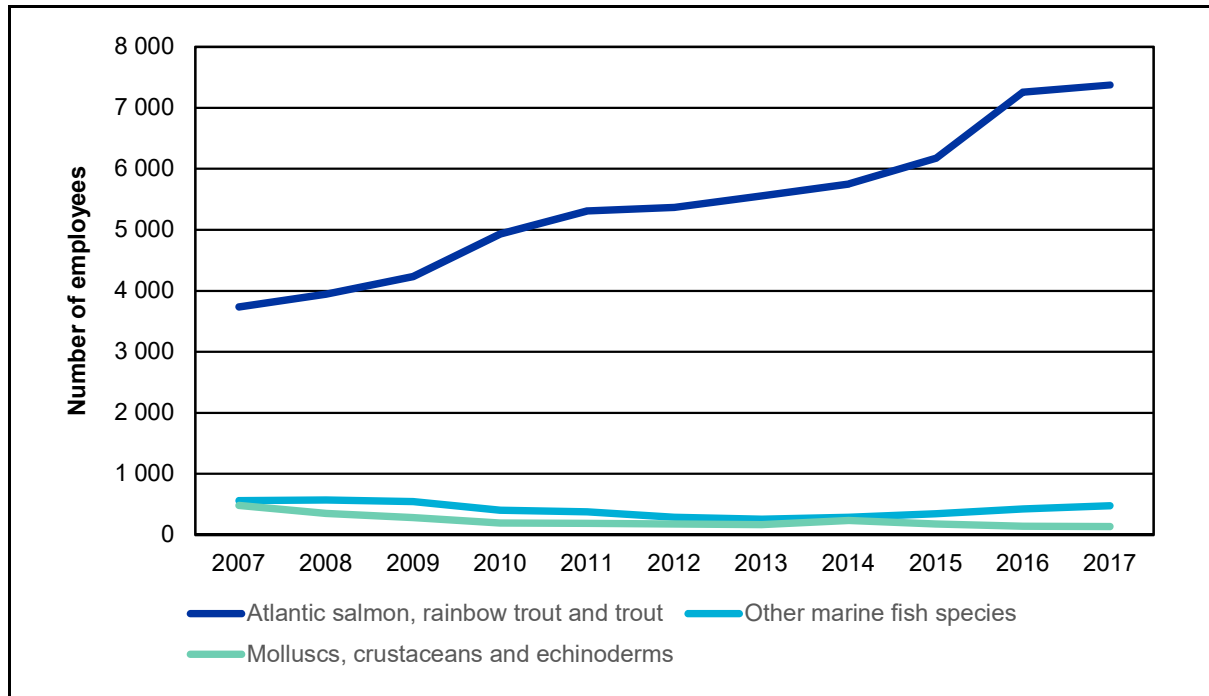
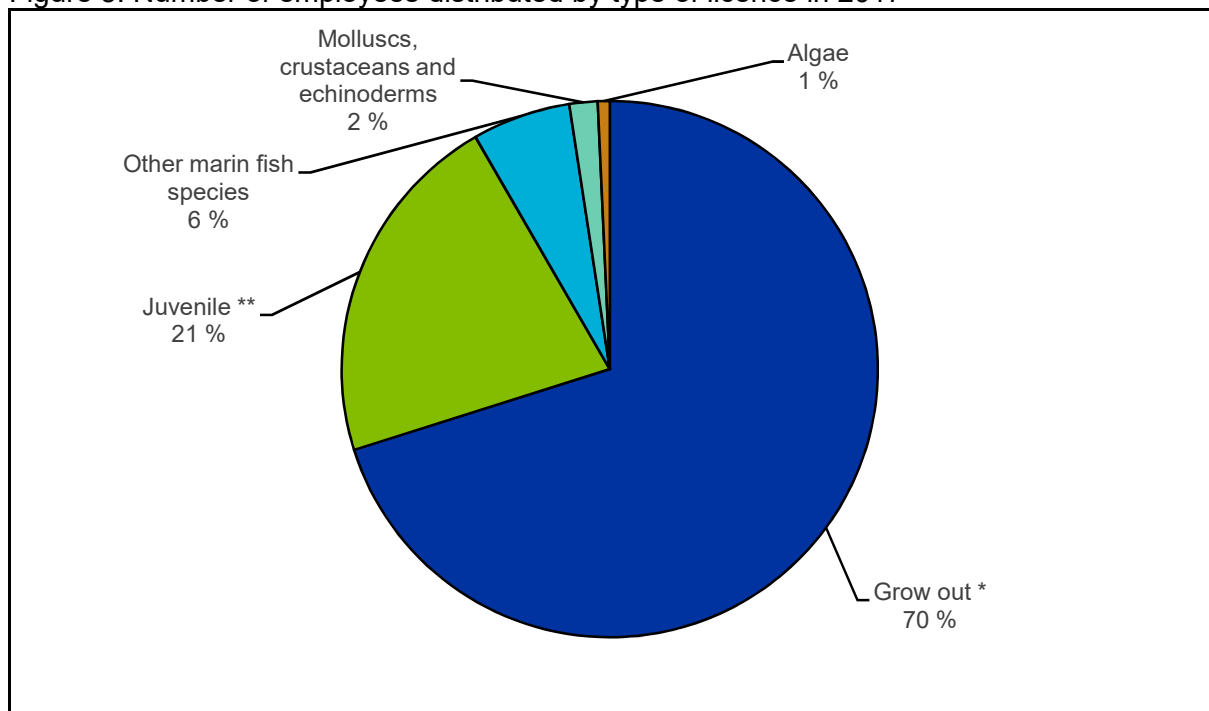


Figure 5. Number of employees distributed by type of licence in 2017



\* Grow out production of Atlantic salmon, rainbow trout and trout

\*\* Juvenile production of Atlantic salmon, rainbow trout and trout

## Atlantic salmon and rainbow trout

Preliminary figures for 2017 (per May 2018)

Table 7. Employment in the production of Atlantic salmon, rainbow trout and trout in 2017

County	Grow out fish, brood stock, R&D		Juvenile fish	
	Men	Women	Men	Women
Finnmark	496	88	45	20
Troms	598	89	71	14
Nordland	791	118	232	97
Nord-Trøndelag	307	38	98	23
Sør-Trøndelag	499	47	96	47
Møre og Romsdal	494	40	179	77
Sogn og Fjordane	362	64	79	39
Hordaland	1042	178	272	162
Rogaland	266	44	109	54
Øvrige fylker	72	10	14	3
<b>Total</b>	<b>4 927</b>	<b>716</b>	<b>1 195</b>	<b>536</b>

Table 8. Man-Hours<sup>1)</sup> in the production of Atlantic salmon, rainbow trout and trout in 2017

County	Grow out fish, brood stock R&D		Juvenile fish	
	Men	Women	Men	Women
Finnmark	699 550	76 419	70 364	24 830
Troms	749 132	83 520	109 137	15 616
Nordland	1 199 989	149 204	334 274	117 851
Nord-Trøndelag	488 464	37 313	145 007	32 106
Sør-Trøndelag	763 225	56 465	128 550	49 419
Møre og Romsdal	713 857	50 422	252 158	76 486
Sogn og Fjordane	509 556	77 613	95 517	34 296
Hordaland	1 370 964	192 415	324 746	123 971
Rogaland	344 685	42 283	126 173	43 273
Øvrige fylker	72 563	4 890	15 625	4 210
<b>Total</b>	<b>6 911 985</b>	<b>770 544</b>	<b>1 601 551</b>	<b>522 058</b>

1) The Directorate of Fisheries define the number of man-hour per year as 1845 hours

## Other marine fish species

Preliminary figures for 2017 (per May 2018)

Table 9. Employment in the production of other marine fish species in 2017

County	Grow out production		Juvenile	
	Men	Women	Men	Women
Finnmark og Troms	7	0	27	20
Nordland	15	7	50	17
Trøndelag	16	0	27	22
Møre og Romsdal	8	3	34	13
Sogn og Fjordane	15	1	19	4
Hordaland	15	11	38	19
Rogaland og øvrige fylker	34	4	32	19
<b>Total</b>	<b>110</b>	<b>26</b>	<b>227</b>	<b>114</b>

Table 10. Man-Hours<sup>1)</sup> in the production of other marine fish species in 2017

County	Grow out production		Juvenile	
	Men	Women	Men	Women
Finnmark og Troms	8 845	0	37 087	26 634
Nordland	10 100	5 000	59 035	21 115
Trøndelag	13 737	0	41 895	31 694
Møre og Romsdal	11 200	1 925	59 370	20 565
Sogn og Fjordane	20 088	1 850	27 824	5 152
Hordaland	17 320	15 400	64 959	23 682
Rogaland og øvrige fylker	49 548	6 817	40 429	14 993
<b>Total</b>	<b>130 838</b>	<b>30 992</b>	<b>330 599</b>	<b>143 835</b>

1) The Directorate of Fisheries defines the number of man-hour per year as 1845 hours

## Molluscs, crustaceans and echinoderms

Preliminary figures for 2017 (per May 2018)

Table 11. Employment in the production of molluscs, crustaceans and echinoderms in 2017

County	Employees		Man-Hours <sup>1)</sup>	
	Men	Women	Men	Women
Finnmark og Troms	:	:	:	:
Nordland	15	2	4 967	880
Trøndelag	49	15	15 376	1 670
Møre og Romsdal	4	1	1 360	100
Sogn og Fjordane	:	:	:	:
Hordaland	22	5	7 054	2 525
Rogaland og øvrige fylker	17	1	2 165	100
<b>Total</b>	<b>111</b>	<b>26</b>	<b>32 167</b>	<b>6 235</b>

1) The Directorate of Fisheries defines the number of man-hour per year as 1845 hours

## Algae

Preliminary figures for 2017 (per May 2018)

Table 12. Employment in the production of algae in 2017

	Employees		Man-Hours <sup>1)</sup>	
	Men	Women	Men	Women
<b>Total</b>	<b>45</b>	<b>13</b>	<b>10 990</b>	<b>2 025</b>

1) The Directorate of Fisheries defines the number of man-hour per year as 1845 hours

## 5. Sale

Source: The Directorate of Fisheries

### Atlantic salmon and rainbow trout

Preliminary figures for 2017 (per May 2018)

Figure 6. Sale of Atlantic salmon and rainbow trout (grow out production) 2007-2017

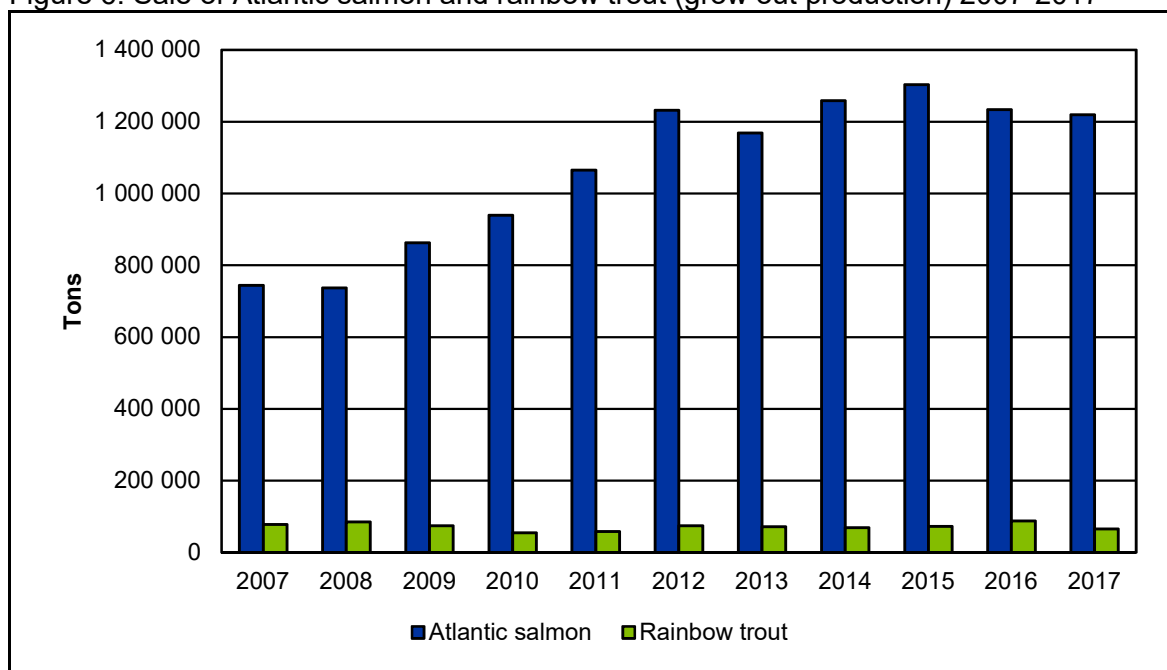


Table 13. Sale of Atlantic salmon and Rainbow trout in 2017, weight in metric tons round weight and value in 1000 NOK.

County	Grow out production					
	Atlantic salmon			Rainbow trout		
	Weight	Value	Price per kg	Weight	Value	Price per kg
Finnmark	86 659	4 246 984	49.01	0	0	-
Troms	179 943	8 993 032	49.98	0	0	-
Nordland	262 955	12 966 383	49.31	4 553	243 059	53.38
Nord-Trøndelag	84 740	4 111 911	48.52	0	0	-
Sør-Trøndelag	94 827	5 045 159	53.20	0	0	-
Møre og Romsdal	162 548	8 581 198	52.79	8 268	406 776	49.20
Sogn og Fjordane	93 529	4 648 168	49.70	14 394	692 222	48.09
Hordaland	160 851	8 100 258	50.36	37 997	1 669 452	43.94
Rogaland	78 758	3 991 621	50.68	1	28	23.84
Øvrige fylker	14 426	704 385	48.83	137	10 066	73.44
<b>Total</b>	<b>1 219 235</b>	<b>61 389 100</b>	<b>50.35</b>	<b>65 350</b>	<b>3 021 604</b>	<b>46.24</b>

Figure 7. Sale of juvenile fish of Atlantic salmon and rainbow trout 2007-2017

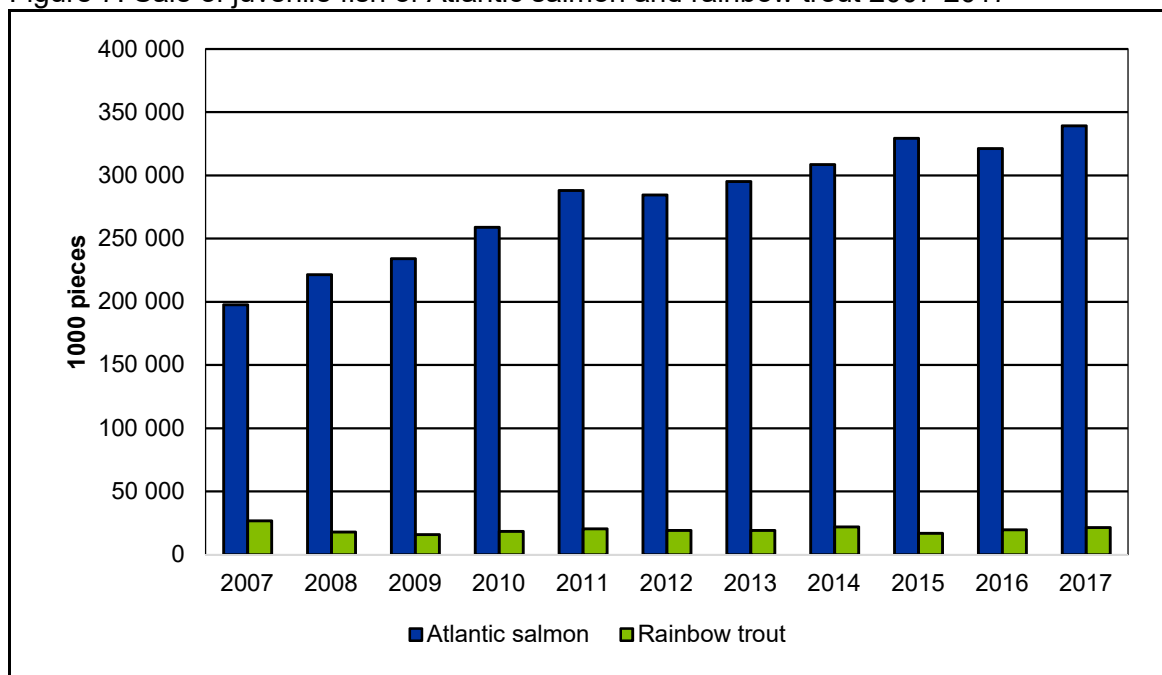


Table 14. Sale of juvenile fish of Atlantic salmon and rainbow trout in 2017. Quantity in 1000 pieces and value in 1000 NOK.

County	Juvenile fish					
	Atlantic salmon			Rainbow trout		
	No.	Value	Price per no.	No.	Value	Price per no.
Finnmark og Troms	34 212	393 500	11.50	0	0	-
Nordland	92 539	1 117 118	12.07	950	11 160	11.75
Nord-Trøndelag	39 493	420 261	10.64	0	0	-
Sør-Trøndelag	35 327	388 610	11.00	2 880	27 114	9.41
Møre og Romsdal	45 268	528 621	11.68	244	3 050	12.50
Sogn og Fjordane	17 226	230 732	13.39	5 260	58 401	11.10
Hordaland	55 826	737 927	13.22	9 346	120 368	12.88
Rogaland	14 382	190 071	13.22	2 532	27 608	10.90
Øvrige fylker	4 929	58 989	11.97	170	1 700	10.00
<b>Total</b>	<b>339 202</b>	<b>4 065 829</b>	<b>11.99</b>	<b>21 382</b>	<b>249 401</b>	<b>11.66</b>

Figure 8. Percentage of sale (Atlantic salmon and rainbow trout) for the 10 largest companies 2007-2017

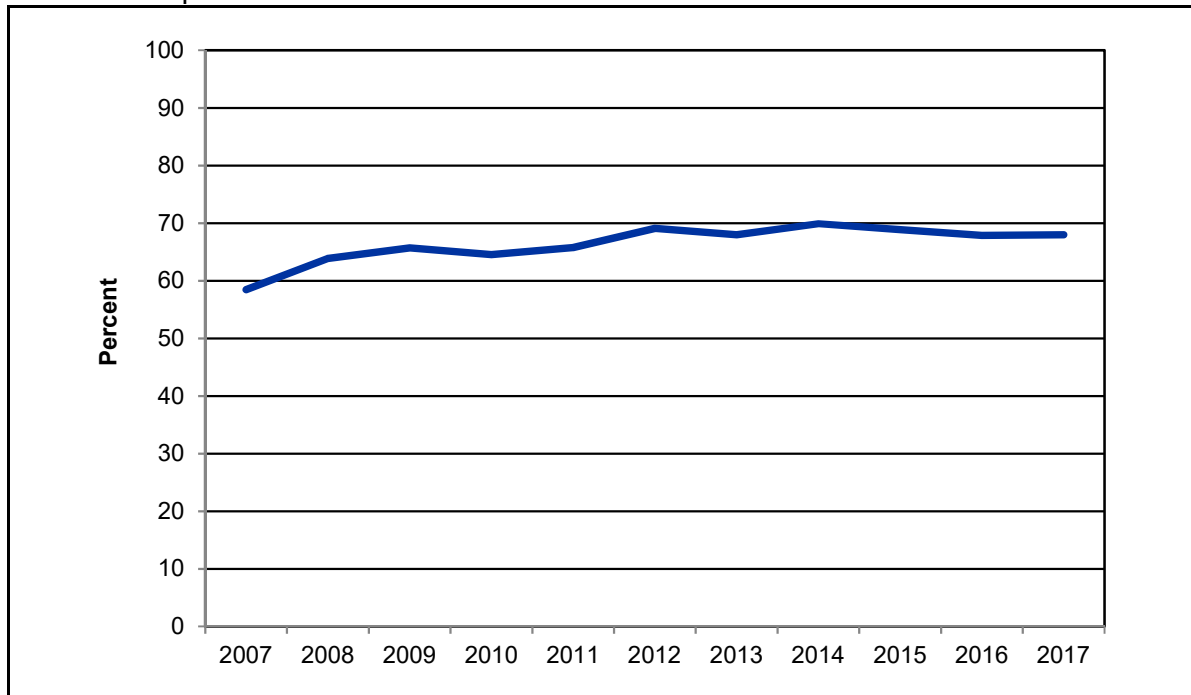


Table 15. Percentage of sale (Atlantic salmon and rainbow trout) for the 10 largest companies in Norway. Weight in tons

Year	Total sale	10 largest	Percentage
2007	821 687	480 257	58.4
2008	822 960	525 830	63.9
2009	936 980	615 803	65.7
2010	994 113	641 551	64.5
2011	1 123 340	739 357	65.8
2012	1 306 678	871 660	69.1
2013	1 239 762	843 165	68.0
2014	1 327 266	927 983	69.9
2015	1 376 267	948 319	68.9
2016	1 321 269	897 262	67.9
2017	1 284 585	872 965	68.0



## Other marine fish species

Preliminary figures for 2017 (per May 2018)

Figure 9. Sale of other marine fish species 2007-2017

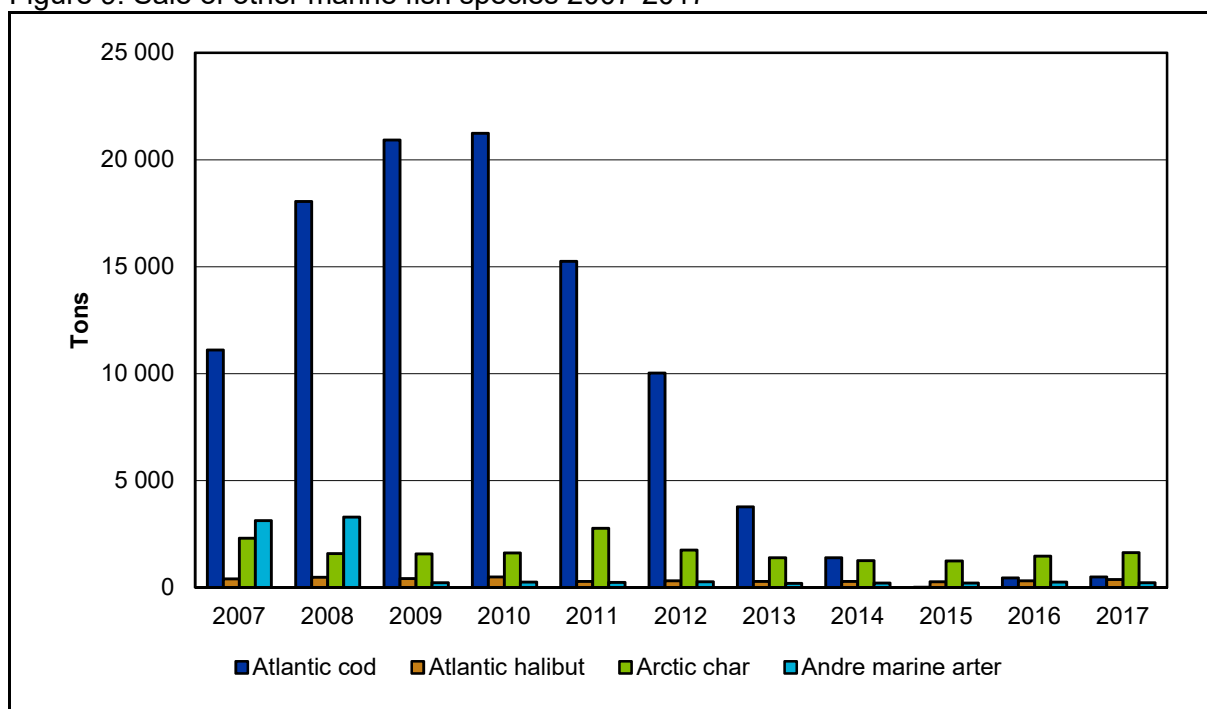


Table 16. Sale of other marine fish species in 2017. Weight in metric tons round weight and value in 1000 NOK.

County	Weight	Value	Species	Weight	Value
Finnmark og Troms	422	10 981	Atlantic cod	492	12 492
Nordland	296	17 156	Arctic char	365	21 816
Trøndelag	115	4 414	Atlantic halibut	1 623	172 871
Møre og Romsdal	598	67 605	Other species	227	21 116
Sogn og Fjordane	28	3 267	<b>Total</b>	<b>2 706</b>	<b>228 296</b>
Hordaland	0	0			
Rogaland og øvrige fylker	1 247	124 873			
<b>Total</b>	<b>2 706</b>	<b>228 296</b>			

Table 17. Sale of juveniles of other marine fish species in 2017. Quantity in 1000 pieces and value in 1000 NOK.

Species	Number	Value
Atlantic cod	6	30
Arctic char	593	2 673
Atlantic halibut	610	16 877
Other species	19	579
<b>Total</b>	<b>1 228</b>	<b>20 159</b>

## Molluscs, crustaceans and echinoderms

Preliminary figures for 2017 (per May 2018)

Figure 10. Gross sale of molluscs, crustaceans and echinoderms 2007-2017

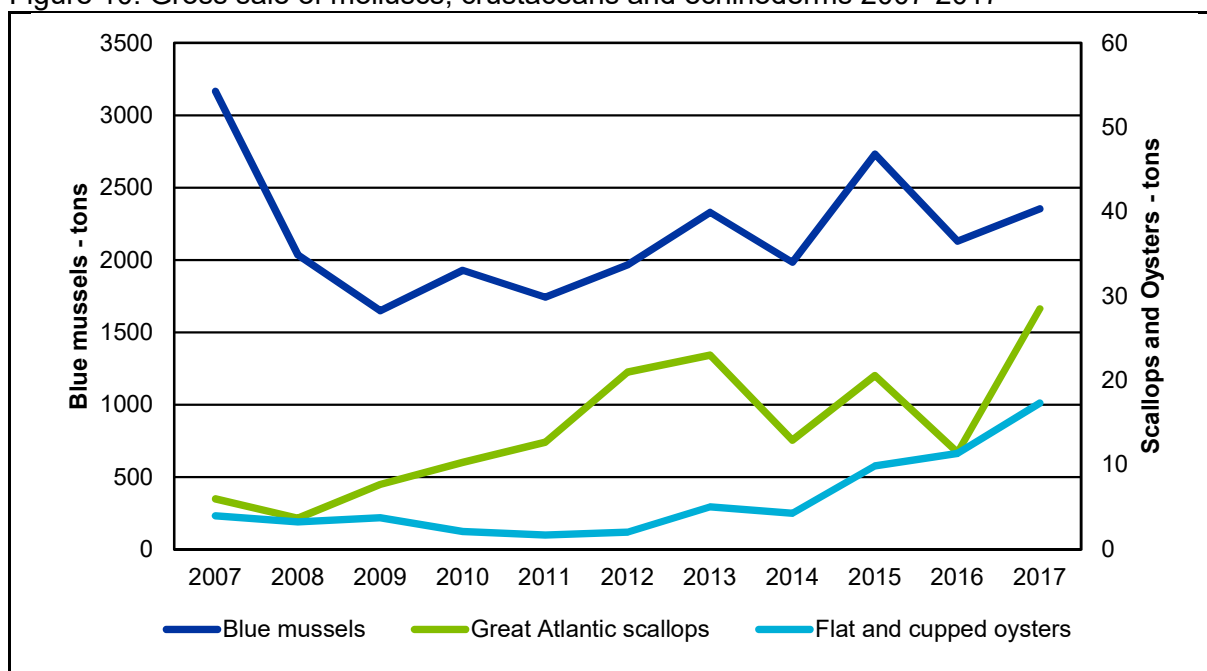


Table 18. Gross sale of molluscs, crustaceans and echinoderms in 2017. Weight in metric tons and value in 1000 NOK.

County	Weight	Value	Species	Weight	Value
Finnmark og Troms	:	:	Blue mussels	2 353	25 862
Nordland	791	6 152	Great Atlantic scallops	29	1 629
Nord-Trøndelag	611	7 398	Oysters	17	1 215
Sør-Trøndelag	869	11 894	Other species	21	3 814
Møre og Romsdal	10	3 291	<b>Total</b>	<b>2 420</b>	<b>32 521</b>
Sogn og Fjordane	:	:			
Hordaland	45	2 764			
Rogaland	12	566			
Øvrige fylker	80	406			
<b>Total</b>	<b>2 420</b>	<b>32 521</b>			

## 6. Losses in the production

Source: The Directorate of Fisheries

### Definitions:

- Dead fish: Number fish physically taken out of the bag-net. Cause of this type of death could be illness, wounds etc. without clearly specifying the cause.
- Turn out from slaughterhouse: Number of fish discarded at slaughterhouse due to maturity, defects, blemishes etc.
- Escapes: Number of fish that have escaped in conjunction with an accident.
- Other losses: Number of fish lost due to predation, theft and other causes.
- Counting mistakes: Number fish adjusted according to original outset numbers.

### Atlantic salmon and rainbow trout

Preliminary figures for 2017 (per May 2018)

Table 19. Losses in production of Atlantic salmon in 2017. Quantity in 1000 pieces.

County	Dead	Rejected	Escapees	Others	Adjust input	Total
Finnmark	2 905	206	0	1 886	56	5 054
Troms	5 147	119	3	734	84	6 087
Nordland	5 645	130	0	144	272	6 191
Nord-Trøndelag	3 373	33	0	6	110	3 522
Sør-Trøndelag	5 593	79	1	0	13	5 686
Møre og Romsdal	6 012	180	2	69	103	6 366
Sogn og Fjordane	4 974	350	0	338	-126	5 535
Hordaland	10 429	931	8	19	453	11 841
Rogaland	3 400	744	0	0	26	4 170
Øvrige fylker	422	50	0	0	-40	431
<b>Total</b>	<b>47 900</b>	<b>2 820</b>	<b>15</b>	<b>3 196</b>	<b>952</b>	<b>54 882</b>

Table 20. Losses in the production of rainbow trout in 2017. Quantity in 1000 pieces.

County	Dead	Rejected	Escapees	Others	Adjust input	Total
Finnmark	0	0	0	0	0	0
Troms	0	0	0	0	0	0
Nordland	127	10	5	0	0	142
Nord-Trøndelag	0	0	0	0	0	0
Sør-Trøndelag	19	0	0	0	0	19
Møre og Romsdal	283	4	0	0	-5	282
Sogn og Fjordane	406	38	0	228	148	820
Hordaland	1 511	147	0	0	-273	1 385
Rogaland	0	1	0	0	0	2
Øvrige fylker	18	11	0	0	0	29
<b>Total</b>	<b>2 365</b>	<b>210</b>	<b>6</b>	<b>228</b>	<b>-130</b>	<b>2 679</b>

## Other marine fish species

Preliminary figures for 2017 (per May 2018)

Table 21. Losses in the production of other marine fish species in 2017. Quantity in 1000 pieces.

County	Dead	Rejected	Escapees	Others	Adjust input	Total
Finnmark og Troms	22	0	0	0	0	22
Nordland	30	3	0	0	0	33
Trøndelag	38	1	0	0	16	55
Møre og Romsdal	29	7	0	11	0	46
Sogn og Fjordane	25	30	0	0	0	56
Hordaland	41	0	50	0	0	91
Rogaland og øvrige fylker	143	6	4	1	6	160
Total	328	48	54	12	21	441

## 7. Cleaner fish

Source: The Directorate of Fisheries

Preliminary figures for 2017 (per May 2018)

Figure 11. Number of cleaner fish in the cages with Atlantic salmon and rainbow trout 2007-2017

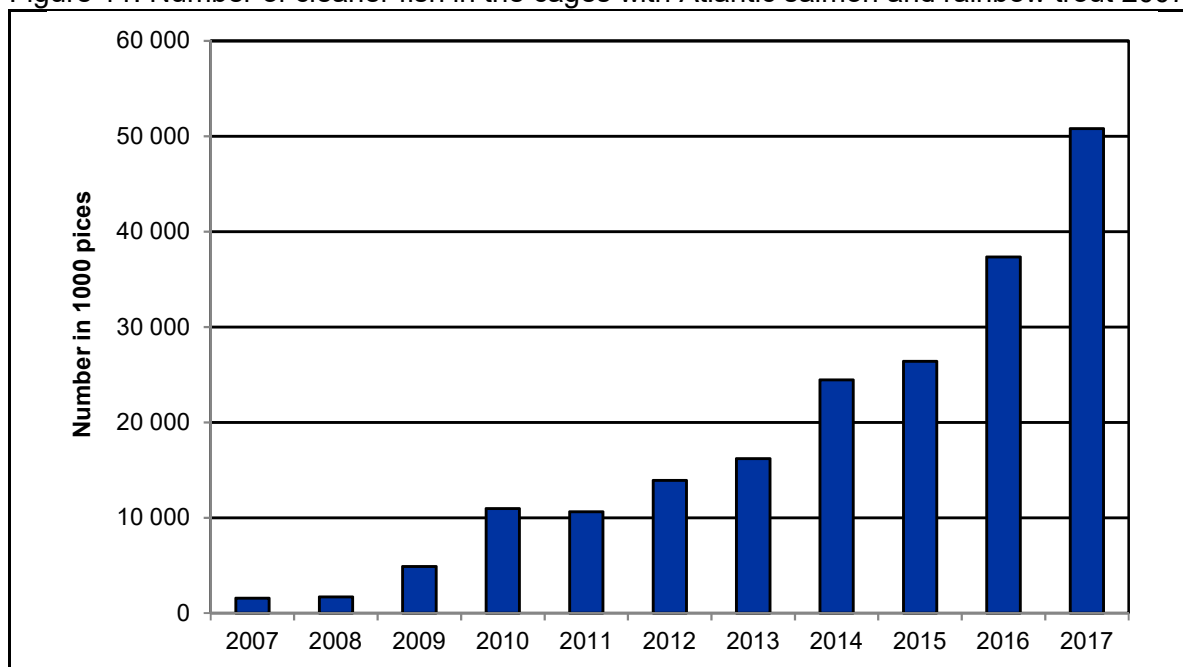


Table 22. Number of cleaner fish in the cages with Atlantic salmon and rainbow trout in 2017. Numbers in 1000 and value in 1000 NOK.

County	No.	Value
Finnmark og Troms	1 728	43 058
Nordland	3 870	81 441
Nord-Trøndelag	2 363	65 206
Sør-Trøndelag	10 436	212 032
Møre og Romsdal	6 497	135 475
Sogn og Fjordane	3 898	68 450
Hordaland	18 228	292 819
Rogaland	3 240	59 168
Øvrige fylker	544	10 122
<b>Total</b>	<b>50 805</b>	<b>967 771</b>

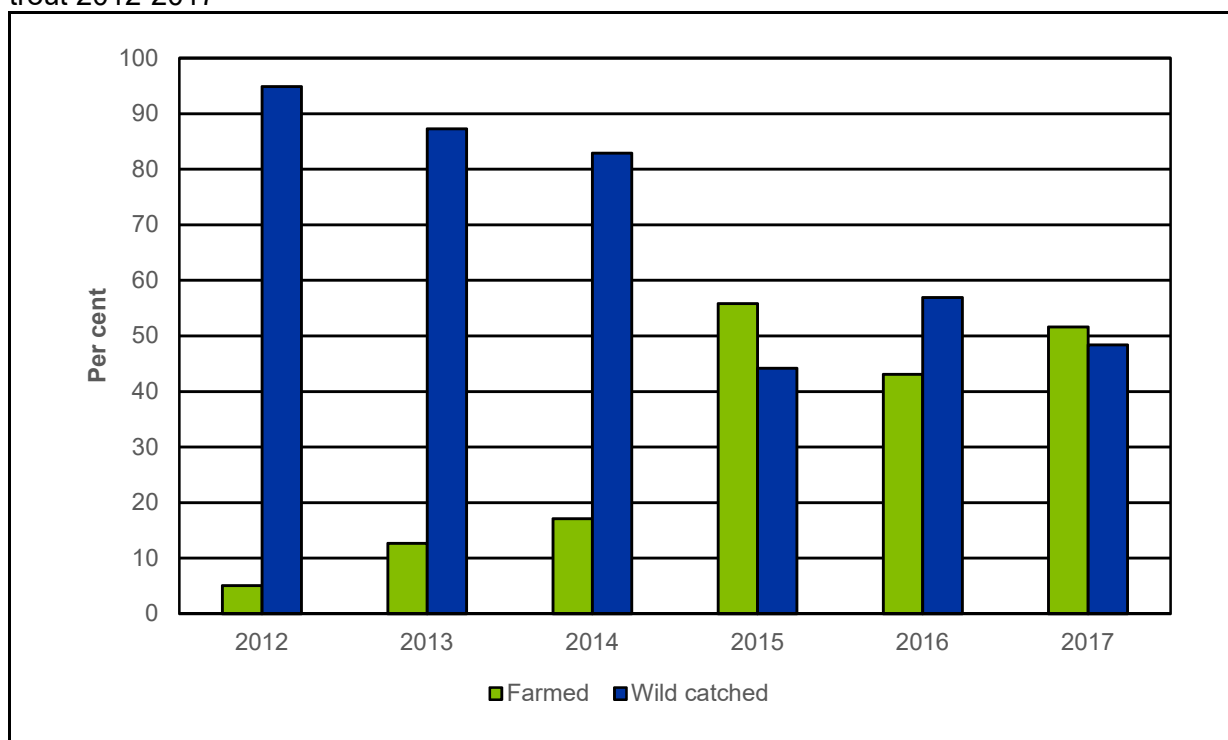
Table 23. Total number of cleaner fish in the cages with Atlantic salmon and rainbow trout by species in 2017. Number in 1000 and value in 1000 NOK.

Species	No.	Value
Lumpfish	27 038	584 226
Ballan wrasse	2 321	72 921
Goldsinny wrasse	10 184	152 031
Corkwing wrasse	6 338	87 656
Non specified	4 924	70 938
<b>Total</b>	<b>50 805</b>	<b>967 771</b>

Table 24. Sale of farmed cleaner fish to producers of Atlantic salmon and rainbow trout. Numbers in 1000 and value in 1000 NOK.

Species	2017		2016		2015	
	No.	Value	No.	Value	No.	Value
Ballan wrasse	200	10 000	524	15 111	1 348	30 304
Lumpfish	25 993	469 412	15 858	289 169	13 385	237 468
Other species	0	0	0	0	0	0
<b>Total</b>	<b>26 193</b>	<b>479 412</b>	<b>16 382</b>	<b>304 280</b>	<b>14 733</b>	<b>267 771</b>

Figure 12. Percentage of farmed and wild cleaner fish in cages with Atlantic salmon and rainbow trout 2012-2017



## 8. Export

Source: Norwegian Seafood Council

Figure 13. Main markets for Atlantic salmon 2017

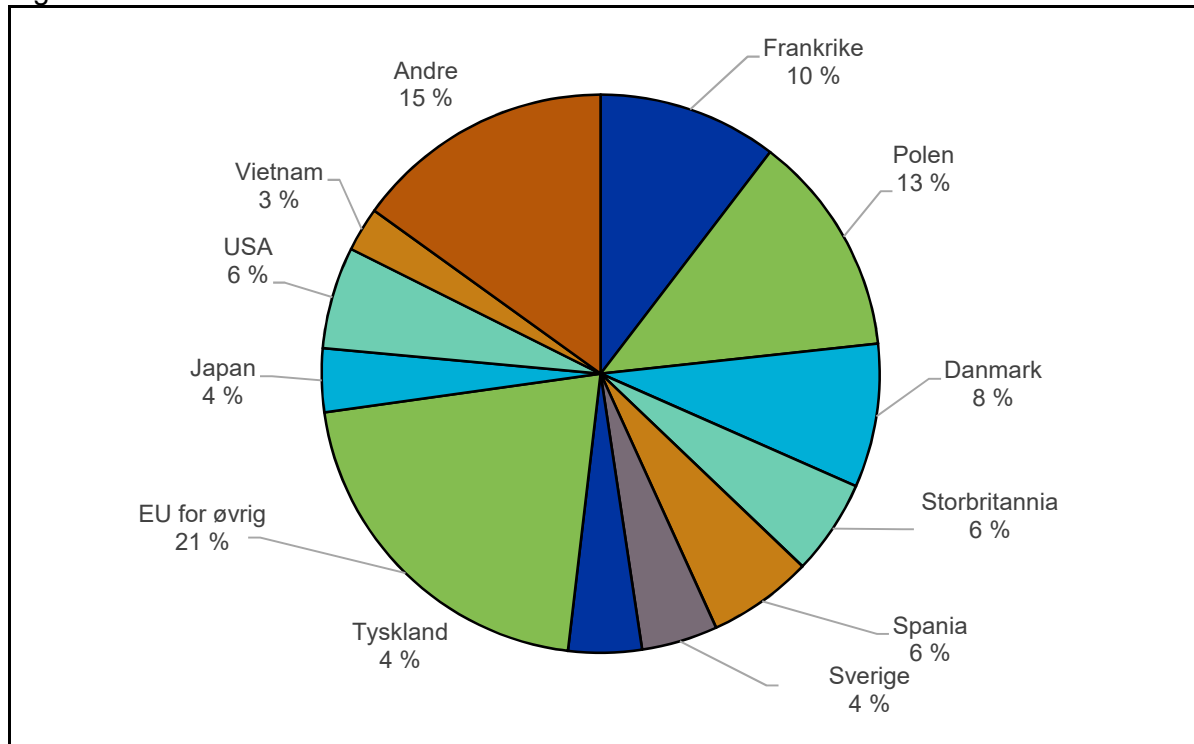


Figure 14. Main markets for rainbow trout 2017

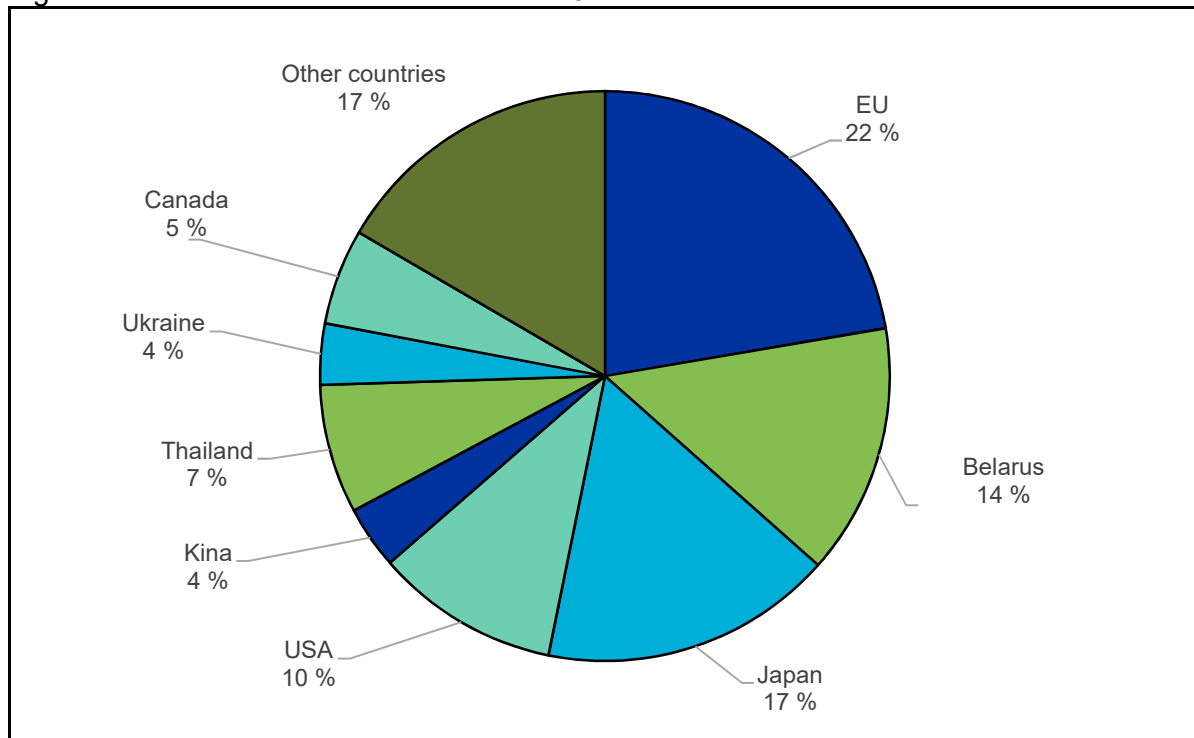


Table 25. Export of Atlantic salmon specified by country. Weight in metric tons (round weight) and value in mill NOK.

Salmon, round	2016			2017			% - changes	
	Quantity	Value	NOK/kg	Quantity	Value	NOK/kg	Quantity	Value
France	134 194	7 198	53.64	120 024	6 456	53.79	-11 %	-10 %
Poland	160 396	8 130	50.69	148 589	7 655	51.52	-7 %	-6 %
Denmark	84 522	4 475	52.95	96 250	5 020	52.15	14 %	12 %
Great Britain	81 325	3 821	46.99	63 660	3 549	55.75	-22 %	-7 %
Spain	64 738	3 585	55.38	70 229	3 905	55.61	8 %	9 %
Sweden	50 215	2 859	56.94	50 955	3 101	60.85	1 %	8 %
Germany	49 681	2 693	54.20	49 145	2 821	57.41	-1 %	5 %
Rest of EU	233 562	12 457	53.34	241 280	13 179	54.62	3 %	6 %
EU	858 634	45 220	52.66	840 131	45 687	54.38	-2 %	1 %
Russia	43 690	2 542	58.18	42 493	2 518	59.26	-3 %	-1 %
Japan	55 232	3 372	61.05	68 183	4 427	64.93	23 %	31 %
USA	22 411	1 435	64.03	29 633	1 816	61.27	32 %	27 %
Other countries	146 870	8 772	59.73	173 881	10 154	58.40	18 %	16 %
<b>Total</b>	<b>1 126 836</b>	<b>61 341</b>	<b>54.44</b>	<b>1 154 321</b>	<b>64 602</b>	<b>55.97</b>	<b>2 %</b>	<b>5 %</b>

Table 26. Export of Atlantic salmon specified by product. Weight in metric tons and value in million NOK.

Product	2016			2017			% - changes	
	Quantity	Value	NOK/kg	Quantity	Value	NOK/kg	Quantity	Value
Fresh fish	904 878	48 914	54.06	932 671	50 640	54.30	3 %	4 %
Fresh filet	128 171	7 002	54.63	115 567	7 052	61.02	-10 %	1 %
Frozen fish	22 892	1 203	52.56	24 811	1 406	56.66	8 %	17 %
Frozen filet	59 482	3 599	60.50	69 448	4 771	68.70	17 %	33 %
Frozen fish meat	2 528	199	78.74	2 176	212	97.60	-14 %	7 %
Smoked	3 259	291	89.28	3 749	339	90.43	15 %	16 %
Other products	5 625	133	22.36	5 898	182	30.90	5 %	37 %
<b>Total</b>	<b>1 126 836</b>	<b>61 341</b>	<b>54.44</b>	<b>1 154 321</b>	<b>64 602</b>	<b>55.97</b>	<b>2 %</b>	<b>5 %</b>

Table 27. Export of rainbow trout specified by country. Weight in metric tons and value in million NOK.

Rainbow trout, round	2016			2017			% - changes	
	Quantity	Value	NOK/kg	Quantity	Value	NOK/kg	Quantity	Value
EU	19 661	861	43.78	10 901	582	53.37	-45 %	-32 %
Belarus	10 368	518	49.94	6 963	381	54.68	-33 %	-26 %
Japan	10 974	503	45.86	8 126	480	59.05	-26 %	-5 %
USA	7 801	368	47.15	5 101	318	62.32	-35 %	-14 %
Kina	3 636	143	39.38	1 737	97	55.60	-52 %	-33 %
Thailand	5 454	263	48.17	3 585	219	61.02	-34 %	-17 %
Ukraine	5 017	200	39.92	1 693	88	51.95	-66 %	-56 %
Canada	3 048	197	64.68	2 661	214	80.48	-13 %	9 %
Other countries	17 416	847	48.64	8 102	481	59.38	-53 %	-43 %
<b>Total</b>	<b>83 374</b>	<b>3 900</b>	<b>46.78</b>	<b>48 871</b>	<b>2 859</b>	<b>58.50</b>	<b>-41 %</b>	<b>-27 %</b>



Table 28. Export of rainbow trout specified by product. Weight in metric tons and value in million NOK.

Product	2016			2017			% -changes	
	Quantity	Value	NOK/kg	Quantity	Value	NOK/kg	Quantity	Value
Fresh fish	45 309	2 204	48.65	25 469	1 440	56.54	-44 %	-35 %
Fresh filet	5 201	267	51.43	4 186	263	62.92	-20 %	-2 %
Frozen	26 272	1 046	39.82	13 942	788	56.55	-47 %	-25 %
Frozen filet	3 683	174	47.31	2 428	111	45.76	-34 %	-36 %
Other products	2 909	208	71.49	2 846	256	89.95	-2 %	23 %
<b>Total</b>	<b>83 374</b>	<b>3 900</b>	<b>46.78</b>	<b>48 871</b>	<b>2 859</b>	<b>58.50</b>	<b>-41 %</b>	<b>-27 %</b>

# 9. Economic results

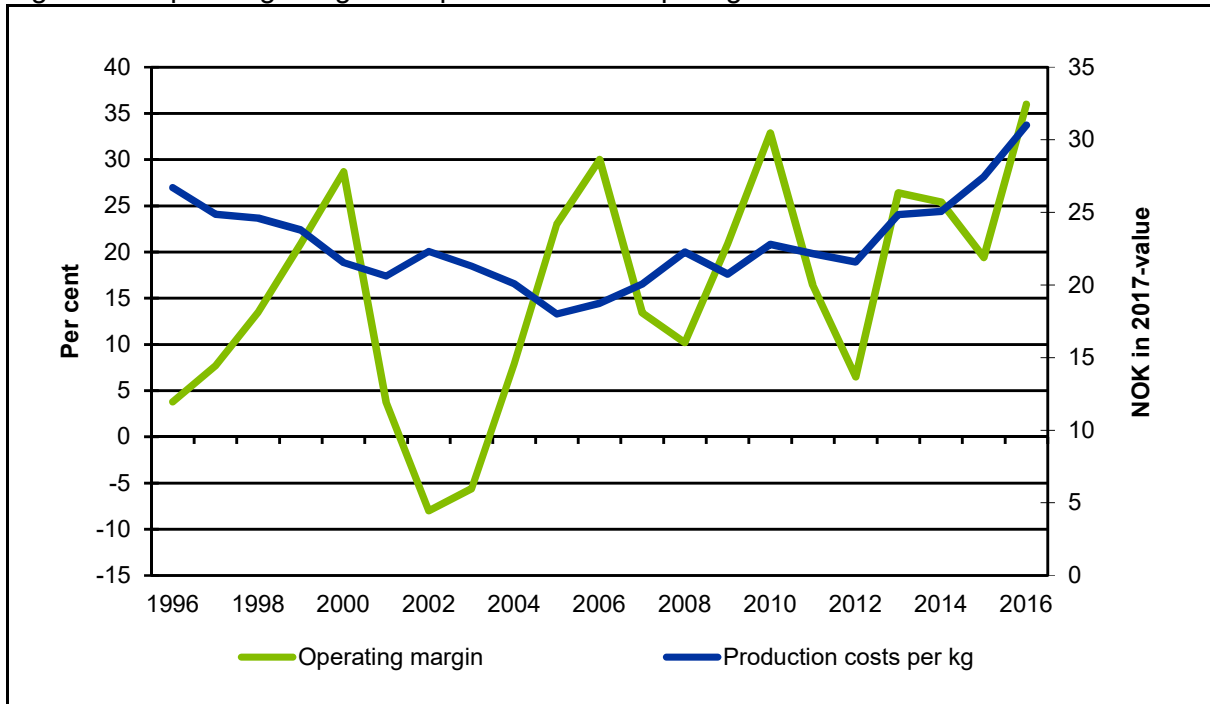
Source: The Directorate of Fisheries

**Definition:**

Operating Margin = (Operating Profit / Operating Revenues) \* 100

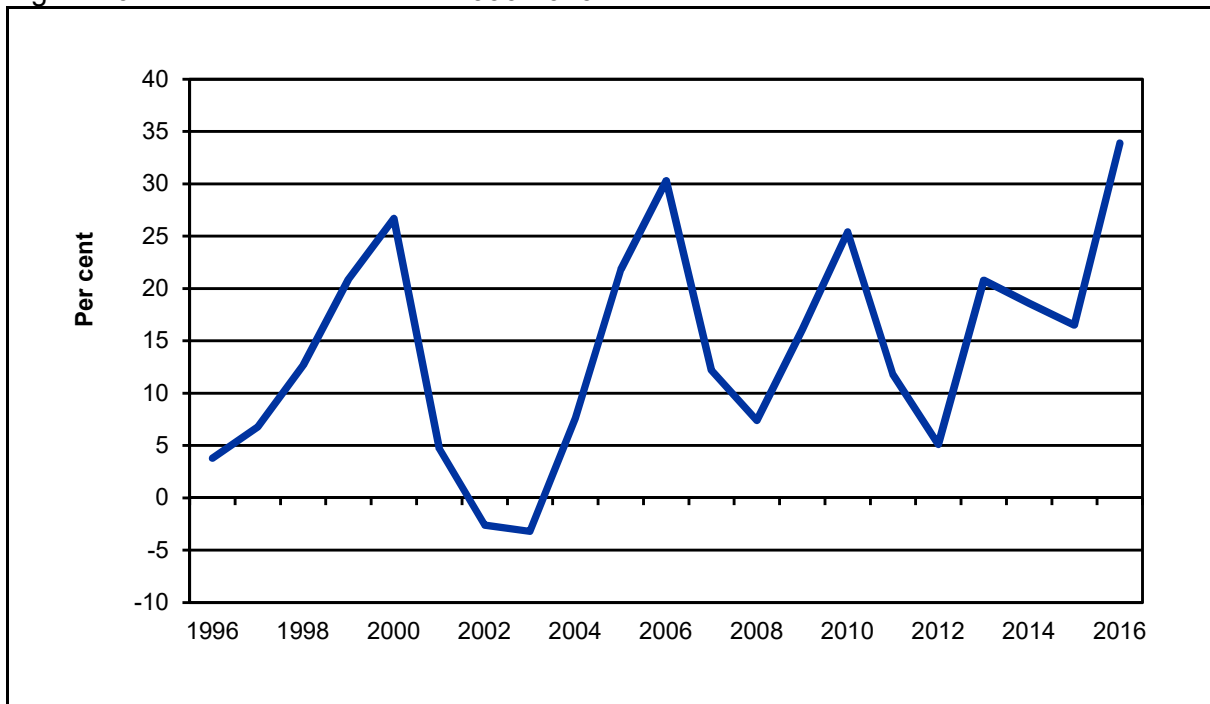
Return on Total Assets = ((Operating Profit + Financial Revenues) / Total Assets) \* 100

Figure 15. Operating margin and production costs per kg 1996-2016<sup>1)</sup>



1) Average figures for companies with grow out production of Atlantic salmon and rainbow trout

Figure 16. Return on Total Assets 1996-2016<sup>1)</sup>

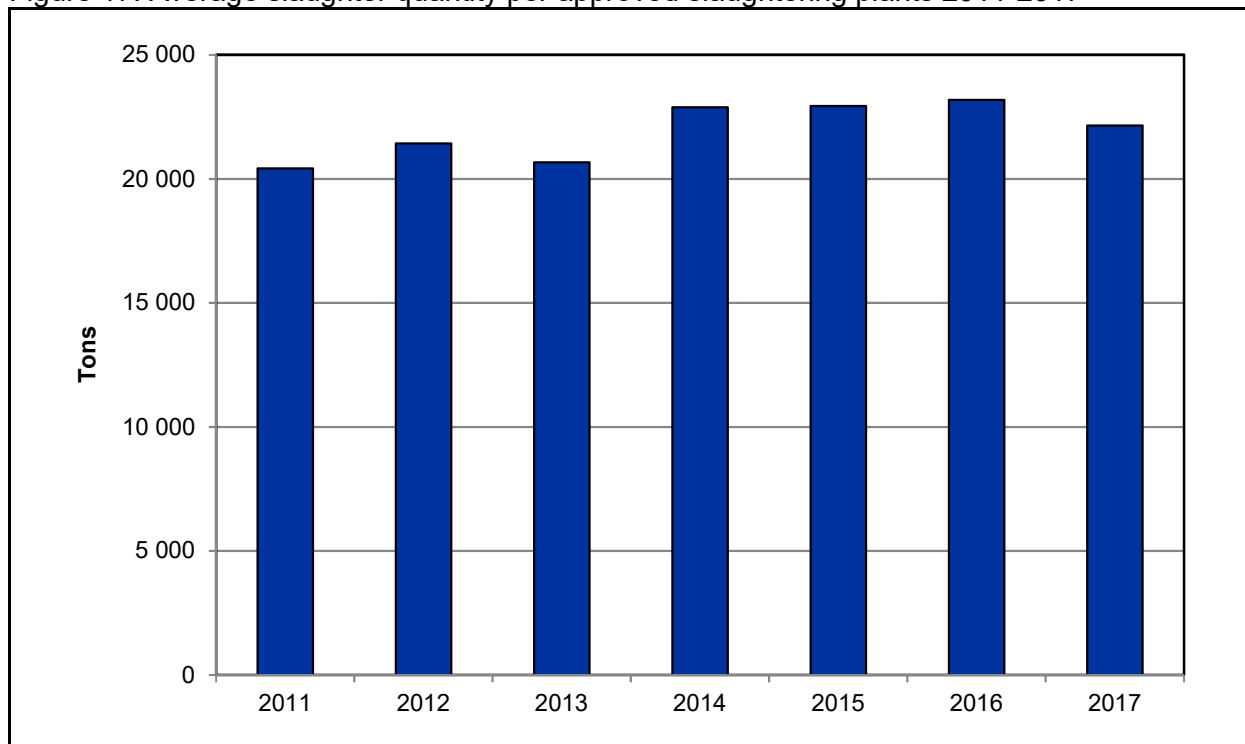


1) Average figures for companies with grow out production of Atlantic salmon and rainbow trout

## 10. Approved slaughtering plants for salmonids

Source: The Norwegian Food Safety Authority

Figure 17. Average slaughter quantity per approved slaughtering plants 2011-2017



Average slaughtered quantity per approved slaughtering plant is defined as total slaughtered quantity divided by the number of slaughtering plants for salmonids. The number of slaughtering plants in operation is unknown.

Table 29. The number of approved slaughtering plants for farmed salmonids

County	2013	2014	2015	2016	2017
Finnmark	4	4	4	4	4
Troms	9	9	9	8	8
Nordland	15	15	15	14	14
Nord-Trøndelag	3	3	3	3	3
Sør-Trøndelag	6	5	6	6	6
Møre og Romsdal	5	5	5	5	5
Sogn og Fjordane	3	3	3	3	4
Hordaland	11	10	10	9	9
Rogaland	4	4	4	4	4
Øvrige fylker	0	0	1	1	1
<b>Total</b>	<b>60</b>	<b>58</b>	<b>60</b>	<b>57</b>	<b>58</b>

# 11. Related activities

## Insurance

Source: Finance Norway (FNO)

Table 30. Insurance of farmed fish in Norway. Amount in mill NOK.

	2013	2014	2015	2016	2017
Premium	191.3	202.6	196.9	203.6	220.7
Compensation	134.6	238.1	239.9	144.3	211.0
Accident index	70 %	118 %	122 %	71 %	96 %

## Use of veterinary drugs

Source: Norwegian Institute of Public Health

Table 31. Figures for use of veterinary drugs<sup>1)</sup> in the Norwegian fish farming industry.  
Quantity in kg.

	2013	2014	2015	2016	2017
Antibacterial agents	972	511	301	212	641
Anaesthetic agents	5 685	10 623	22 110	17 056	15 391
Agents against intestinal worms	460	625	942	518	380
Agents against surface infections	1 418	1 320	1 733	41 472	48 040
Agents against lice	8 403	12 812	12 768	10 625	2 450
Hydrogen peroxide	8 262 000	31 577 000	43 246 000	26 597 000	9 277 000

1) Use and dose are differently for the various drugs and it is therefore not possible to sum total kilogram

## Well boats

Source: Association of cargo freighters

Table 32. The number of well boats<sup>1)</sup>

County	2013	2014	2015	2016	2017
Finnmark	2	2	1	0	0
Troms	3	2	2	3	5
Nordland	12	13	13	12	11
Trøndelag	6	6	7	0	6
Møre og Romsdal	25	26	25	31	36
Sogn og Fjordane	0	0	0	1	0
Hordaland	8	9	10	13	8
Rogaland	0	0	0	0	0
Øvrige fylker	0	0	0	0	0
<b>Total</b>	<b>56</b>	<b>58</b>	<b>58</b>	<b>60</b>	<b>66</b>

1) Based on members in Association of cargo freighters

## Use of feed

Source: Norwegian Seafood Federation

Table 33. Figures for use of feed in the Norwegian fish farming industry.  
Quantity in metric tons.

	2013	2014	2015	2016	2017
January	92 974	109 885	115 335	107 609	117 177
February	60 216	90 542	88 250	86 263	89 099
March	59 661	85 068	99 155	87 864	91 738
April	67 433	89 763	96 633	88 279	93 215
May	95 302	110 168	102 581	111 960	111 428
June	130 308	146 910	135 984	137 601	146 339
July	196 456	193 382	180 168	178 012	185 712
August	218 152	204 455	212 812	221 308	235 135
September	218 150	208 674	211 163	210 611	215 768
October	198 517	195 899	195 379	177 491	223 144
November	155 447	165 074	169 670	164 829	175 905
December	131 794	142 597	139 321	137 085	144 577
<b>Total</b>	<b>1 624 410</b>	<b>1 742 417</b>	<b>1 746 451</b>	<b>1 708 912</b>	<b>1 829 236</b>



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