



FISKERIDIREKTORATET

# Key figures from Norwegian Aquaculture Industry 2022

Livet i havet - vårt felles ansvar

# Rapport

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Key figures from Norwegian Aquaculture Industry 2022

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## Key figures from Norwegian Aquaculture Industry 2022

### Summary:

This report presents key figures from the Norwegian Aquaculture Industry. The report contains information about all species farmed in Norway. The information is in four groups. One group contains information about Atlantic salmon and Rainbow trout. Another group contains information about other 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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# 1. Licences

Source: The Directorate of Fisheries

## Granted licenses

Figure 1. Number of licenses 2012-2022

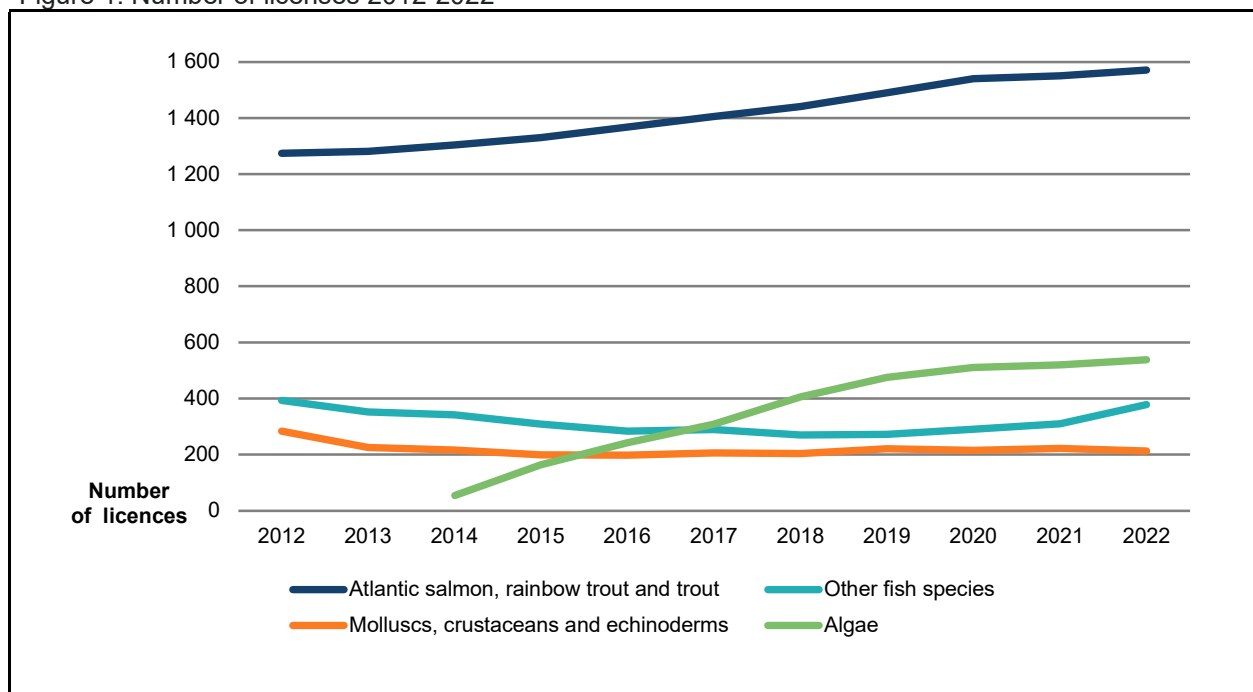
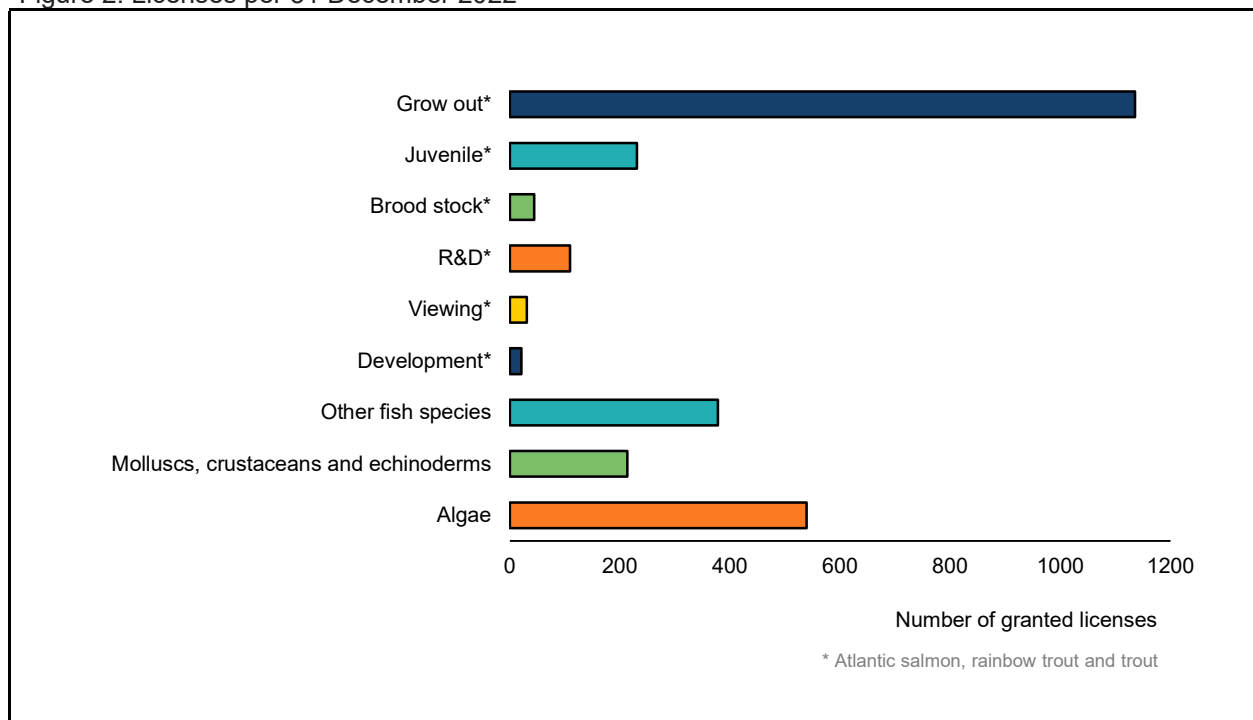


Figure 2. Licenses per 31 December 2022



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. Atlantic salmon, rainbow trout and trout. Commercial licenses per 31 December 2022.

County	Juvenile	Grow out
	Number of licenses	Number of licenses
Troms og Finnmark	21	219
Nordland	37	223
Trøndelag	39	199
Møre og Romsdal	30	115
Vestland	76	265
Rogaland	17	63
Agder	5	25
Other counties	6	26
<b>Total</b>	<b>231</b>	<b>1 135</b>

Table 2. Atlantic salmon, rainbow trout and trout. Licenses with special purpose per 31 December 2022. Number of licenses

County	Brood stock	R&D <sup>1)</sup>	Viewing	Development
Troms og Finnmark	1	18	5	8
Nordland	10	24	10	4
Trøndelag	10	16	4	4
Møre og Romsdal	5	9	3	0
Vestland	10	25	8	5
Rogaland	5	15	1	0
Agder	1	1	0	0
Other counties	2	1	0	0
<b>Total</b>	<b>44</b>	<b>109</b>	<b>31</b>	<b>21</b>

1) Research and education

Table 3. Atlantic salmon, rainbow trout and trout. Licenses per 31 December 2022 by production area<sup>1)</sup>.

Area	Numbers of licenses
1. Svenskegrense til Jæren	24
2. Ryfylke	54
3. Karmøy til Sotra	114
4. Nordhordland til Stadt	143
5. Stadt til Hustadvika	69
6. Nordmøre og Sør-Trøndelag	169
7. Nord-Trøndelag med Bindal	75
8. Helgeland til Bodø	108
9. Vestfjorden og Vesterålen	117
10. Andøya til Kvaløya	66
11. Kvaløya til Senja	54
12. Vest-Finnmark	89
13. Øst-Finnmark	16
<b>Total</b>	<b>1 098</b>

1) Only licenses covered by the production area regulations

Table 4. Other species. Licenses per 31 December 2022 by county

	Fish	Molluscs, crustaceans, and echinoderms	Sea Ranching	Algae
County	Number of licenses	Number of licenses	Number of licenses	Number of licenses
Troms og Finnmark	34	8	0	11
Nordland	54	42	0	174
Trøndelag	53	48	1	23
Møre og Romsdal	50	10	1	12
Vestland	118	70	1	300
Rogaland	27	17	3	2
Agder	15	12	2	16
Other counties	27	6	0	1
<b>Total</b>	<b>378</b>	<b>213</b>	<b>8</b>	<b>539</b>

Table 5. Other species. Licenses per 31 December by species

Other fish species		Molluscs, crustaceans, and echinoderms		Algae	
Species	No.	Species	No.	Species	No.
Atlantic halibut	70	Blue mussel	123	Sea belt	119
Turbot	35	European lobster	26	Babberlocks	106
Wrasse	232	Great Atlantic scallop	43	Tangle	112
Lumpfish	86	Sea urchin	41	Dulse	96
Arctic char	55	Flat and cupped oyster	42	Other's species	460
Atlantic cod	147	Other species	639		
Other species	736				

The licenses for fish species, molluscs, crustaceans, and echinoderms are comprised of several species. In Table 5 licenses are counted several times. The total number of licenses in Table 5 is therefore higher than the total number of licenses presented in Table 4.

## Total license capacity

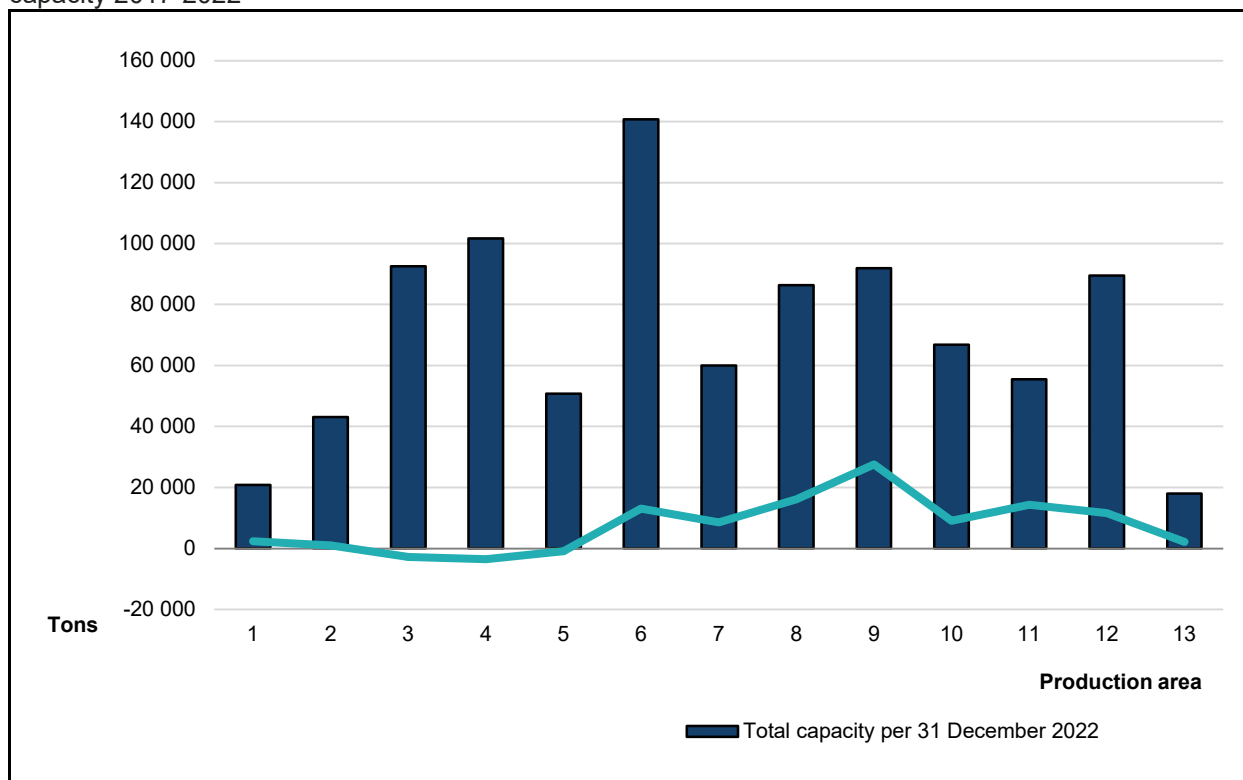
License capacity is maximum allowed biomass. Where biomass is the quantity of live fish at any given time (measured in kg or ton)

Table 6. Atlantic salmon and rainbow trout. License capacity per production area<sup>1)</sup> per 31 December 2022

Production area	Tons
1. Svenskegrense til Jæren	20 815
2. Ryfylke	43 100
3. Karmøy til Sotra	92 513
4. Nordhordland til Stadt	101 665
5. Stadt til Hustadvika	50 746
6. Nordmøre og Sør-Trøndelag	140 704
7. Nord-Trøndelag med Bindal	60 018
8. Helgeland til Bodø	86 339
9. Vestfjorden og Vesterålen	91 899
10. Andøya til Kvaløya	66 842
11. Kvaløya til Senja	55 525
12. Vest-Finnmark	89 541
13. Øst-Finnmark	17 972
<b>Total</b>	<b>917 679</b>

1) Only capacity covered by the production area regulations

Figure 3. Total license capacity per 31 December 2022 by production area<sup>1)</sup>, and changes in the capacity 2017-2022



1) Capacity covered by the production area regulations



## Licenses with production

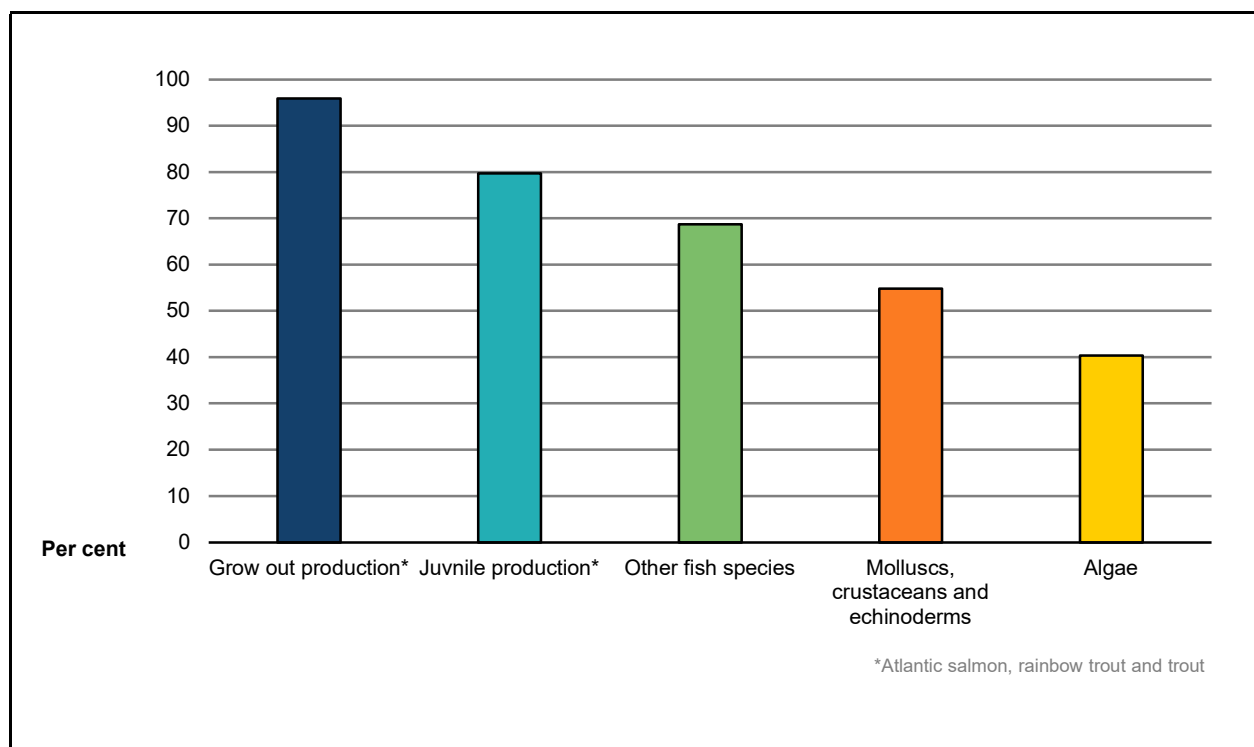
Table 7. Fish. Licenses with production in 2022, preliminary figures

County	Atlantic salmon, rainbow trout and trout		Other fish species	
	Grow out	Hatcheries	Grow out	Hatcheries
Troms og Finnmark	235	16	13	8
Nordland	259	31	26	11
Trøndelag	234	36	19	7
Møre og Romsdal	126	21	24	12
Vestland	287	64	43	32
Rogaland	78	14	8	6
Other counties	30	6	8	13
<b>Total</b>	<b>1 249</b>	<b>188</b>	<b>141</b>	<b>89</b>

Table 8. Molluscs, crustaceans, echinoderms, and algae. Licenses with production in 2022, preliminary figures

County	Molluscs, crustaceans, and echinoderms	Algae
Troms og Finnmark	3	1
Nordland	30	50
Trøndelag	39	14
Møre og Romsdal	1	4
Vestland	27	140
Rogaland	6	0
Other counties	9	12
<b>Total</b>	<b>115</b>	<b>221</b>

Figure 4. The percentage of licenses with production 2022, preliminary figures



## 2. Sites

Source: The Directorate of Fisheries

Table 9. Number of sites in seawater per 31 December 2022

	Atlantic salmon and rainbow trout	Other fish species	Molluscs, crustaceans, and echinoderms	Algae
County	Number	Number	Number	Number
Troms og Finnmark	195	8	3	7
Nordland	212	10	40	19
Trøndelag	161	11	43	10
Møre og Romsdal	80	7	3	8
Vestland	271	10	38	54
Rogaland	60	2	4	2
Agder	10	0	6	5
Other counties	0	0	1	0
<b>Total</b>	<b>989</b>	<b>48</b>	<b>138</b>	<b>105</b>

Table 10. Number of sites at land per 31. December 2022 for production of Atlantic salmon and rainbow trout.

County	Licenses for grow out		Licenses for juveniles	
	Freshwater	Salt water	Freshwater	Salt water
County	Number	Number	Number	Number
Troms og Finnmark	1	2	15	0
Nordland	1	4	30	3
Trøndelag	1	2	31	2
Møre og Romsdal	2	5	20	3
Vestland	8	12	49	5
Rogaland	2	1	11	2
Agder	2	2	3	1
Other counties	12	1	6	0
<b>Total</b>	<b>29</b>	<b>29</b>	<b>165</b>	<b>16</b>

### 3. Companies with production

Source: *The Directorate of Fisheries*

Table 11. Fish. Number of companies with production in 2022, preliminary figures

County	Atlantic salmon, rainbow trout and trout		Other fish species	
	Grow out	Juvenile	Grow out	Juvenile
Troms og Finnmark	22	14	6	6
Nordland	39	14	13	8
Trøndelag	13	19	6	6
Møre og Romsdal	14	12	8	9
Vestland	46	39	11	10
Rogaland	16	11	3	5
Other counties	15	6	6	8
<b>Total</b>	<b>165</b>	<b>115</b>	<b>53</b>	<b>52</b>

Table 12. Molluscs, crustaceans, echinoderms, and algae. Number of companies with production of in 2022, preliminary figures

County	Molluscs, crustaceans, and echinoderms	Algae
Troms og Finnmark	2	1
Nordland	4	5
Trøndelag	8	2
Møre og Romsdal	1	2
Vestland	13	11
Rogaland	4	0
Other counties	6	3
<b>Total</b>	<b>38</b>	<b>24</b>

## 4. Employment

Source: *The Directorate of Fisheries*

Figure 5. Number of employees working with production of fish, molluscs, crustaceans, and echinoderms 2012-2022, preliminary figures

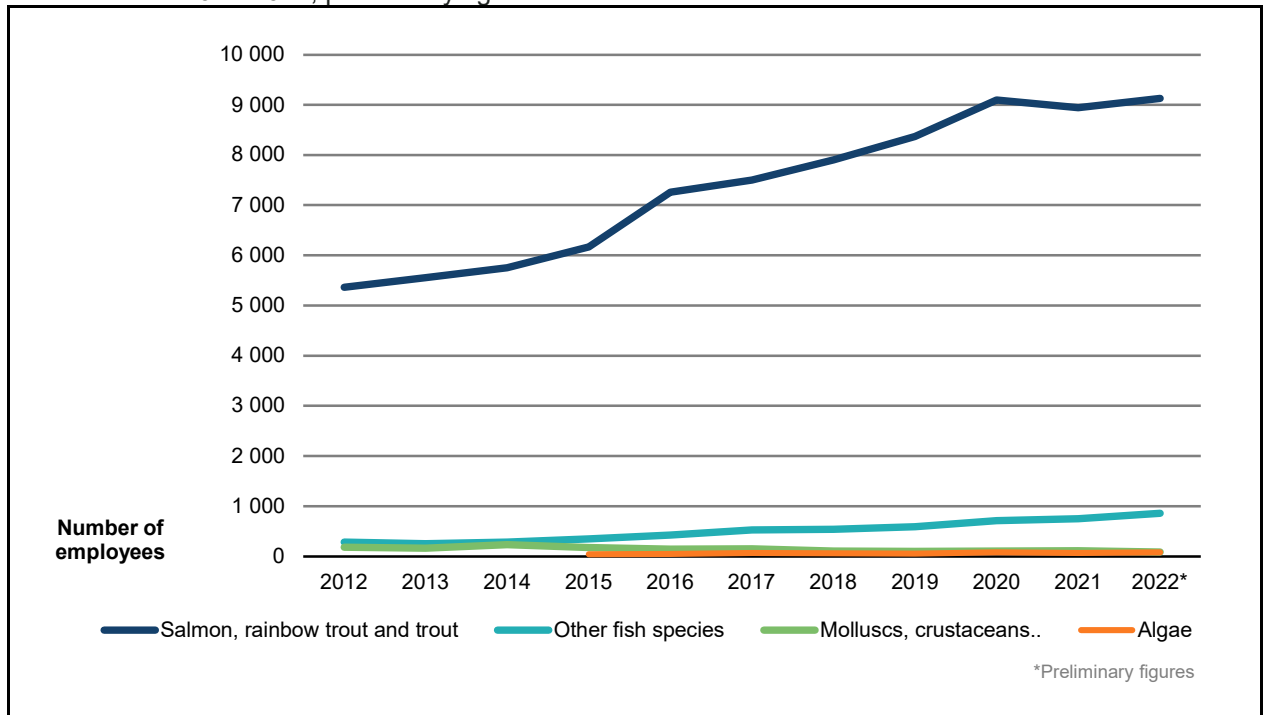
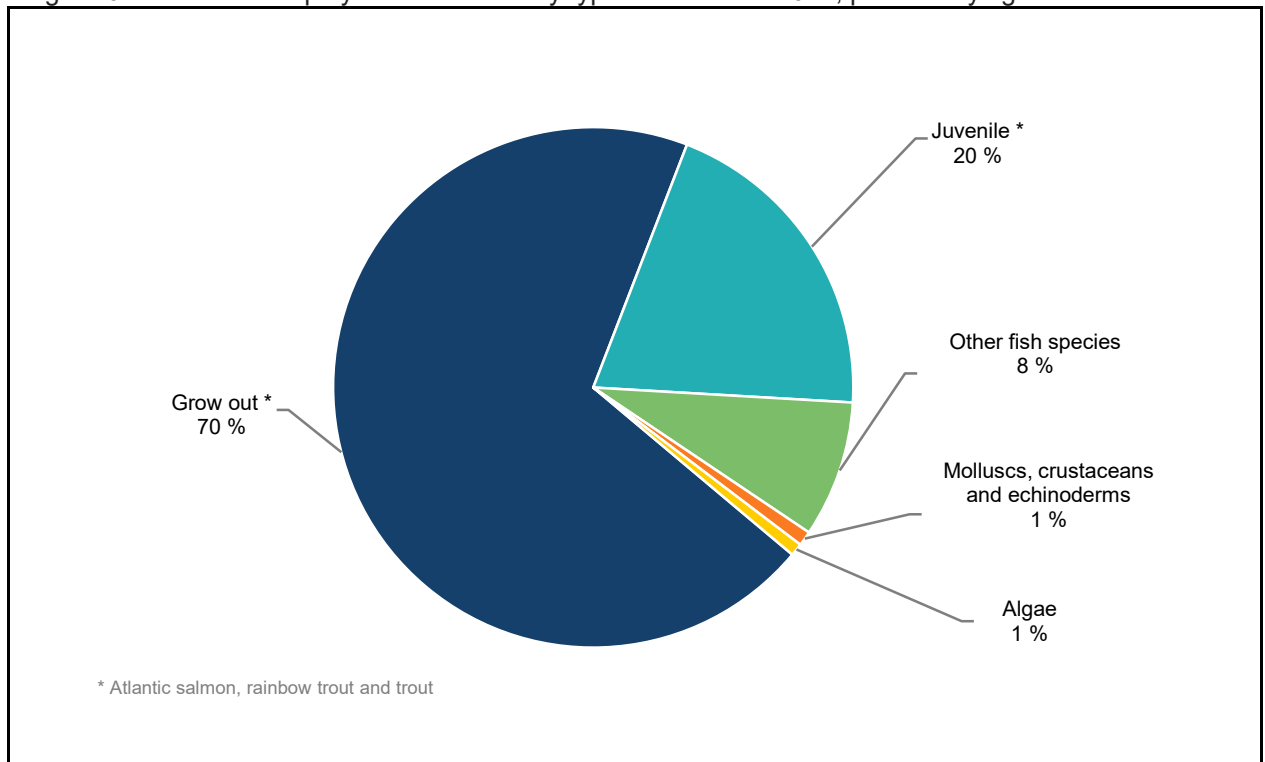


Figure 6. Number of employees distributed by type of license in 2022, preliminary figures



## Atlantic salmon and rainbow trout

Table 13. Atlantic salmon, rainbow trout and trout. Employment in 2022, preliminary figures

County	Grow out fish, brood stock, and R&D			Juvenile fish		
	Men	Women	Total	Men	Women	Total
Troms og Finnmark	1 275	269	1 544	232	88	320
Nordland	1 136	336	1 472	253	116	369
Trøndelag	962	171	1 133	247	136	383
Møre og Romsdal	541	81	622	133	53	186
Vestland	1 398	339	1 737	388	210	598
Rogaland	391	68	459	117	42	159
Other counties	105	19	124	16	8	24
<b>Total</b>	<b>5 808</b>	<b>1283</b>	<b>7 091</b>	<b>1 386</b>	<b>653</b>	<b>2 039</b>

Table 14. Atlantic salmon, rainbow trout and trout. Man-Hours<sup>1)</sup> in 2022, preliminary figures

County	Grow out fish, brood stock, and R&D			Juvenile fish		
	Men	Women	Total	Men	Women	Total
Troms og Finnmark	1 752 514	303 550	2 056 064	318 814	102 746	421 560
Nordland	1 728 851	410 204	2 139 055	367 387	155 486	522 873
Trøndelag	1 515 013	224 765	1 739 778	342 920	157 968	500 888
Møre og Romsdal	880 569	118 148	998 717	215 058	70 631	285 689
Vestland	1 962 529	341 709	2 304 238	522 922	194 388	717 310
Rogaland	507 406	65 980	573 386	159 057	51 246	210 303
Other counties	140 304	12 287	152 591	26 193	12 937	39 130
<b>Total</b>	<b>8 487 186</b>	<b>1 476 643</b>	<b>9 963 829</b>	<b>1 952 351</b>	<b>745 402</b>	<b>2 697 753</b>

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

## Other fish species

Table 15. Other fish species. Employment in 2022, preliminary figures

County	Grow out production			Juvenile		
	Men	Women	Total	Men	Women	Total
Troms og Finnmark	24	3	27	22	17	39
Nordland	38	15	53	42	22	64
Trøndelag	37	12	49	69	38	107
Møre og Romsdal	39	4	43	86	56	142
Vestland	58	23	81	76	58	134
Rogaland and other counties	39	9	48	53	23	76
<b>Total</b>	<b>235</b>	<b>66</b>	<b>301</b>	<b>348</b>	<b>214</b>	<b>562</b>

Table 16. Other fish species. Man-Hours<sup>1)</sup> in 2022, preliminary figures

County	Grow out production			Juvenile		
	Men	Women	Total	Men	Women	Total
Troms og Finnmark	24 810	2 320	27 130	27 295	17 503	44 798
Nordland	53 132	22 707	75 839	41 775	24 631	66 406
Trøndelag	37 241	14 957	52 198	74 994	35 339	110 333
Møre og Romsdal	36 626	1 735	38 361	123 929	57 548	181 477
Vestland	67 802	29 812	97 614	112 923	69 798	182 721
Rogaland and other counties	48 968	10 448	59 416	74 206	33 010	107 216
<b>Total</b>	<b>268 579</b>	<b>81 979</b>	<b>350 558</b>	<b>455 122</b>	<b>237 829</b>	<b>692 951</b>

<sup>1)</sup> The Directorate of Fisheries defines the number of Man-hour per year as 1845 hours

## Molluscs, crustaceans, and echinoderms

Table 17. Molluscs, crustaceans, and echinoderms. Employment in 2022, preliminary figures

County	Employees			Man-Hours <sup>1)</sup>		
	Men	Women	Total	Men	Women	Total
Troms og Finnmark	:	:	:	:	:	:
Nordland	9	0	9	12 825	0	12 825
Trøndelag	18	3	21	12 650	2 460	15 110
Møre og Romsdal	:	:	:	:	:	:
Vestland	20	5	25	8 659	652	9 311
Rogaland	16	2	18	12 800	2 500	15 300
Other counties	15	1	16	5 498	200	5 698
<b>Total</b>	<b>81</b>	<b>11</b>	<b>92</b>	<b>53 877</b>	<b>5 812</b>	<b>59 689</b>

<sup>1)</sup> The Directorate of Fisheries defines the number of Man-hour per year as 1845 hours

## Algae

Table 18. Algae. Employment in 2022, preliminary figures

County	Employees			Man-Hours <sup>1)</sup>		
	Men	Women	Total	Men	Women	Total
Total	61	19	80	30 266	7 780	38 046

<sup>1)</sup> 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

Figure 7. Sale of Atlantic salmon and rainbow trout (grow out production) 2012-2022

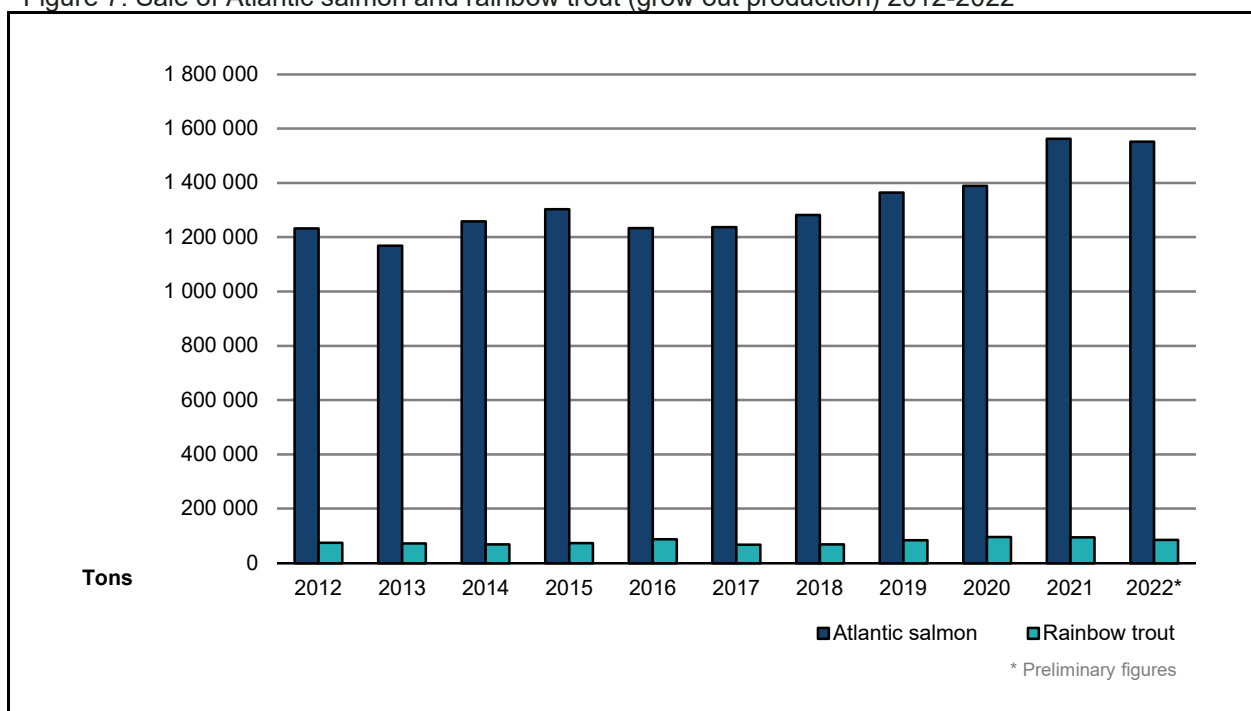


Table 19. Atlantic salmon and rainbow trout. Sale of slaughtered fish in 2022, preliminary figures. Quantity in metric tons round weight, value in 1000 NOK and prices in NOK per kg

County	Grow out production					
	Atlantic salmon			Rainbow trout		
	Quantity	Value	Price per kg	Quantity	Value	Price per kg
Troms and Finnmark	355 324	21 909 987	61.66	0	0	0
Nordland	365 713	24 100 635	65.90	420	18 666	44.45
Trøndelag	311 492	19 257 408	61.82	111	5 551	49.92
Møre og Romsdal	99 738	7 291 777	73.11	17 125	898 304	52.46
Vestland	302 314	20 061 597	66.36	66 542	4 172 279	62.70
Rogaland	100 852	7 076 665	70.17	625	35 802	57.30
Other counties	16 538	1 105 049	66.82	106	5 554	52.55
<b>Total</b>	<b>1 551 972</b>	<b>100 803 117</b>	<b>64.95</b>	<b>84 928</b>	<b>5 136 156</b>	<b>60.48</b>

Table 20. Atlantic salmon and rainbow trout. Sale for the 10 largest companies in Norway. Weight in tons

Year	Total sale	10 largest	Percentage
2018	1 350 219	909 165	67.3
2019	1 447 332	955 460	66.0
2020	1 484 565	976 858	65.8
2021	1 657 075	1 107 959	66.9
2022 <sup>1)</sup>	1 636 900	1 136 437	69.4

1) Preliminary figures

Figure 8. Sale of juvenile fish of Atlantic salmon and rainbow trout 2012-2022

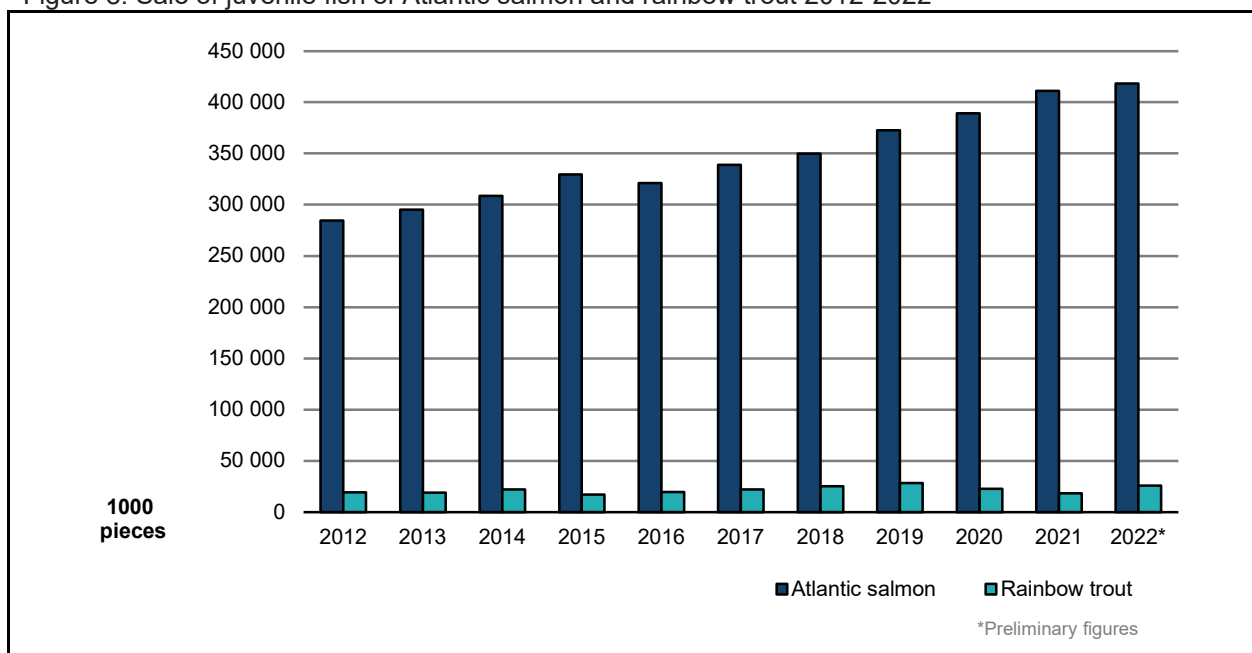


Table 21. Atlantic salmon and rainbow trout. Sale of juvenile fish in 2022, preliminary figures. Numbers in 1000 pieces, value in 1000 NOK and prices in NOK per fish

County	Juvenile fish					
	Atlantic salmon			Rainbow trout		
	Number	Value	Price per fish	Number	Value	Price per fish
Troms and Finnmark	64 393	1 130 959	17.56	0	0	0
Nordland	103 211	1 603 155	15.53	0	0	0
Trøndelag	93 349	1 542 520	16.52	457	7 471	16.35
Møre og Romsdal	45 409	773 148	17.03	4 483	72 652	16.21
Vestland	81 955	1 825 917	22.28	19 991	322 759	16.15
Rogaland	24 302	835 728	34.39	751	20 183	26.87
Other counties	5 495	97 548	17.75	202	2 087	10.33
<b>Total</b>	<b>418 114</b>	<b>7 808 975</b>	<b>18.68</b>	<b>25 884</b>	<b>425 152</b>	<b>16.43</b>

Table 22. Atlantic salmon and rainbow trout. Sale of juvenile fish by size group in 2022, preliminary figures. Numbers in 1000 pieces

County	Juvenile fish					
	Atlantic salmon			Rainbow trout		
	< 250 grams	> 250 grams	Total	< 250 grams	> 250 grams	Total
Troms og Finnmark	52 860	11 533	64 393	0	0	0
Nordland	92 021	11 190	103 211	0	0	0
Trøndelag	88 377	4 972	93 349	457	0	457
Møre og Romsdal	39 764	5 645	45 409	4 081	402	4 483
Vestland	62 164	19 791	81 955	19 227	764	19 991
Rogaland	12 656	11 646	24 302	497	254	751
Other counties	4 797	698	5 495	202	0	202
<b>Total</b>	<b>352 639</b>	<b>65 475</b>	<b>418 114</b>	<b>24 464</b>	<b>1 420</b>	<b>25 884</b>

**Size groups:**

< 250 grams = weight less than 250 grams

> 250 grams = weight higher than 250 grams



## Sale of other fish species than Atlantic salmon and rainbow trout

Figure 9. Sale of other fish species 2012-2022

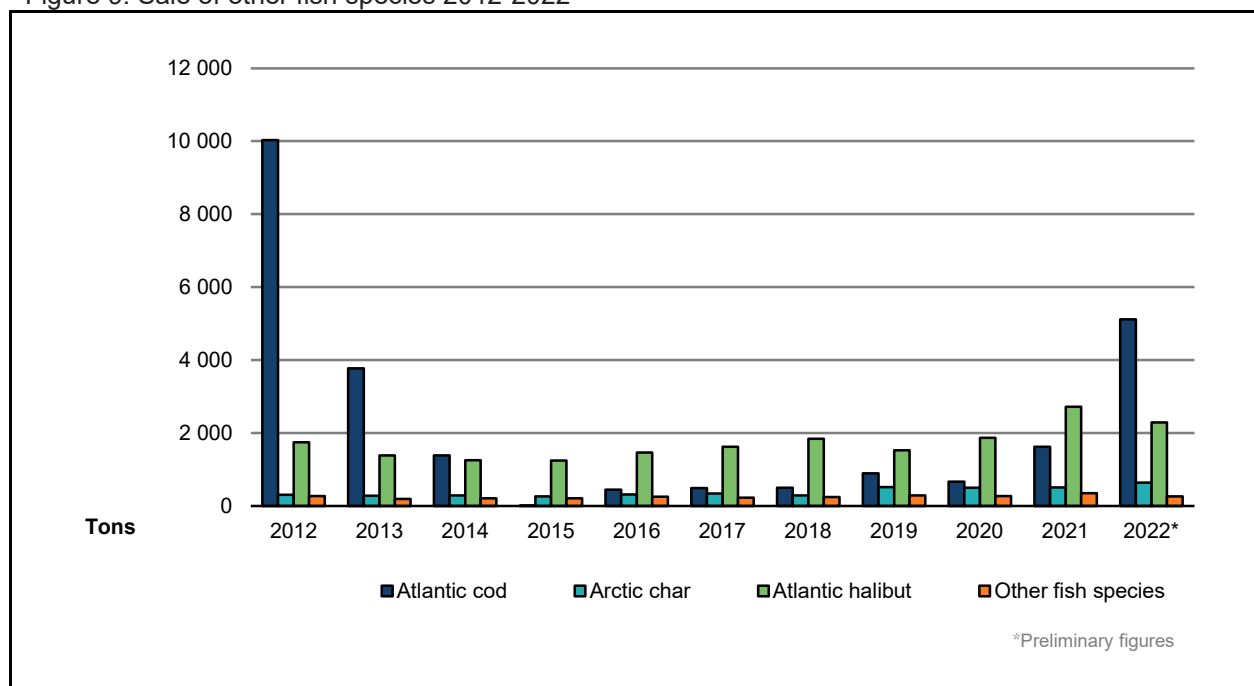


Table 23. Other fish species. Sale of slaughtered fish in 2022, preliminary figures. Quantity in metric tons round weight and value in 1000 NOK

County	Quantity	Value	Species	Quantity	Quantity
Troms and Finnmark	36	2 912	Atlantic cod	5 116	189 400
Nordland	1 323	72 766	Arctic char	638	40 929
Trøndelag	3 225	109 792	Atlantic halibut	2 291	277 671
Møre og Romsdal	596	80 037	Other species	266	33 440
Vestland	1 394	73 365	<b>Total</b>	<b>8 310</b>	<b>541 439</b>
Rogaland and other counties	1 735	202 568			
<b>Total</b>	<b>8 310</b>	<b>541 439</b>			

Table 24. Other fish species. Sale of juveniles in 2022, preliminary figures. Quantity in 1000 pieces and value in 1000 NOK

Species	Quantity	Value
Atlantic cod	4 781	62 548
Arctic char	904	3 159
Atlantic halibut	2 214	76 779
Other species	209	0
<b>Total</b>	<b>8 109</b>	<b>142 486</b>

## Sale of molluscs, crustaceans, and echinoderms

Figure 10. Gross sale of molluscs, crustaceans, and echinoderms 2012-2022

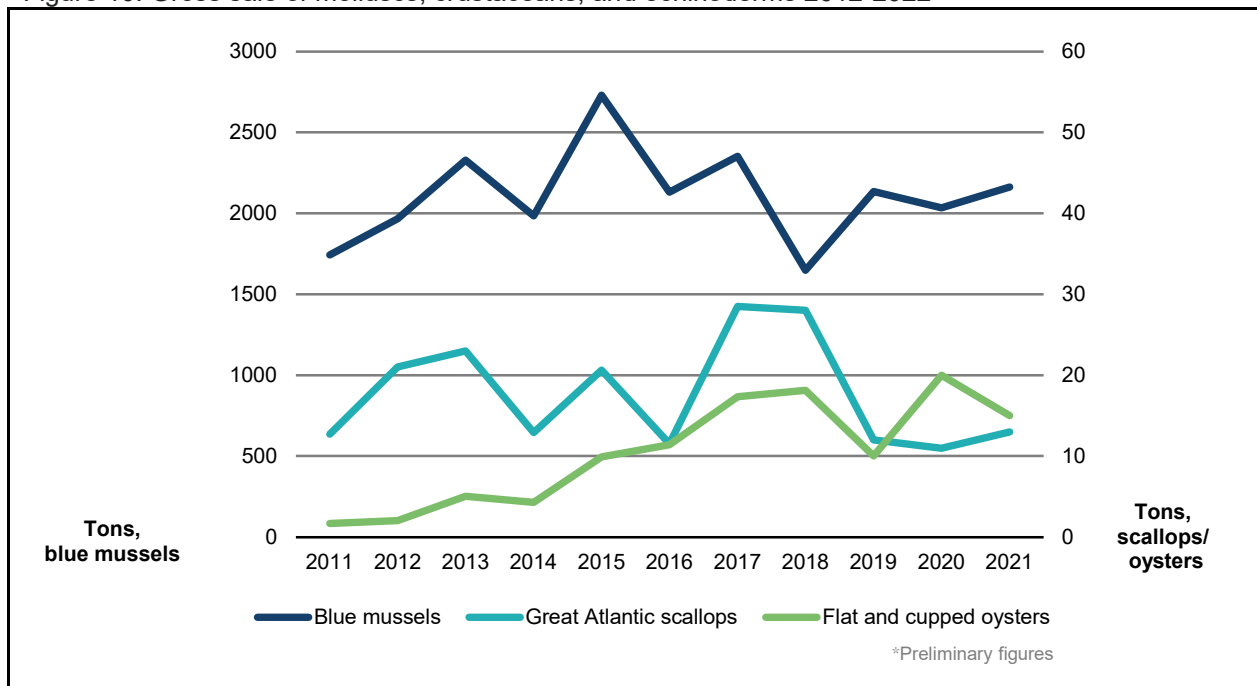


Table 25. Molluscs, crustaceans, and echinoderms. Sale for human consumption in 2022, preliminary figures. Quantity in metric tons and value in 1000 NOK

County	Quantity	Value	Species	Quantity	Value
Troms and Finnmark	:	:	Blue mussels	2 612	14 644
Nordland	1 169	5 679	Great Atlantic scallops	18	1 203
Trøndelag	1 422	8 851	Oysters	16	995
Møre og Romsdal	:	:	Other species	1	25
Hordaland	53	2 095	<b>Total</b>	<b>2 647</b>	<b>16 866</b>
Rogaland	1	28			
Other counties	2	200			
<b>Total</b>	<b>2 647</b>	<b>16 866</b>			

## Sale of farmed algae

Figure 11. Harvesting of farmed algae 2015-2022

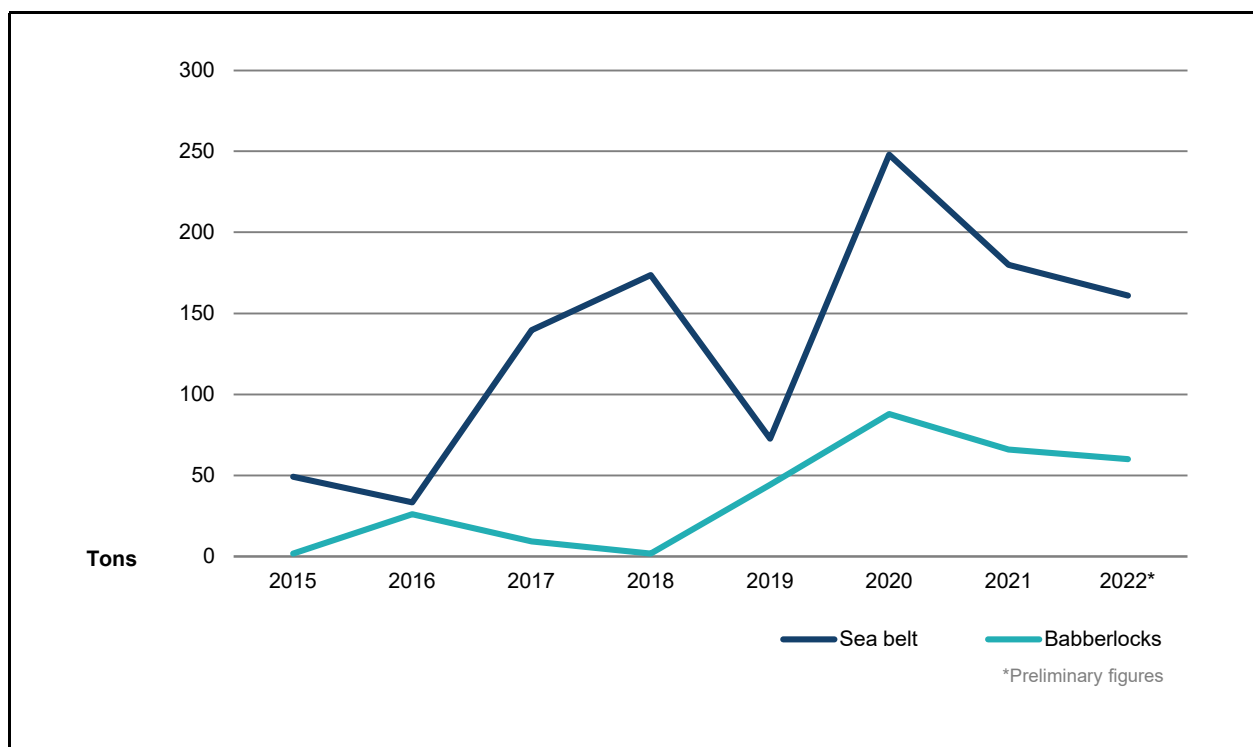


Table 26. Algae. Harvesting for feed and human consumption in 2022, preliminary figures. Quantity in metric tons and value in 1000 NOK

Species	Quantity	Value
Sea belt	161	2 985
Babberlocks	60	1 242
Other species	0	0
<b>Total</b>	<b>221</b>	<b>4 227</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, counting mistakes and other causes.

Table 27. Atlantic salmon. Losses in the production in 2022, preliminary figures. Quantity in 1000 pieces

County	Dead	Rejected	Escapes	Others	Total
Troms og Finnmark	11 088	460	10	3 503	15 061
Nordland	7 485	239	0	1 601	9 325
Trøndelag	7 693	263	0	37	7 993
Møre og Romsdal	4 805	290	9	820	5 924
Vestland	12 761	839	37	1 483	15 120
Rogaland	4 786	394	0	605	5 785
Other species	907	34	0	252	1 193
<b>Total</b>	<b>49 526</b>	<b>2 519</b>	<b>56</b>	<b>8 301</b>	<b>60 402</b>

Table 28. Rainbow trout. Losses in the production in 2022, preliminary figures. Quantity in 1000 pieces

County	Dead	Rejected	Escapes	Others	Total
Troms og Finnmark	0	0	0	0	0
Nordland	1	0	0	7	8
Trøndelag	23	0	0	-2	21
Møre og Romsdal	643	0	0	46	689
Vestland	2 022	363	3	444	2 833
Rogaland	5	2	0	13	19
Other species	22	0	0	1	23
<b>Total</b>	<b>2 715</b>	<b>366</b>	<b>3</b>	<b>509</b>	<b>3 594</b>

Table 29. Other fish species. Losses in the production in 2022, preliminary figures. Quantity in 1000 pieces

County	Dead	Rejected	Escapes	Others	Total
Troms og Finnmark	337	10	0	0	347
Nordland	257	13	0	5	275
Trøndelag	491	32	0	38	560
Møre og Romsdal	115	1	98	30	243
Vestland	233	28	0	45	306
Rogaland and other counties	179	7	0	1	187
<b>Total</b>	<b>1 612</b>	<b>91</b>	<b>98</b>	<b>119</b>	<b>1 919</b>

## 7. Cleaner fish

Source: The Directorate of Fisheries

### Use of cleaner fish

Figure 12. Number of cleaner fish in the cages with Atlantic salmon and rainbow trout 2012-2022

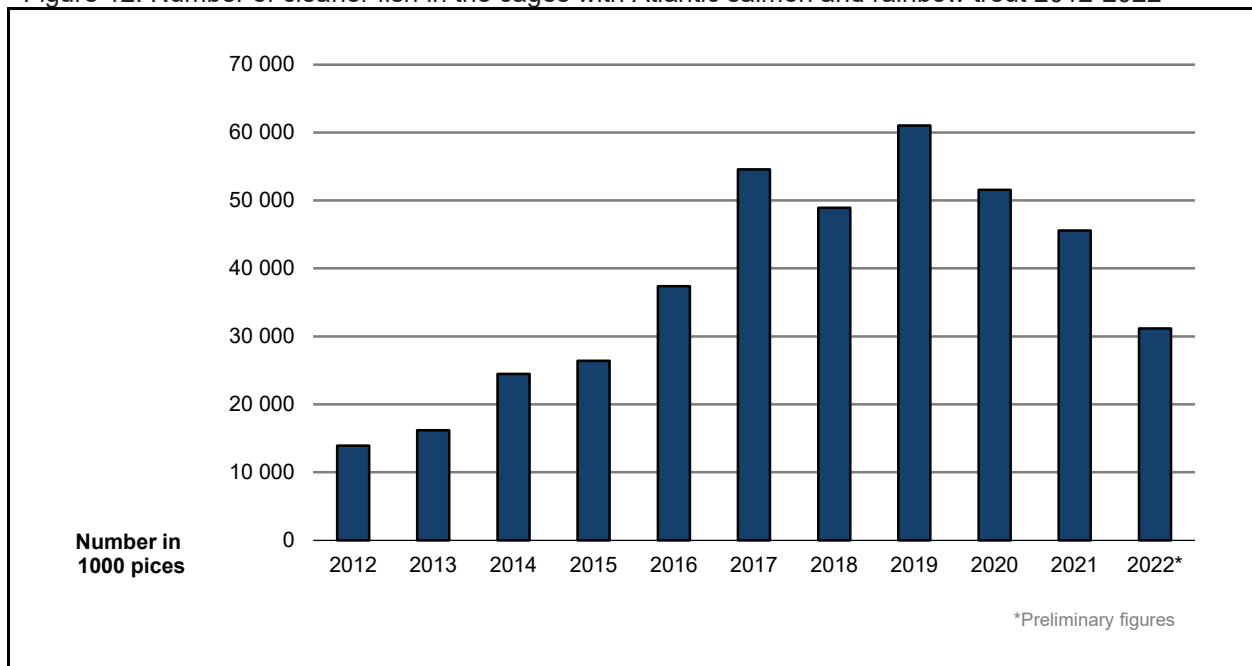
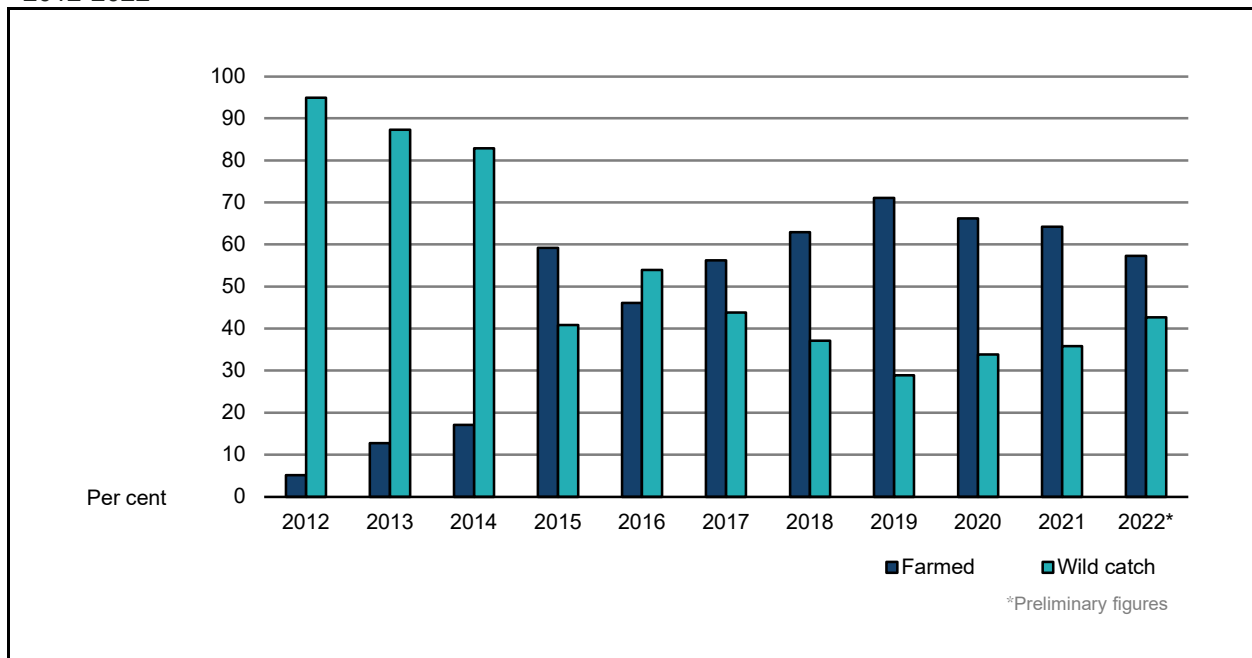


Figure 13. Percentage of farmed and wild catch cleaner fish with Atlantic salmon and rainbow trout 2012-2022



## Use of cleaner fish

Table 30. Cleaner fish. Number of fish (farmed and wild catch) in the cages with Atlantic salmon and rainbow trout in 2022, preliminary figures. Numbers in 1000 pieces and value in 1000 NOK

County	Number	Value
Troms and Finnmark	1 176	21 686
Nordland	928	19 741
Trøndelag	4 497	104 687
Møre og Romsdal	5 480	151 156
Vestland	11 639	232 878
Rogaland	6 496	161 602
Other counties	959	28 914
<b>Total</b>	<b>31 174</b>	<b>720 663</b>

Table 31. Cleaner fish. Number of cleaner fish (farmed and wild catch) in the cages with Atlantic salmon and rainbow trout by species in 2022, preliminary figures. Number in 1000 pieces and value in 1000 NOK

Species	Number	Value
Lumpfish	16 465	324 150
Ballan wrasse	2 150	148 566
Goldsinny wrasse	4 824	91 915
Corkwing wrasse	7 648	154 522
Rock cook	87	1 507
Non specified	0	3
<b>Total</b>	<b>31 174</b>	<b>720 663</b>

## Farmed cleaner fish

Table 32. Cleaner fish. Sale of farmed cleaner fish to producers of Atlantic salmon and rainbow trout in 2022, preliminary figures. Numbers in 1000 pieces and value in 1000 NOK

County	Number	Value
Ballan wrasse	1 474	119 612
Lumpfish	20 276	366 303
Other species	0	0
<b>Total</b>	<b>21 751</b>	<b>485 915</b>

## 8. Export

Source: Norwegian Seafood Council

Figure 14. Main markets for Atlantic salmon in 2022, based on sales quantity

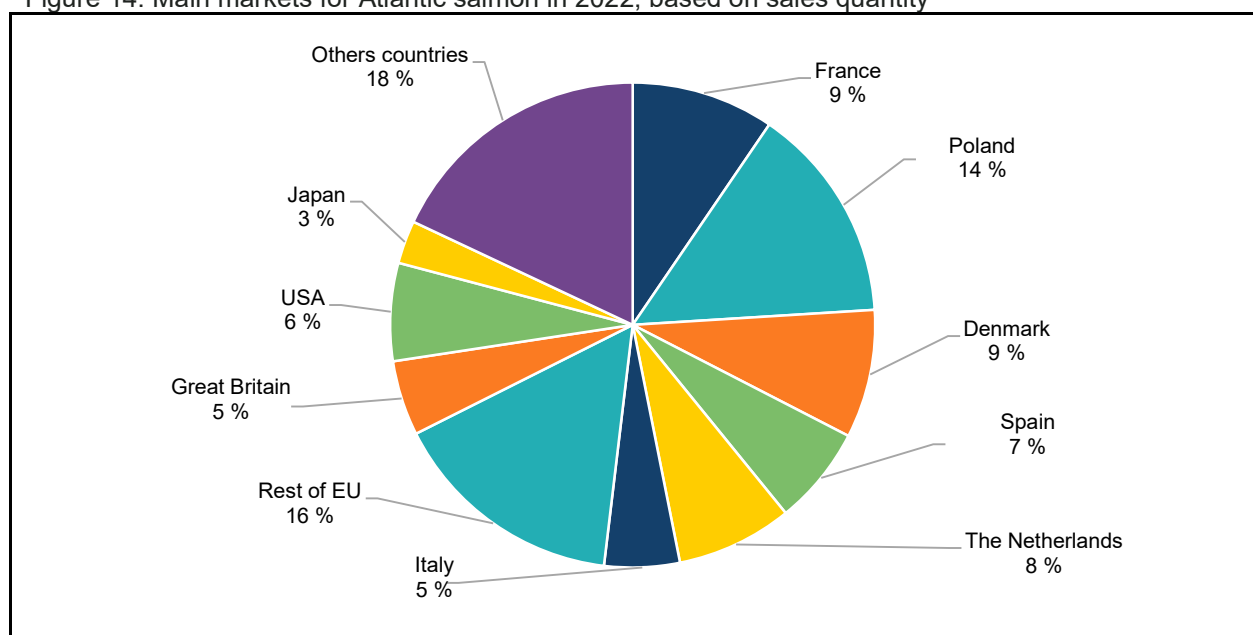


Table 33. Atlantic salmon. Export specified by country. Weight in metric tons (round weight) and value in 1000 NOK

Country	2021			2022			Changes (%)	
	Weight	Value	NOK/kg	Weight	Value	NOK/kg	Weight	Value
Poland	225 650	10 730 675	47.55	213 171	13 552 779	63.58	-6 %	26 %
France	138 255	7 505 255	54.29	140 046	9 866 216	70.45	1 %	31 %
Denmark	130 307	6 543 359	50.22	126 031	8 541 412	67.77	-3 %	31 %
The Netherlands	104 315	5 554 225	53.24	113 876	7 866 111	69.08	9 %	42 %
Spain	99 930	5 493 221	54.97	96 650	6 667 928	68.99	-3 %	21 %
Italy	75 867	4 195 870	55.31	74 027	5 755 466	77.75	-2 %	37 %
Rest of EU	237 728	12 736 757	53.58	231 294	16 026 305	69.29	-3 %	26 %
<b>EU</b>	<b>1 012 052</b>	<b>52 759 362</b>	<b>52.13</b>	<b>995 095</b>	<b>68 276 218</b>	<b>68.61</b>	<b>-2 %</b>	<b>29 %</b>
Great Britain	69 475	3 754 349	54.04	73 448	4 965 125	67.60	6 %	32 %
USA	80 679	5 668 626	70.26	96 112	8 895 922	92.56	19 %	57 %
Japan	50 272	2 860 361	56.90	42 149	2 676 439	63.50	-16 %	-6 %
Other countries	271 838	19 938 535	73.35	264 941	25 815 957	97.44	-3 %	29 %
<b>Total</b>	<b>1 484 316</b>	<b>81 226 883</b>	<b>54.72</b>	<b>1 471 745</b>	<b>105 664 535</b>	<b>71.80</b>	<b>-1 %</b>	<b>30 %</b>

Table 34. Atlantic salmon. Export specified by product. Weight in metric tons (round weight) and value in 1000 NOK

Product	2021			2022			Changes (%)	
	Weight	Value	NOK/kg	Weight	Value	NOK/kg	Weight	Value
Fresh fish	1 156 737	61 091 226	52.81	1 106 402	78 314 182	70.78	-4 %	28 %
Fresh filet	189 453	11 558 190	61.01	201 349	15 358 158	76.28	6 %	33 %
Frozen fish	26 489	1 343 773	50.73	24 368	1 792 854	73.57	-8 %	33 %
Frozen filet	96 380	6 268 699	65.04	102 789	8 758 365	85.21	7 %	40 %
Other products	15 256	964 994	63.25	36 837	1 440 976	39.12	141 %	49 %
<b>Total</b>	<b>1 484 316</b>	<b>81 226 883</b>	<b>54.72</b>	<b>1 471 745</b>	<b>105 664 535</b>	<b>71.80</b>	<b>-1 %</b>	<b>30 %</b>

Figure 15. Main markets for rainbow trout in 2022, based on sales quantity

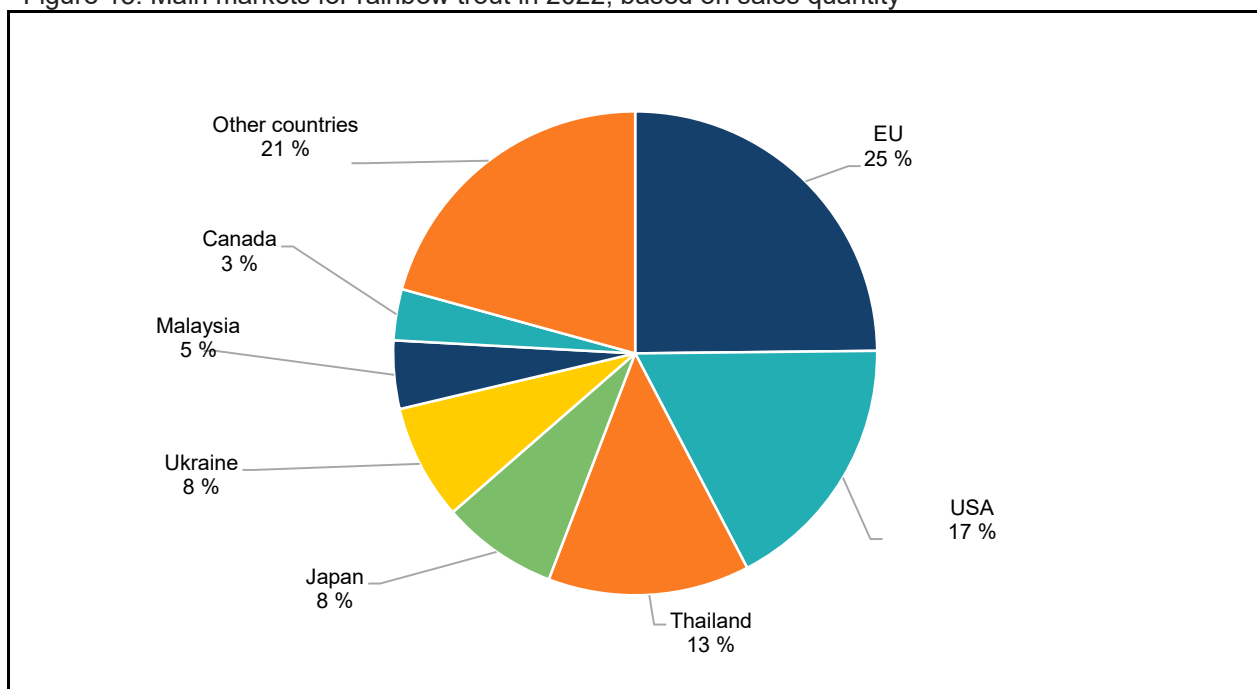


Table 35. Rainbow trout. Export specified by country. Weight in metric tons (round weight) and value in 1000 NOK

Country	2021			2022			Changes (%)	
	Weight	Value	NOK/kg	Weight	Value	NOK/kg	Weight	Value
EU	14 430	681 508	47.23	17 170	1 161 104	67.62	19 %	70 %
USA	10 878	550 650	50.62	12 108	905 061	74.75	11 %	64 %
Thailand	6 603	371 078	56.20	9 313	706 755	75.89	41 %	90 %
Japan	8 137	448 923	55.17	5 390	353 545	65.59	-34 %	-21 %
Ukraine	9 520	417 677	43.87	5 329	307 798	57.76	-44 %	-26 %
Malaysia	2 804	158 792	56.63	3 143	238 522	75.88	12 %	50 %
Canada	2 333	174 530	74.82	2 373	194 922	82.13	2 %	12 %
Other countries	23 150	1 239 306	53.53	14 319	1 138 154	79.48	-38 %	-8 %
<b>Total</b>	<b>77 854</b>	<b>4 042 464</b>	<b>51.92</b>	<b>69 146</b>	<b>5 005 860</b>	<b>72.40</b>	<b>-11 %</b>	<b>24 %</b>

Table 36. Rainbow trout. Export specified by product. Weight in metric tons (round weight) and value in 1000 NOK

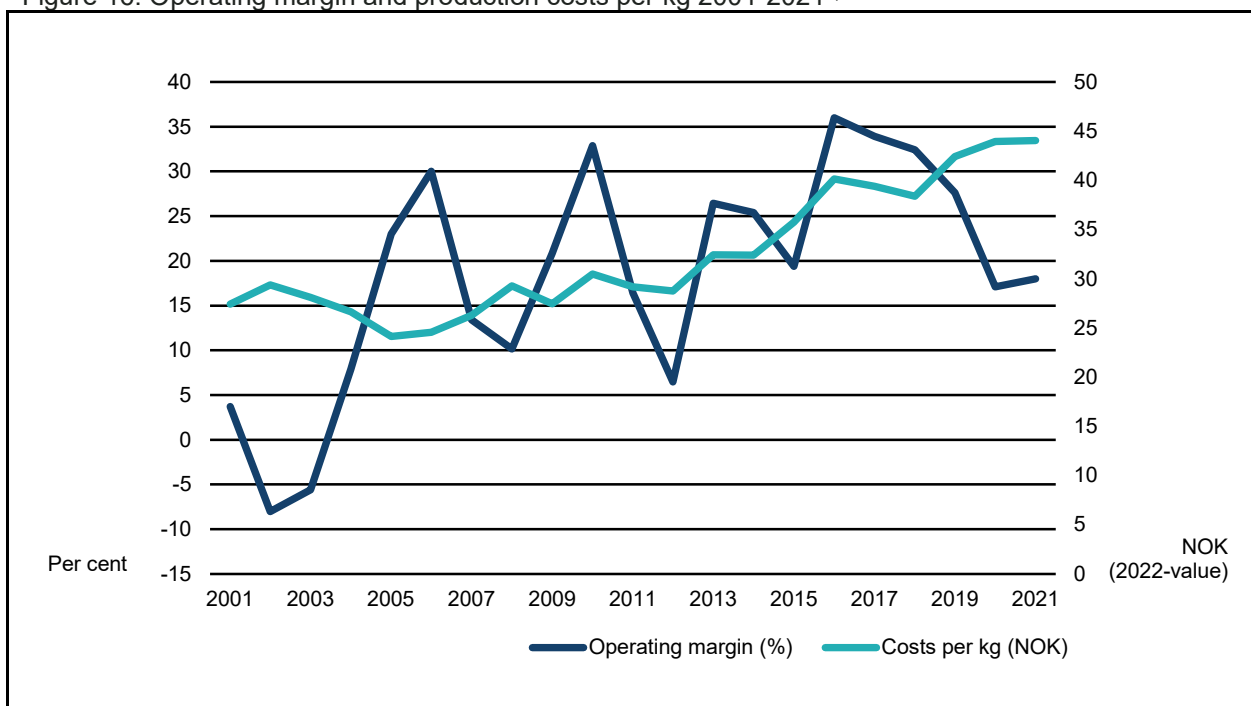
Product	2021			2022			Changes (%)	
	Weight	Value	NOK/kg	Weight	Value	NOK/kg	Weight	Value
Fresh fish	48 891	2 545 416	52.06	39 879	3 018 565	75.69	-18 %	19 %
Fresh filet	7 062	401 557	56.86	11 707	814 421	69.57	66 %	103 %
Frozen fish	12 602	546 554	43.37	9 692	560 901	57.87	-23 %	3 %
Frozen filet	6 778	317 252	46.80	4 994	314 649	63.00	-26 %	-1 %
Other products	2 520	231 686	91.93	2 874	297 324	103.46	14 %	28 %
<b>Total</b>	<b>77 854</b>	<b>4 042 464</b>	<b>51.92</b>	<b>69 146</b>	<b>5 005 860</b>	<b>72.40</b>	<b>-11 %</b>	<b>24 %</b>



## 9. Economic

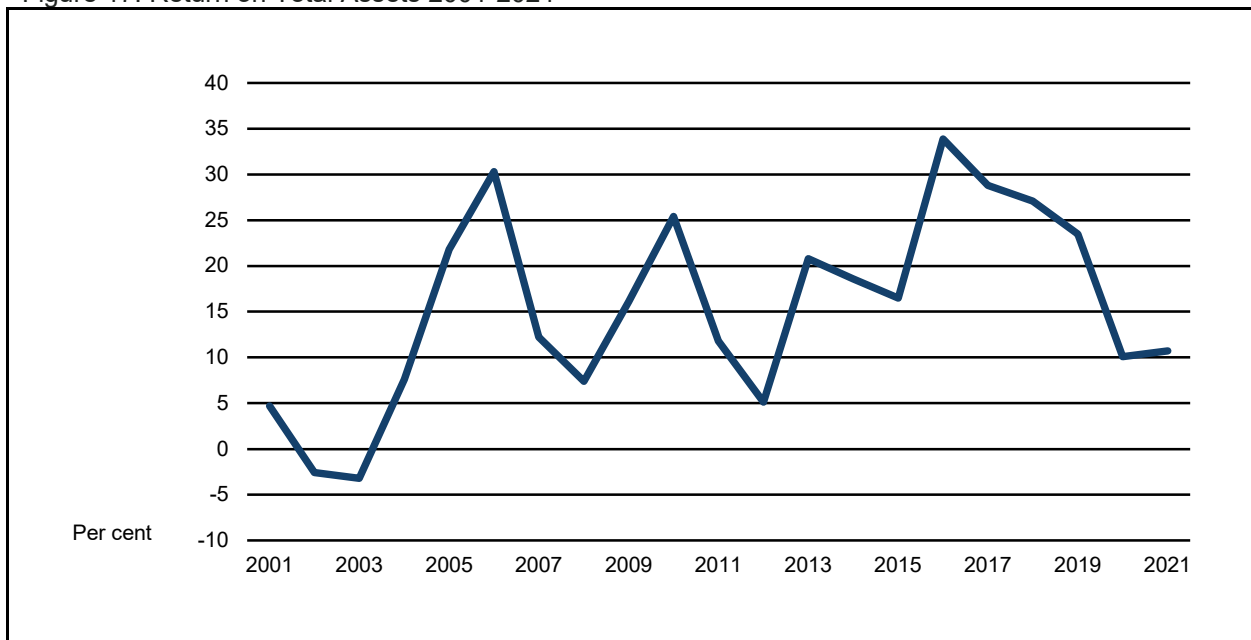
Source: The Directorate of Fisheries

Figure 16. Operating margin and production costs per kg 2001-2021<sup>1)</sup>



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

Figure 17. Return on Total Assets 2001-2021



## Key figures

### Definitions:

- Return on Total Assets = ((Operating Profit + Financial Revenues) / Total Assets) \* 100
- Operating Margin = (Operating Profit / Operating Revenues) \* 100
- Quick Ratio = (Total tangible fixed assets / Current liabilities) \* 100
- Equity Ratio = (Total equity / Total assets) \* 100

Table 37. Atlantic salmon and rainbow trout. Key figures in average per company in 2021. Figures in per cent

	Grow out production	Hatcheries
Return on Total Assets	10.7	5.0
Operating Margin	18.0	10.4
Quick Ratio	180.6	190.4
Equity Ratio	50.0	36.3

## Costs

Table 38. Atlantic salmon and rainbow trout. Costs per kg produced fish (round weight) in average per company in 2021. Numbers in NOK.

	Grow out production
Smolt costs per kg	4.45
Feeding costs per kg	16.79
Insurance costs (fish) per kg	0.17
Wages and salaries per kg	3.12
Depreciation per kg	2.46
Other operating expenses per kg	10.31
Net Financial Expenses per kg	-0.23
Slaughter costs and freight charges per kg	4.57
<b>Costs per kg</b>	<b>41.65</b>

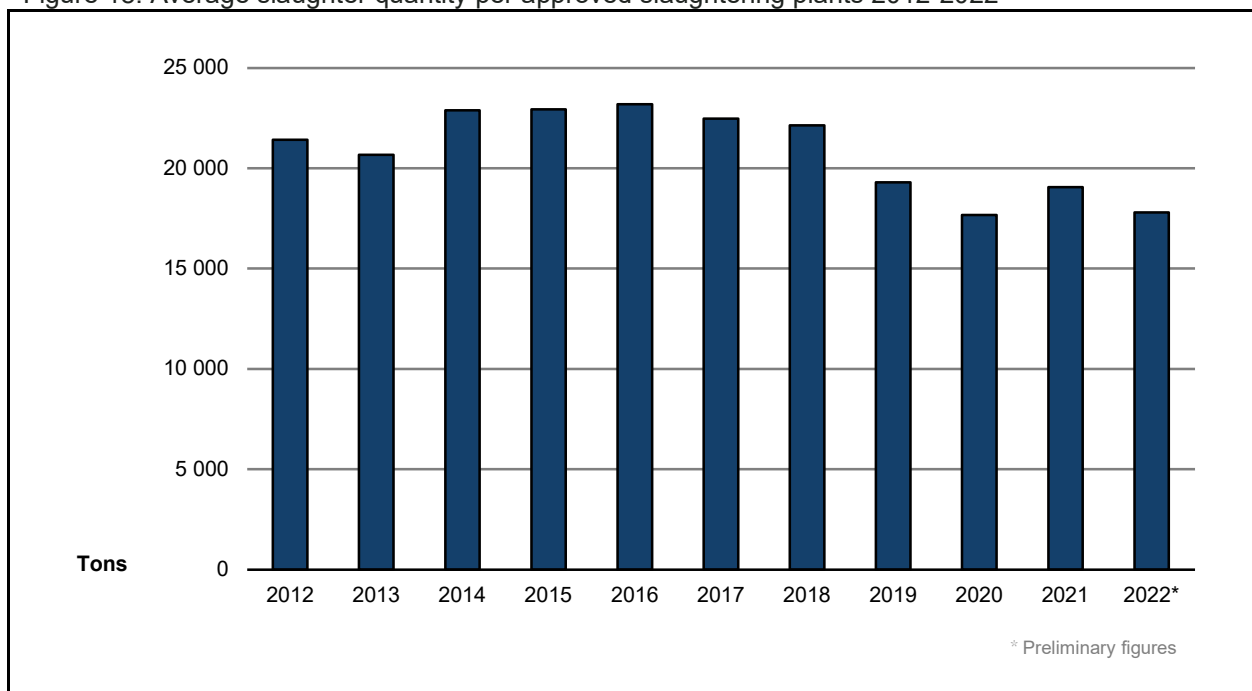
Table 39. Atlantic salmon and rainbow trout. Costs per number sold fry and smolt in average per company in 2021. Numbers in NOK.

	Hatcheries
Roe and fry costs	2.27
Feeding costs	2.50
Insurance	0.16
Vaccination costs.	2.32
Wages and salaries	2.53
Depreciation	1.82
Electricity costs	0.93
Other operating expenses	2.79
Net financial expenses	0.19
<b>Costs per sold fry and smolt</b>	<b>15.52</b>

## 10. Approved slaughtering plants for salmonids

Source: The Norwegian Food Safety Authority

Figure 18. Average slaughter quantity per approved slaughtering plants 2012-2022



### Definition:

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 40. Number of approved slaughtering plants for farmed salmonids

County	2018	2019	2020	2021	2022
Troms og Finnmark	12	12	14	13	13
Nordland	13	13	13	14	15
Trøndelag	10	11	10	9	9
Møre og Romsdal	5	6	8	11	11
Vestland	17	28	29	32	36
Rogaland	3	3	4	4	3
Other counties	1	2	6	4	5
<b>Total</b>	<b>61</b>	<b>75</b>	<b>84</b>	<b>87</b>	<b>92</b>

## 11. Related activities

### Insurance

Source: Finance Norway (FNO)

Table 41. Insurance of farmed fish in Norway. Amount in mill NOK

	2018	2019	2020	2021	2022
Premium	222.2	226.0	238.1	254.0	285.6
Compensation	178.4	271.7	143.7	189.0	141.6
<b>Accident index</b>	<b>80 %</b>	<b>120 %</b>	<b>60 %</b>	<b>74 %</b>	<b>50 %</b>

### Use of veterinary drugs

Source: Norwegian Institute of Public Health

Table 42. Use of veterinary drugs<sup>1)</sup> in the Norwegian fish farming industry. Quantity in kg

	2018	2019	2020	2021	2022
Antibacterial agents	933	213	229	605	396
Agents against lice	779	1 757	3 014	4 359	7 291
Hydrogen peroxide	6 735 000	4 523 000	5 084 000	4 060 000	3 004 000
Agents against intestinal worms	171	50	123	40	62
Agents against surface infections	42 714	43 049	52 923	47 772	49 833
Anaesthetic agents	13 670	16 536	18 665	18 263	15 379

1) The different drugs are used and dosed differently, and the total number in kg can therefore not be summed up

### Use of feed

Source: Norwegian Seafood Federation

Table 43. Use of feed in the Norwegian fish farming industry. Quantity in metric tons

Month	2018	2019	2020	2021	2022
January	111 245	119 328	121 137	134 373	119 379
February	91 459	94 181	99 580	103 544	101 639
March	85 777	96 932	115 336	120 938	124 651
April	84 004	116 947	113 603	125 735	116 821
May	127 722	137 246	119 340	148 043	151 453
June	150 674	155 564	157 964	191 123	184 079
July	186 799	200 457	201 533	233 677	220 672
August	225 058	227 255	234 384	263 619	273 904
September	209 187	224 865	236 961	261 558	257 347
October	221 382	205 478	230 930	250 724	250 241
November	195 630	168 718	193 564	201 839	213 616
December	152 454	147 794	164 770	157 880	166 010
<b>Total</b>	<b>1 841 391</b>	<b>1 894 766</b>	<b>1 989 103</b>	<b>2 193 053</b>	<b>2 179 812</b>

## Well boats

Source: The Association of Coastal Ship-owners

Tabell 44. Number of well boats<sup>1)</sup>

County	2018	2019	2020	2021	2022
Troms og Finnmark	4	1	1	2	5
Nordland	7	10	2	3	3
Trøndelag	0	7	15	16	16
Møre og Romsdal	51	40	55	64	65
Vestland	7	15	14	19	19
Rogaland	0	9	0	1	1
Other counties	0	4	8	0	0
<b>Total</b>	<b>69</b>	<b>86</b>	<b>95</b>	<b>105</b>	<b>109</b>

1) Based on members in the Association of Coastal Ship-owners



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