New approaches to a sustainable development of fishery, aquaculture and scientific researches

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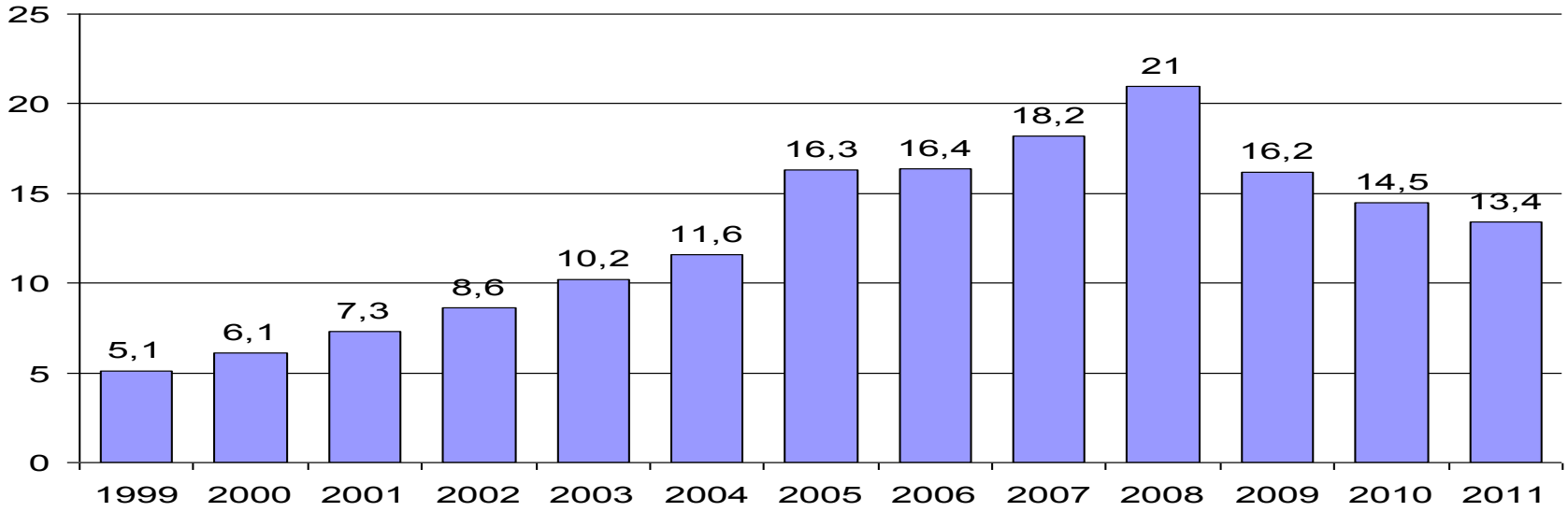
UKRAINE

	Fishing and production of other aquatic resources (tones)					Including fishing
		in internal reservoirs	in the maritime economic zone of Ukraine	in the maritime economic zones of other states	in the open oceans	
2000	350 087	38 210	56 990	175 033	79 854	346 699
2001	333 363	38 257	134 585	151 613	8 908	310 451
2002	293 205	38 011	93 030	153 324	8 840	253 847
2003	248 176	37 703	55 027	140 991	14 455	222 385
2004	225 905	35 365	52 467	126 834	11 239	195 067
2005	265 585	37 396	61 176	149 622	17 391	234 185
2006	228 840	36 701	46 799	122 374	22 966	202 231
2007	213 669	43 207	46 909	123 553	-	198 335
2008	244 527	41 229	55 037	140 705	7 556	220 543
2009	256 853	42 201	67 314	147 338	-	238 600
2010	218 681	38 364	69 725	110 592	-	215 017
2011	211 182	37 574	74 870	98 738	-	205 285
2012	203 926	41 569	63 454	98 903	-	195 490
2013 (I – XI)	191 482	33 214				182 109

Consumption of fish and seafood in Ukraine (kg/person/year)



Import of fish and seafood in Ukraine is 80-90% of the total fish market.

	Export of fish and seafood, $,000	Import of fish and seafood, $,000
2005	**9 668,99**	**221 669,8**
2006	**5 782,8**	**361 240,6**
2007	**5 677,7**	**444 451,6**
2008	**3 673,4**	**616 966,2**
2009	**25 175,6**	**471 195,7**
2010	**21 007,7**	**568 561,9**
2011	**19 654,0**	**505 514,4**
2012	**18 793,0**	**687 662,2**
2013 (I – XI)	**18 768,0**	**757 824,8**

CRIMEA is a wonderful peninsula in the south of Ukraine.

CRIMEA has an extent of coastline an about 1600 km with lagoons and bays, open-sea shelf areas are suitable for aquaculture of fish, algae and molluscs.

Ukraine has all the suitable conditions for the development of marine aquaculture:

- marine area and coastline have great length;
- unique mild climate and optimal hydrological conditions in the Black Sea and salty Lake Donuzlav for cultivation of many species;
- availability of qualified personnel who have knowledge and experience in this field and have patents and other innovative technologies in fish and shellfish farming.

Knowledge, information and high-qualified personnel resources are Institute of biology of the southern seas NASU; Marine Hydrophysical Institute NASU; 1st Ukrainian Marine Institute; Employment center, which are members of *Association of "Cluster "Products of the Sea"*

Innovations offered:

- ✓ Technologies for fish, mussel and oyster mariculture farms, the scientific platform and technical support for the projects.
- ✓ Biotechnologies for breeding juvenile mussels and oysters on mariculture farms.
- ✓ Biotechnologies for culturing aquatic organisms to be used as bioactive substances (BAS's), in pharmacology and cosmetics.
- ✓ Biotechnologies for culturing micro algal strains used for feeding molluscs and their larvae and in BAS production.
- ✓ Education and training of personnel competent in mariculture; devising the relevant instructions and training materials.

Logo of Cluster “Products of the Sea”

Cluster “Products of the Sea”: new approaches to a sustainable development of fishery, aquaculture and scientific researches (main office is located in Sevastopol, Ukraine)

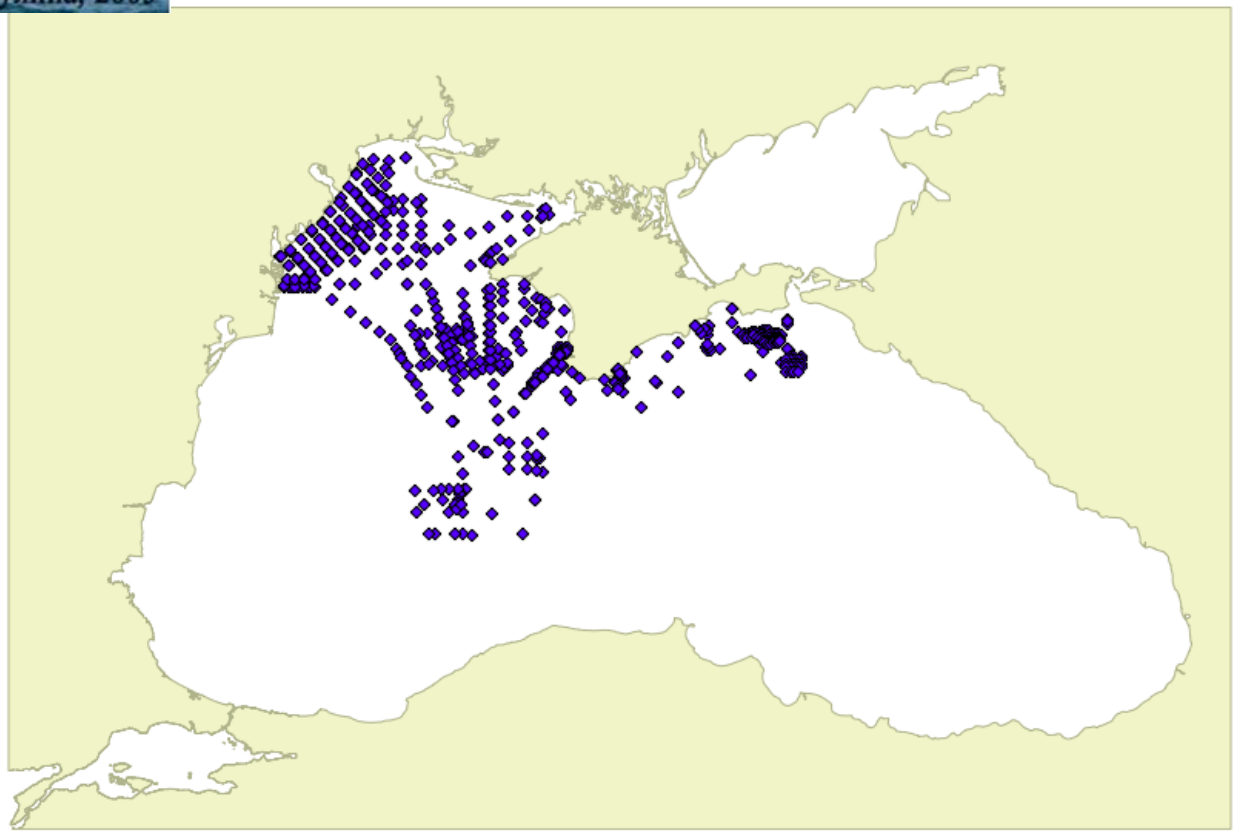
The goals of the cluster are:

- ✓ **Developing seafood business, inshore fishery, marine and freshwater aquaculture;**
- ✓ **Implementation of modern technologies and control systems of quality of water, fishes and seafood;**
- ✓ **Commercialization of scientific researches in the field of biotechnologies, cultivation and processing of marine organisms;**
- ✓ **Creation of cooperation net between the cluster members and associated members;**
- ✓ **Acceleration of economic development of the Sevastopol and Crimean region.**

Sustainable integrated aquaculture and fishery on the Black Sea region

- Investment and financial support from the EU and government of each Black sea countries for development of poly - and multitrophic aquaculture, use new world practice and experience of marine farming in the Black Sea conditions.
- International scientific and technical collaboration and cooperation in this fields. Transfer of scientific innovations and knowladges. Global Monitoring and study of fish stock in the Black sea.
- Organization of nurseries for the cultivation of shellfish and other aquatic organisms and their processing enterprises for the producing of food, medical and pharmacological products, etc.
- Use of new species of marine organisms for commercial cultivation in the Black Sea.
- Seafood available: increasing profitability of marine farming. Possible ways are a tax rebates, bank lending, priority land use in the coastal zone, the use of modern high-tech equipment and materials, etc.
- Environmental safety fish and shellfish farming, legalization of the special status of aquatic areas for aquaculture.
- Aquaculture farming training and courses, “blue” tourism, gastronomic tourism.
- Biotechnologies for processing of marine organisms.
- Development of a new technology - getting of marine biofuels.

Since 2010 R/V “Professor Vodyanitskiy” is operational.



Map of cruises 2010 – 1013

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