



SVEUČILIŠTE U DUBROVNIKU

ODJEL ZA AKVAKULTURU



Hrvatska marikultura u EU-konkurencija i perspektive

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- ROMANTIČNI OSVRT NA HRVATSKU MARIKULTURU
- Hrvatska baštini dugu tradiciju u marikulturi, od višestoljetnoga uzgoja malostonskih kamenica, prvoga industrijskoga mrjestilišta morske ribe do uzgoja tuna.
- Razvoj komercijalnoga uzgoja, bio je uspješno praćen i u istraživačkom i visokobrazovnom sektoru.
- Danas gledajući i pored niza objektivnih i subjektivnih razloga, teško je objasniti zašto Hrvatska u zadnjih 30-godina nije postala veliki igrač u europskoj marikulturi, u odnosu na slične zemlje u okruženju, posebice Grčka i Turska.
- U zadnjih 20-tak godina, osim iskoraka u uzgoju tune, hrvatska marikulturna proizvodnja ne bilježi značajnije povećane u proizvodnji i investicijama. Proizvodnja školjkaša od 2100 tona 2009. godine je manja nego prije rata, a uzgoj morske ribe je samo 5000 tona u 2009.



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UZGOJ RIBE I ŠKOLJKAŠA U RH- TREND

	2007.	2008	2009.
ŠARAN	1503	1546	2.058
PASTRVA	2031	2058	2.024
LUBIN-ORADA	3950	4500	5.000
TUNA	4180	3711	4.200
DAGNJE I KAMENICA	3500	3000	2.100

Podatci: HGK, 2011



SVEUČILIŠTE U DUBROVNIKU

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Uvoz ribe i prerađevina	2008.	2009.
Žive ribe	817	97
ribe svježe ili rashlađene	1.075	929
riba smrznuta	31.845	25.506
riblji fileti	3.309	2.500
riba sušena, soljena, dimljena	1.054	860
Ljuskavci, mekušci	9.726	8.941
konzervirana riba	5.533	4.754
Izvor: dzs; obrada: hgk sektor za poljoprivredu, prehrambenu industriju i šumarstvo		



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- A 2013. HRVATSKA ULAZI U EU
- ŠTO ČEKA MARIKULTURU ULASKOM U EU
- 1. OGROMNO TRŽIŠTE S DEFICITOM MORSKIH PROIZVODA I VELIM UVOZOM
- 2. OGROMNO TRŽIŠTE S VELIKOM KONKURENCIJOM
- 3. IZRAZITO SEGMENTIRANO TRŽIŠTE (npr. SJEVER-JUG)
- 4. ZASIĆENO TRŽIŠTE NIZOM VRSTA S TRENDOM PADA CIJENA- DAGNJE, LUBIN, ORADA



SVEUČILIŠTE U DUBROVNIKU

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PROIZVODNJA (tone)	Godina									
Vrsta	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Šaran	75,429	79,300	77,664	72,743	73,265	73,004	73,308	72,666	70,341	70,597
Som	3,359	4,490	4,071	3,756	5,458	5,512	6,436	6,857	7,788	7,775
Jegulja	11,109	11,094	10,282	8,993	8,679	8,268	8,805	7,790	5,320	5,124
Plovnatice	3,969	5,007	5,029	5,730	6,004	7,035	7,464	9,020	8,903	10,086
Druga slatkovodna riba	619	595	420	496	528	481	539	350	514	471
Druga morska riba	4,989	6,109	10,103	9,071	9,655	15,203	16,781	18,725	17,400	19,486
Losos	591,068	611,013	640,825	671,695	756,770	716,994	748,978	763,348	926,428	987,789
Lubin	46,157	57,811	56,162	61,093	62,060	68,679	79,706	97,336	93,425	138,156
Orada	60,831	75,232	79,003	79,767	88,340	88,922	93,772	119,499	105,097	148,830
Isetra	543	665	595	600	630	675	2,142	2,597	2,077	2,077
Tilapija	200	150	150	150	450	450	700	750	1,150	1,150
Dužičasta pastrva	333,509	343,243	358,005	374,350	349,144	341,061	326,891	334,442	345,816	326,843
Grand Total	1,131,782	1,194,708	1,242,309	1,288,444	1,360,983	1,326,283	1,365,522	1,433,379	1,584,258	1,718,383



SVEUČILIŠTE U DUBROVNIKU

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Species	2006 Value (€ mill)	Volume (1000 tonnes)	Average price (€/Kg)
Atlantic salmon	574.1	144.6	3,97
Rainbow trout	494.9	201.0	2,46
Gilthead sea bream	314.0	73.0	4,30
European sea bass	282.8	56.0	5,05
Pacific cupped oyster	278.0	125.4	2,22
Japanese carpet shell	218.9	58.7	3,73
Blue mussel	207.3	146.9	1,41
Common carp	134.9	66.1	2,04
Mediterranean mussel	80.0	105.6	0,76
European eel	74.6	8.3	8,99
Sea mussels nei	62.9	229.2	0,27
Turbot	45.8	7.6	6,03
Grooved carpet shell	40.8	8.2	4,98
Atlantic bluefin tuna	36.7	3.2	11,47
European flat oyster	13.7	4.7	2,91
North African catfish	10.2	6.6	1,55
Other species	201.9	57.4	3,52
Total	3,071.4	1,302.6	2,36



SVEUČILIŠTE U DUBROVNIKU

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Table 13: Sea bream production (t) within EU-27 and Non-EU Mediterranean states 2003-2008

Year	2003	2004	2005	2006	2007	2008
EU-27 MED REGION						
Greece	49	46	44	60	43	60
Italy	12.4	13	15.6	20.2	23	25
France	7.8	8.5	8.5	8.9	9	10
Spain	3.8	3.8	5.7	3	4.1	4.1
Portugal	0.7	0.8	1.1	1	1.2	1.5
Others	2	2.2	2.6	2.8	3.1	3
Sub-total	75.7	74.3	77.5	95.9	83.4	103.6
Non-EU						
Turkey	12	13.9	17.5	22.5	24	27
Egypt	2.5	2.9	3.4	2.8	2.9	2.9
Croatia	2.5	2.5	2.5	1.6	1.6	2
Tunisia	1.1	1.6	1.9	2.2	1.5	1.7
Sub-total	18.1	20.9	25.3	29.1	30	33.6
Grand-total	93.8	95.2	102.8	125	113.4	137.2

Source FEAP Aquamedia



SVEUČILIŠTE U DUBROVNIKU

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Table 14: Sea bass production (t) within EU-27 and Non-EU Mediterranean states 2003-2008

Year	2003	2004	2005	2006	2007	2008
EU-27 MED Region						
Greece	25.4	30	36	40	29	35
Italy	8.9	9	8.6	9.1	9.2	9.8
France	3.7	4	4.3	5.6	4.6	4
Spain	4.5	4.7	5.5	8.9	10.6	11.8
Portugal	1.5	1.5	1.5	1.4	1.4	1.4
Others	5.5	0.7	0.7	0.6	0.6	0.5
Sub-total	49.5	49.9	56.6	65.6	55.4	62.5
Non-EU						
Turkey	15	17	21.1	30	35	38
Egypt	3.2	2.8	5.3	2.1	2.6	2.6
Croatia	1.8	1.6	1.9	1.6	1.8	2
Tunisia	0.5	0.5	0.6	0.5	0.8	0.8
Sub-total	20.5	21.9	28.9	34.2	40.2	43.4
Grand-total	70	71.8	85.5	99.8	95.6	105.9



Table 25: Generalised SWOT analysis for European sea bass and sea bream aquaculture

Strengths	Weaknesses
Short production cycle (8) (9) High demand in Mediterranean market (6) Market share 63-68% of global production (6) Several large companies exploiting significant scale-economies (9) Vertical integration (9) (10) Consistent quality and year round production (4) (6) Protective sanitary legislation (5)	Licensing bureaucracy (1) Credit limits (10) Large number of small-subsidised operations in Greece with limited market access (6) (10) Absence of production controls or strategic planning by Greek authorities (1) Low consumer familiarity (esp. bream) in Northern Europe (6) Absence of zoning (1) (3) Lack of industry and market studies relating to potential export markets (6) Absence of timely updated EU industry and market information (10) Limited authorised chemicals and chemotherapeutants for prevention and treatment of disease Lack of effective vaccines to prevent some disease losses
Opportunities	Threats
Increasing demand for farmed produce (4) (6) Emerging markets for processed products in N. Europe (6) Emerging quality labels (4) (6)	Increased-production and price competition (6) (9) (10) Third party competition (Turkey) (6) NGO campaigns against poor farming practices (4) (6) (10) Inability to launch centrally coordinated transnational promotion campaigns (6) Emerging diseases (5)



Table 27: Generalised SWOT analysis for European shellfish aquaculture

Strengths	Weaknesses
Low input production systems (labour and feeds) (2) (8) (9) Increasing demand (4) (6) Protective sanitary legislation (5)	Over production resulting in low prices e.g. mussels (6) (9) (10) Fragmented production base e.g. oysters (6) (9) (10) Negative environmental impact of dredging operations (2) (8) No possibility of treatment applications (5) No vaccines available (5)
Opportunities	Threats
Development of new environmental friendly production systems (2) (8) Eco-labelling opportunities (2) (4) (6)	Diseases and parasites (5) Environmental contamination (5) Uncertain spat-fall under extensive production conditions (2) (8) (9) Spread of commercially unfavourable/ invasive species (2) (10)



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- **PERSPEKTIVE**
- KROZ STRUKTURNE PREDPRISTUPNE FONDOVE NE PREDVIĐA SE POTPORA ULAGANJIMA U MARIKULTURNU PROIZVODNJU ???
- U EU POTPORE SU DOSTUPNE UGLAVNOM KROZ *Europski ribarstveni fond* EFF, a za inovacije kroz FP7 program (*fond je trenutno u fazi restrukturiranja radi postizanja planiranih ciljeva i problema s kojima se suočavao; poticaji nisu rezultirali rastom proizvodnje*)—*visoka kompetitivnost u natjecajima* ???
- INVESTICIJE BI TREBALA PROMOVIRATI RH, RADI POLITIKE RURALNOGA RAZVOJA OTOKA I PRIOBALJA I SPRJEČAVANJA NEGATIVNIH DEMOGRAAFSKIH TRENDOVA ????
- ORIJENTACIJA NA LOKALNO I TURISTIČKO TRŽIŠTE
- OKRUPNJAVANJE SEKTORA, POSEBICE U ŠKOLJKARSTVU
- PRILAGODBA SVIH DIONIKA SEKTORA NA PREDSTOJEĆE PROMJENE—PROIZVODNJA, JAVNI SEKTOR, ZNANOST I OBRAZOVANJE