

Hrvatska gospodarska komora

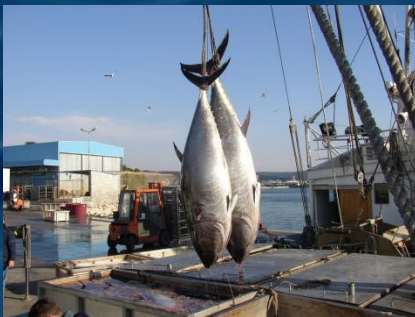
Croatian Chamber of Economy



Udruženje ribarstva i prerade ribe
Association of Fisheries and Fish Processing



Grupacija akvakulture
Aquaculture Association



Zagreb, Rooseveltov trg 2

10. Međunarodni gospodarsko - znanstveni skup o ribarstvu"

10th International Production and Scientific
Conference on Aquaculture

Vukovar, 27.- 28. studenog 2014.

**Akvakultura u Republici Hrvatskoj
Stanje i perspektive razvoja**

Croatian Aquaculture
Status and Prospects

Ž. Filić, G. Markulin, M. Božić, B. Marković i Z. Radan

2014.-2020. prilika za uređenje i snaženje djelatnosti

2014th to 2020th opportunity for planning and strengthening
of activities

Poticajno poslovno-političko okruženje

Uređena i pozitivna zakonska regulativa

Veliko tržište

Značajna financijska sredstva

Stimulating business and political environment

Organized and positive legislation

large market

Significant financial resources

Republika Hrvatska

The Republic of Croatia



Republika Hrvatska u brojkama

The Republic of Croatia in Numbers

- Kopno Land: 56.594 km²
- Teritorijalno more Territorial Sea: 31.067 km²
- Ukupna površina Total Surface: 87.661 km²
- Obalna crta Coastline 5.835 km
- Otoci Islands: 1.264 (otoci grebeni)
- Rijeke Rivers: 2.162 km
- Jezera Lakes: 12 *

*Hrvatska nema velik broj prirodnih jezera, dvanaestak, od 30km² na manje. Međutim, napravljeni su brojni umjetni ribnjaci za ribolov i akvakulturu ili za iskorištavanje hidroenergije.

Croatia does not have a large number of natural lakes, a dozen, from 30km² to less. However, numerous artificial ponds for fishing and aquaculture or the exploitation of hydropower were made.

Udruženje ribarstva

Association of Fisheries

Djeluje putem tri grupacije

Operate through three Affiliation:

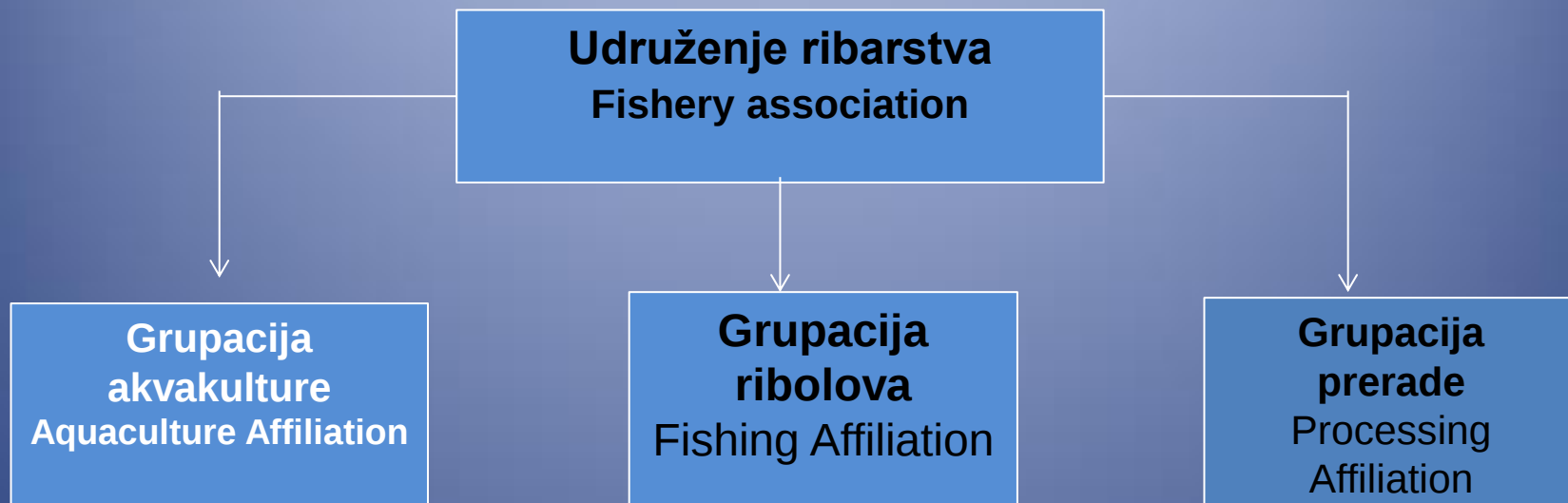
Akvakultura	Aquaculture
Ribolov	Fishing
Prerada	Fish processing

Grupacija akvakulture

Aquaculture Affiliation

28 šaranskih ribnjaka (10,6 ha)	carp farms
27 uzgajališta pastrva (5 ha)	trout farms
25 uzgajališta morske ribe	marine fish farms
4 uzgajališta tuna	facility for of tuna farming
Mnogobrojna uzgajališta školjaka	numerous shellfish farms

Hrvatska gospodarska komora
Sektor za poljoprivredu, prehrambenu industriju i šumarstvo
Croatian Chamber of Economy
Agriculture, Food Industry and Forestry Department



Management :

- Assembly
- Executive Committee
- Presidents
- Heads

Upravljanje:

- Skupština
- Izvršni odbor
- Predsjednici
- Voditelji

Grupacija akvakulture

Aquaculture Affiliation

Izvršni odbor

Executive committee

Odbor za slatkovodni
uzgoj
Commission for freshwater
culture

Odbor za marikulturu

Commission for
marine culture

Sekcija za
ciprinide

Carp
culture

Sekcija za
salmonide

Trout
culture

Sekcija za
bijelu ribu

Sea bass &
Bream
culture

Sekcija za
plavu ribu

Tuna
culture

Sekcija za
školjke

Shellfish
culture

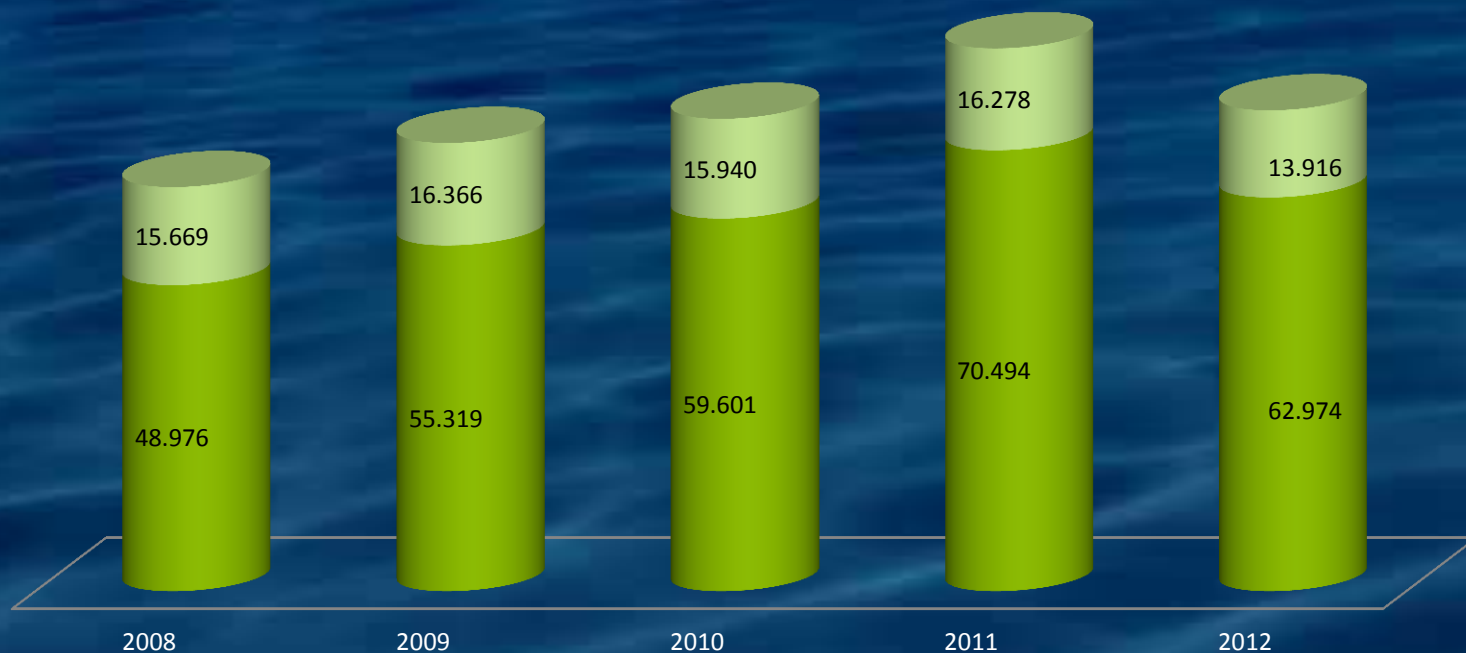
Sekcija za
morsku
pastrvu

Marine
trout
(planned)

Proizvodnja ribarstva: 2008 - 2012

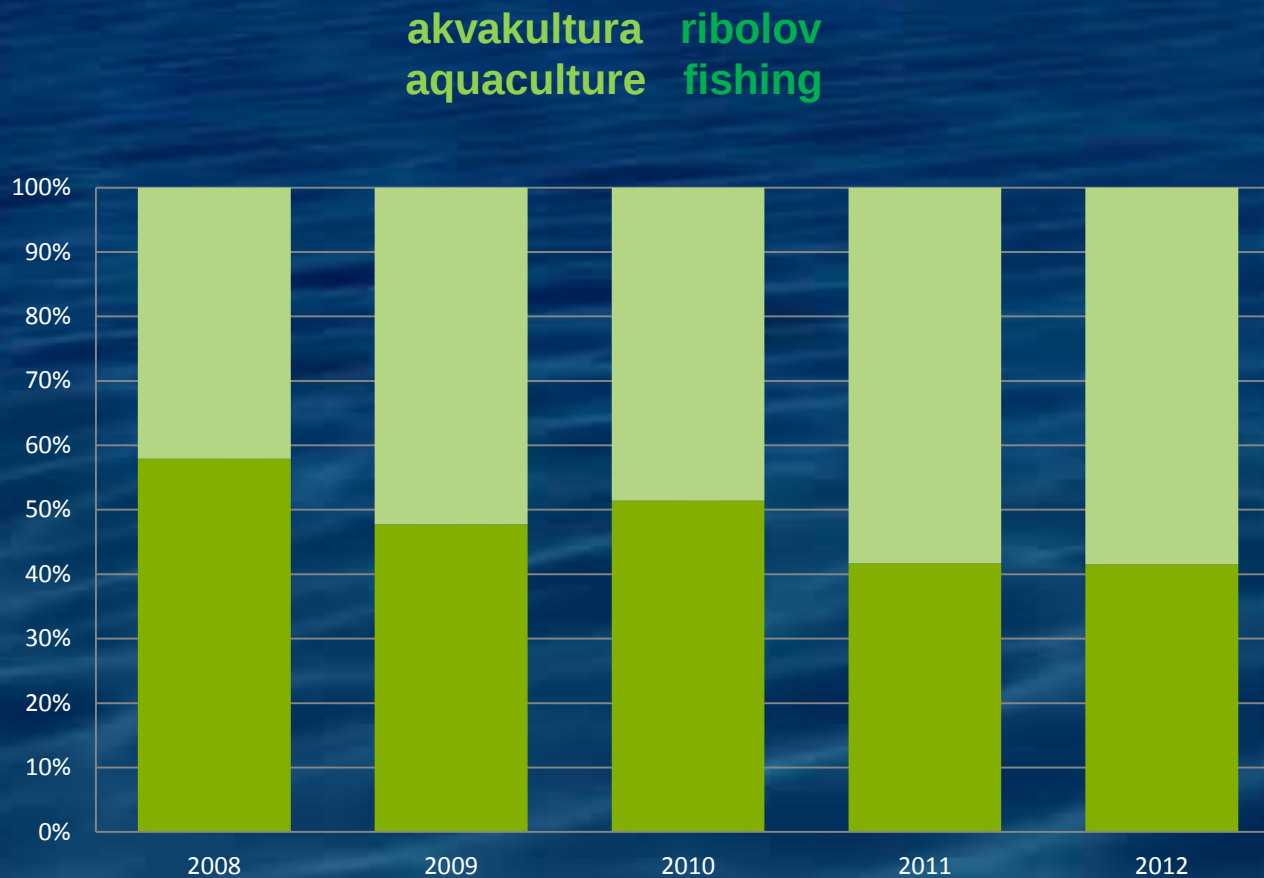
Production of fisheries

Akvakultura **Ribolov**
Aquaculture **Fishing**



Udjel akvakulture u ukupnom izvozu ribarstva 2008 – 2012 (mil.kn)

Share aquaculture (%) of total exports of fisheries 2008-2012 (mil.kn)



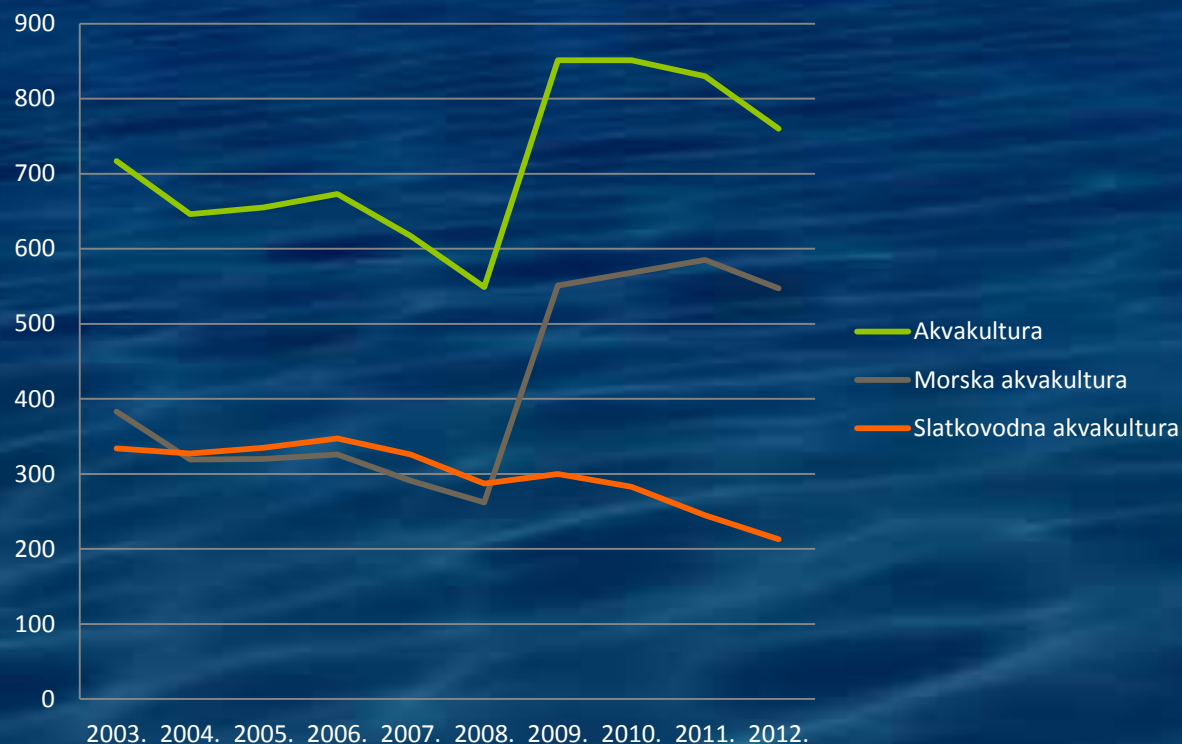
Ukupan prihod pravnih osoba u akvakulturi 2003-2012

Total income of legal persons in aquaculture



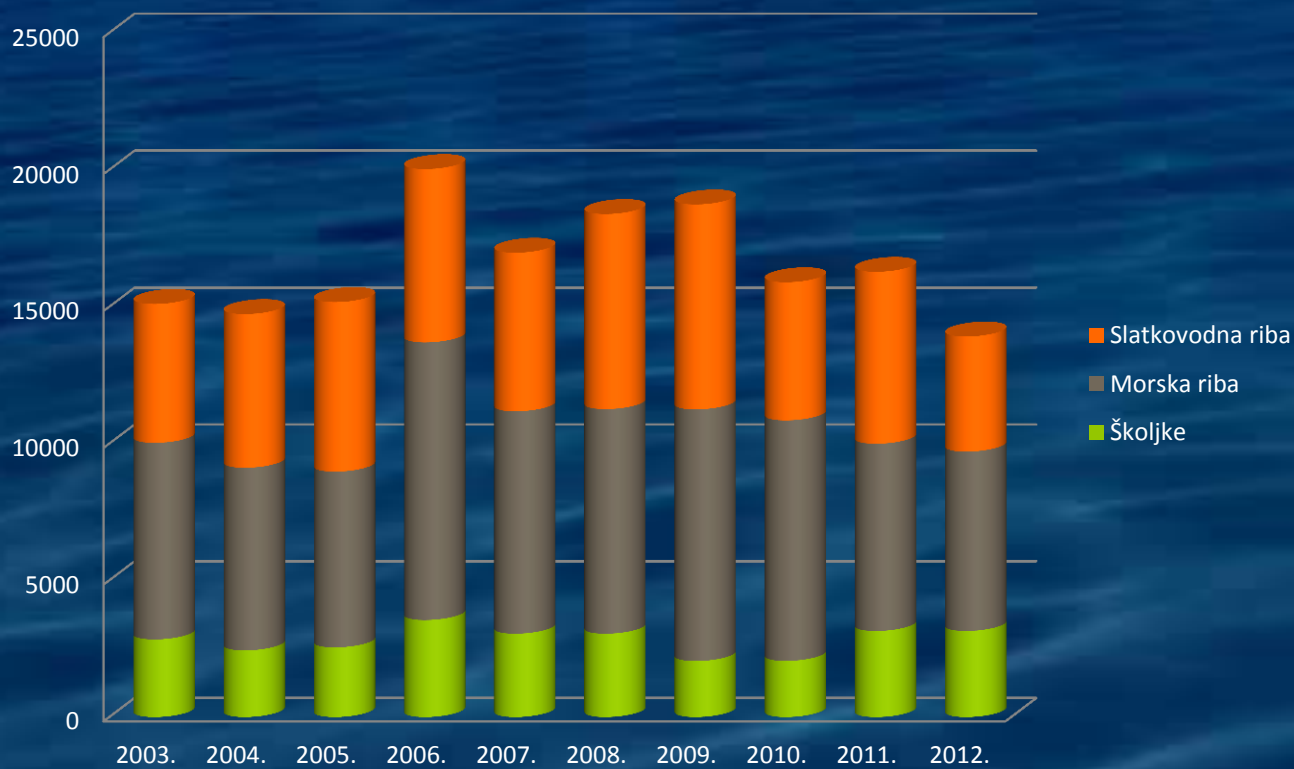
Broj zaposlenih u akvakulturi 2003-2012

Persons employed in legal persons in aquaculture



Proizvodnja u akvakulturi (t) 2003-2012

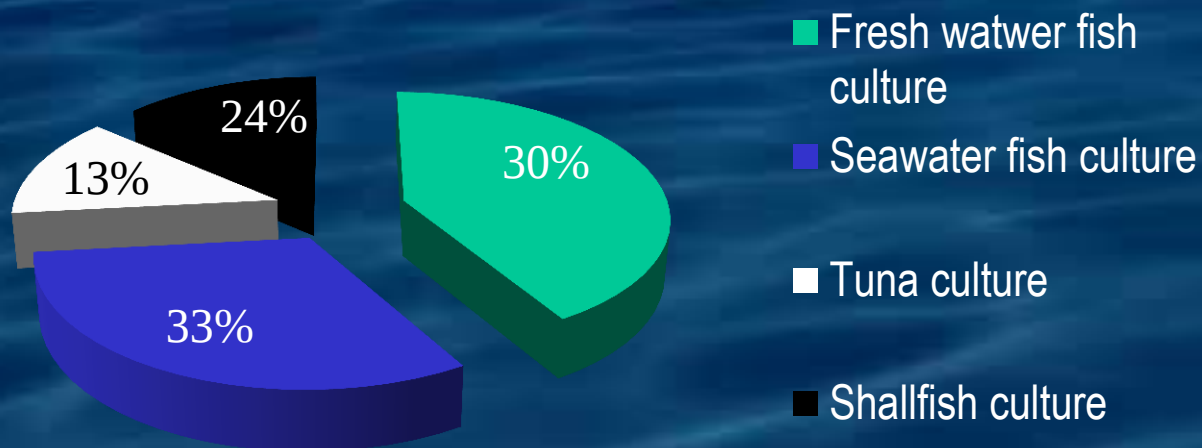
Aquaculture Production



Proizvodnja u 2012 oko 14.000

Production in 2012 14.000 tonnes of which:

4.209 t šarani & pastrve	carp & trout,
1.907 t tuna,	
4.624 t lubin & komarča	sea bass & sea bream
3.000 t dagnja&kamenica	mussels and oysters).



Održivi razvoj akvalulture 2014-2020

Sustainable development of aquaculture

Prema NSPA i dostupnim resursima RH bi u 2020 mogla doseći proizvodnju od 29.000 t

According to the national strategic projections and available resources, Croatia could achieve in 2020 an annual production of 24.050 t.

Slakovodni	freshwater:	6.050
Morski	marine:	18.000 t

Lubin&komarča	bass&bream:	10.000 t
Školjke	Shellfish:	5.000 t
Morska pastrva	Marine trout:	1.000 t
Tuna:		3.000 t (?)
Šaran	Carps:	5.000 t
Pastrva	Trout:	1.050 t

EATiP i vizija za europsku akvakulturu u 2030

EATiP and its Vision for European Aquaculture

EATiP – Europska tehnološka platforma za akvakulturu

European Technology Platform for Aquaculture

- Održiva i globalno kompetitivna
 - Dinamična aktivnost u obalnoj i ruralnoj ekonomiji
 - 4,5 mil. t kvalitetnih nutritivnih proizvoda u harmoniji sa prirodom i društvom.
 - Vrijednost ex farm 14 milijardi €,
 - Više od 150.000 radnih mjesta
-
- Sustainable and globally competitive
 - Dynamic activity in coastal and inland economies
 - 4,5 million tons of sustainable food products
 - Worth € 14 billion
 - 150.000 direct jobs supporting

EATiP 3 glavna prioriteta 3 core priorities

Uspostaviti snažnu vezu industrije akvakulture i potrošača

Osigurati održivi sektor akvakulture

Konsolidirati ulogu i značaj akvakulture u društvu

Establish a stronger relationship between the aquaculture industry and the consumer

Assure a sustainable aquaculture sector

Consolidate the role and importance of aquaculture in society

Ujedinjeni efekt scenarija rezultirati će godišnjim prosječnim rastom proizvodnje 3.1%

The combined effect of these scenarios would result achieving average annual growth of 3.1 %

Procjene rasta proizvodnje

Growth Forecast

Slatkovodni uzgoj – Freshwater:

Glavne vrste ostaju šaran i pastrva, diverzifikacija&nove djelatnosti

Rast 41%, godišnje 1.5%, 136.00t (41%), 337 M€ (39%)

FCR pada na 0.9(-15%)

Produktivnost po zaposleniku + 50%

Mediterranski uzgoj – Mediterranean

Glavne vrste lubin,komarča, list, hama, romb

Rast veći od 100%, 4% godišnje, 305.000 t (112%), 1.449 M€ (113%)

FCR pada na 1.2 (-35%), preživljavanje mlađi raste 20%

Produktivnost po zaposleniku +30%

Morski hladnovodni uzgoj

Losos ostaje glavnom vrstom, više offshore uzgoja, multifunkcionalne farme

Rast veći od 100%, 4% godišnje, 1,350.000 t (107%), 4.130 M€ (108%)

FCR pada na 1.2% (-20%)

Produktivnost po zaposleniku +50%



Antička povijest

Ancient history

Marie-Brigitte Carre

Aix Marseille Université-CNRS

Vladimir Kovačić

Županijski muzej, Poreč

County Museum, Poreč

Prema sadašnjim procjenama i stavovima nalazi kod rta Kupanja (1998-2009) odnose se na bazene (ribnjaci) za uzgoj riba, a bazeni u uvali Busija (2011-2013) mogli su služiti za „predrast mlada” ili sakupljalište riblje mladi. Ovaj zadnji nalaz je jedinstven i neusporediv sa ostalima u Mediteranu

According to current assessment and opinions the findings reffer to a fish pond at the cape Kupanja (1998-2009) and the fish pond in the bay Busuja (2011-2013?), that might have served as a “nursery-hatchery”, or „fingerlings collecting site”. This last finding is unique and is not comparable with others in the mediterranean area.

Zajedničko ekspertno mišljenje o cjelini nalaza bit će donijeto nakon završetka istraživanja.

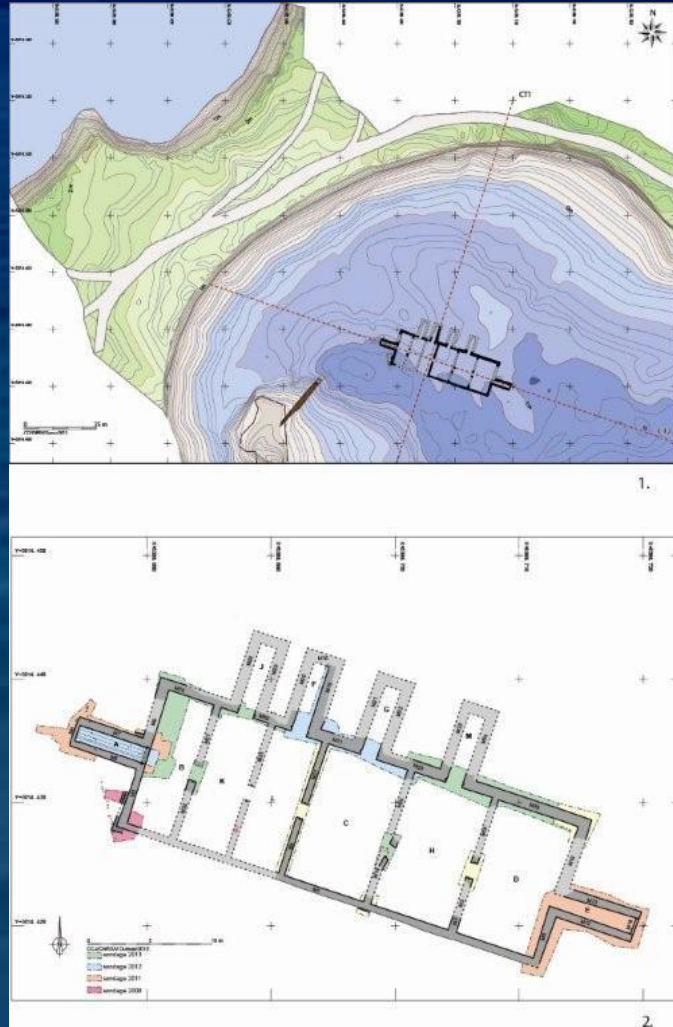
A conjoint expert opinion on the overall findings will be adopted after completion of the research.

City of Porec – Location: Cervar Porat

Period: I century



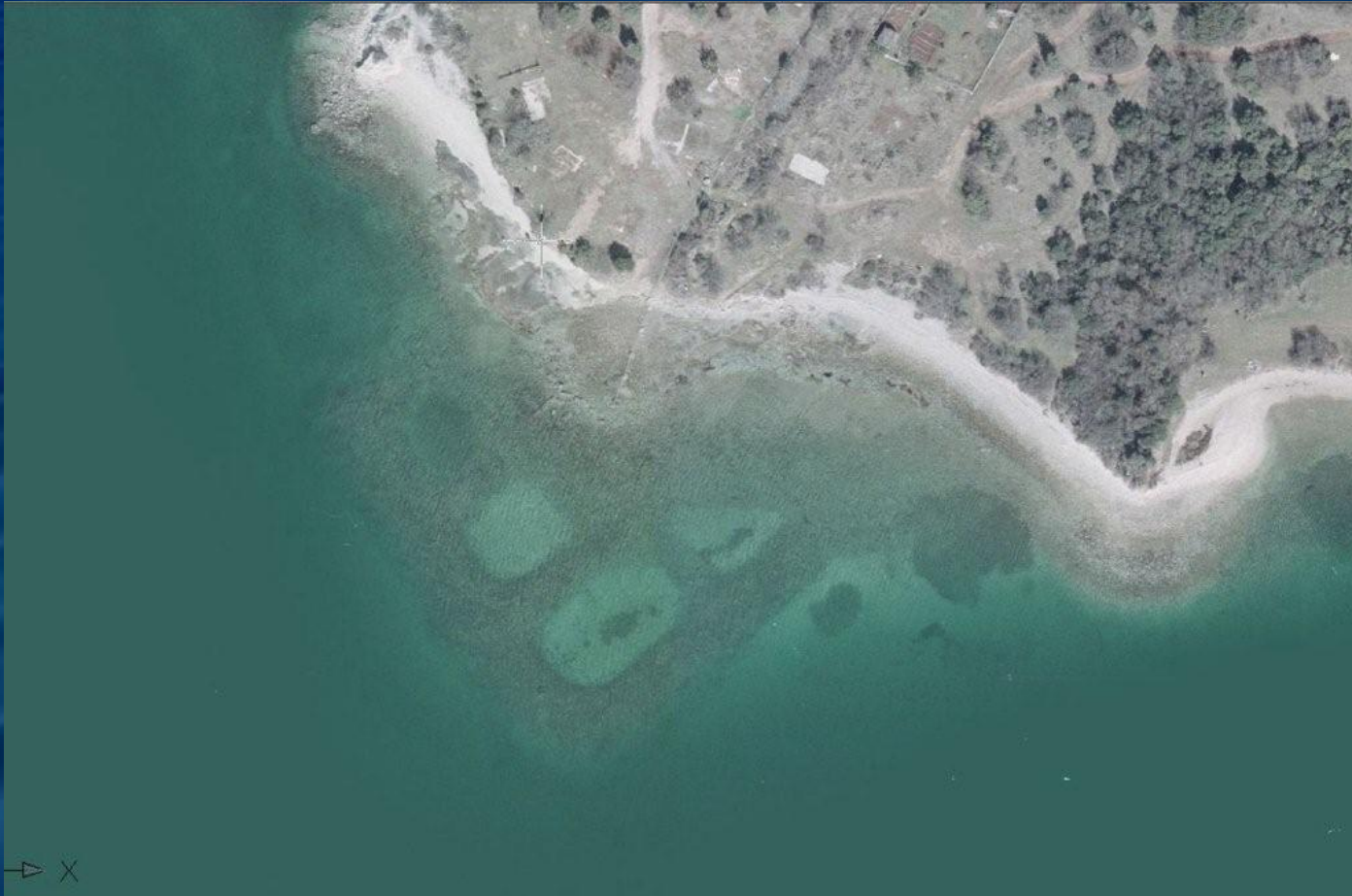
Skica „mrijestilišta” Sketch of „hatchery”



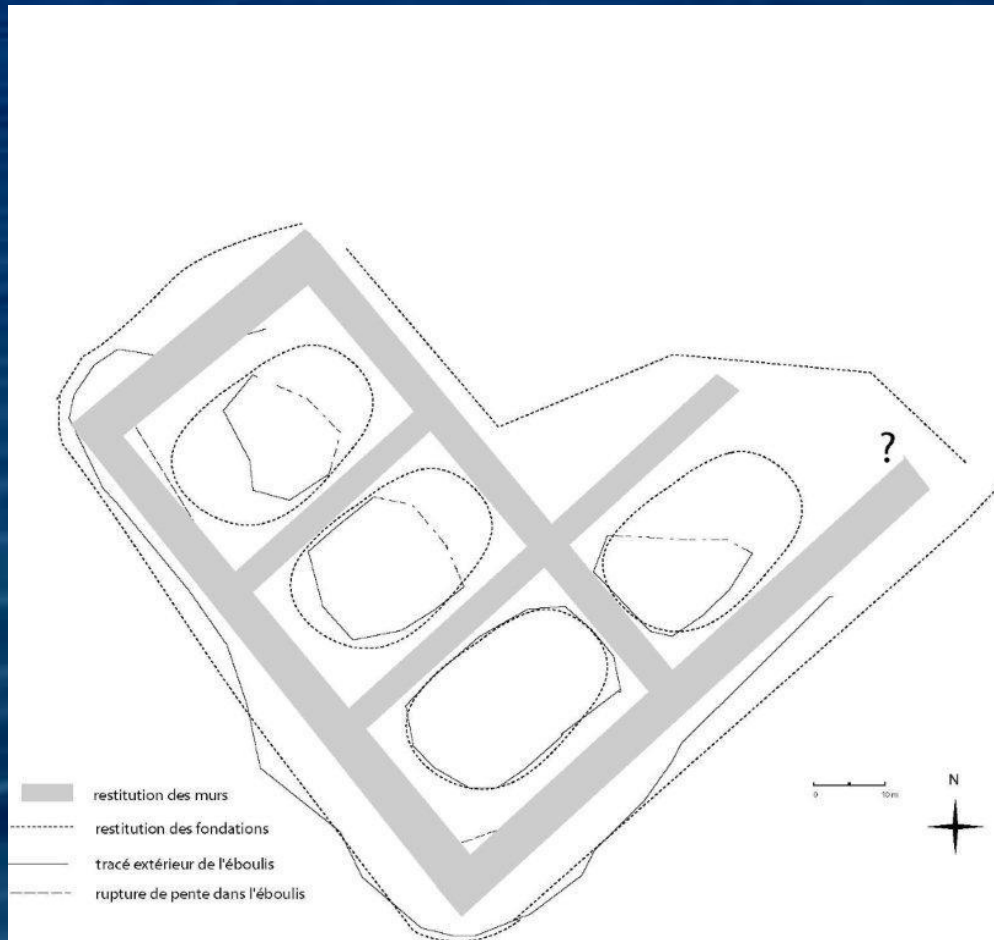
Bočni manji bazeni sa ustavom
Lateral smaller basins with barrier



Bazeni za rast Basins for ongrowing



Ukupna površina 7.000 m², jedinična površina 700-800 m²
Total area of 7.000 m² Surface of the basin 700-800 m²



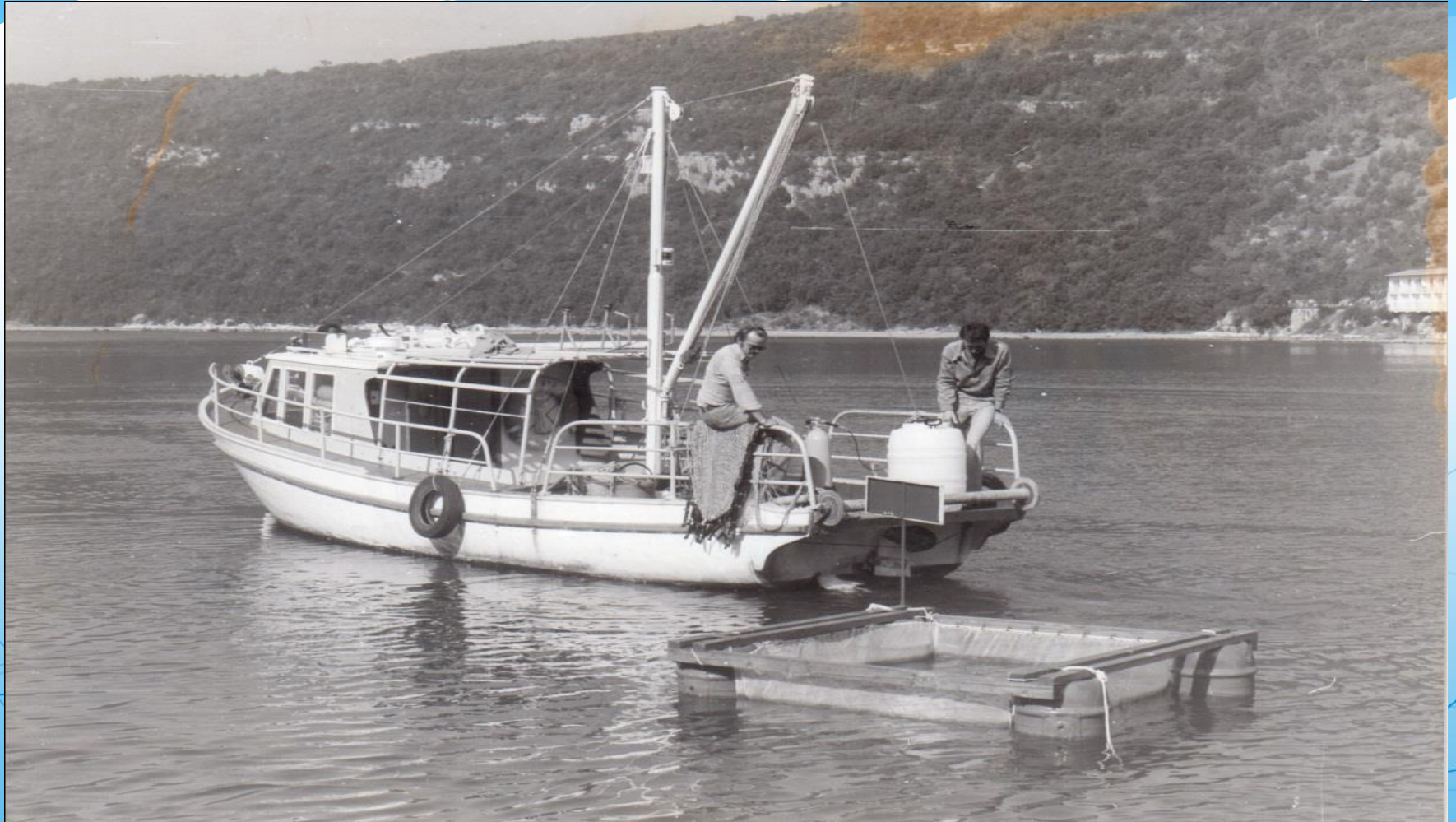


Novija povijest

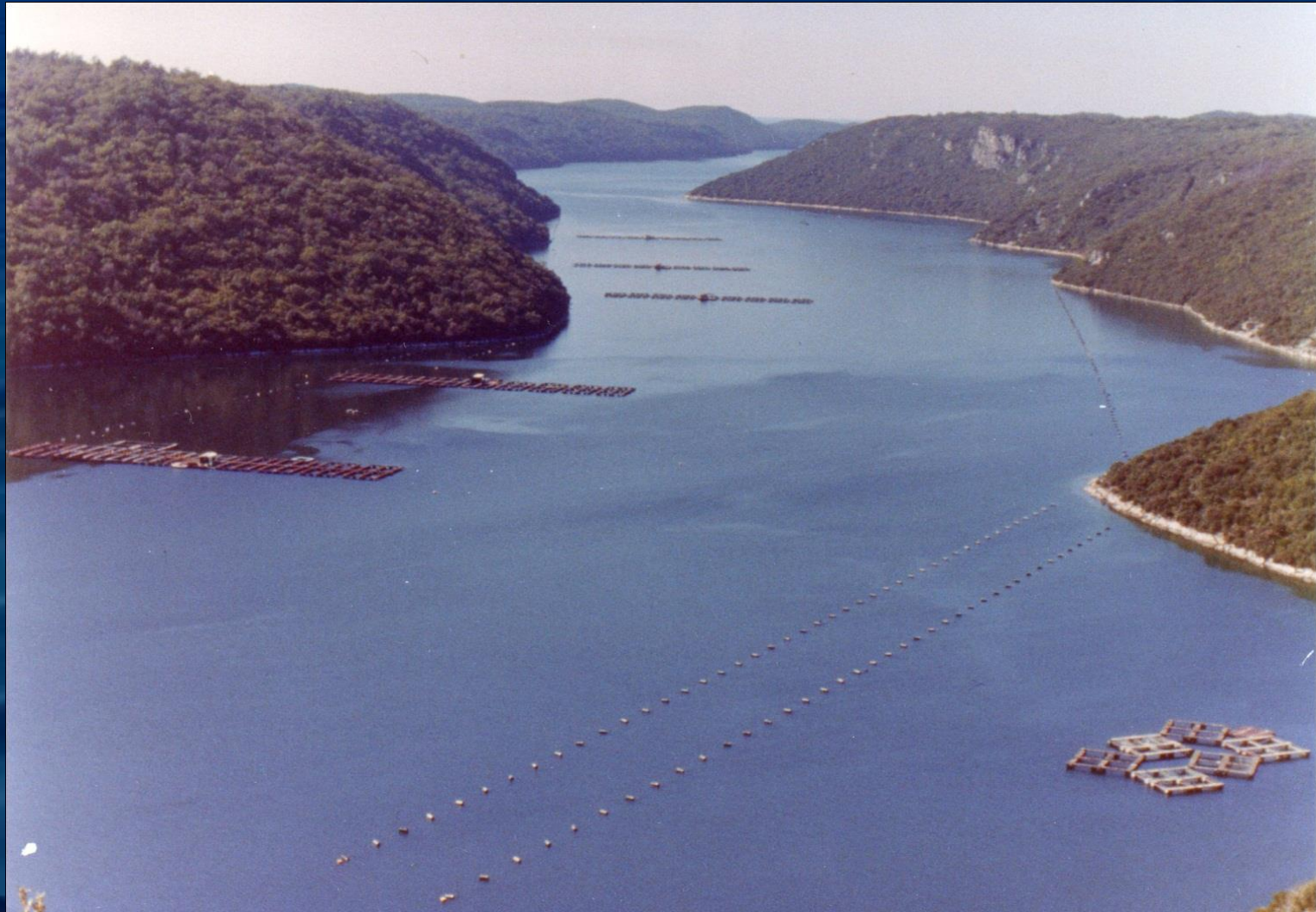
Recent history

**Mlađ lubina iz laboratorijskog mrijestilišta prenesena u kavez 8m³.
Limski zaljev, 1976.**

The first sea bass fingerlings. Floating cage (8m³), Lim bay (1976)



1981.



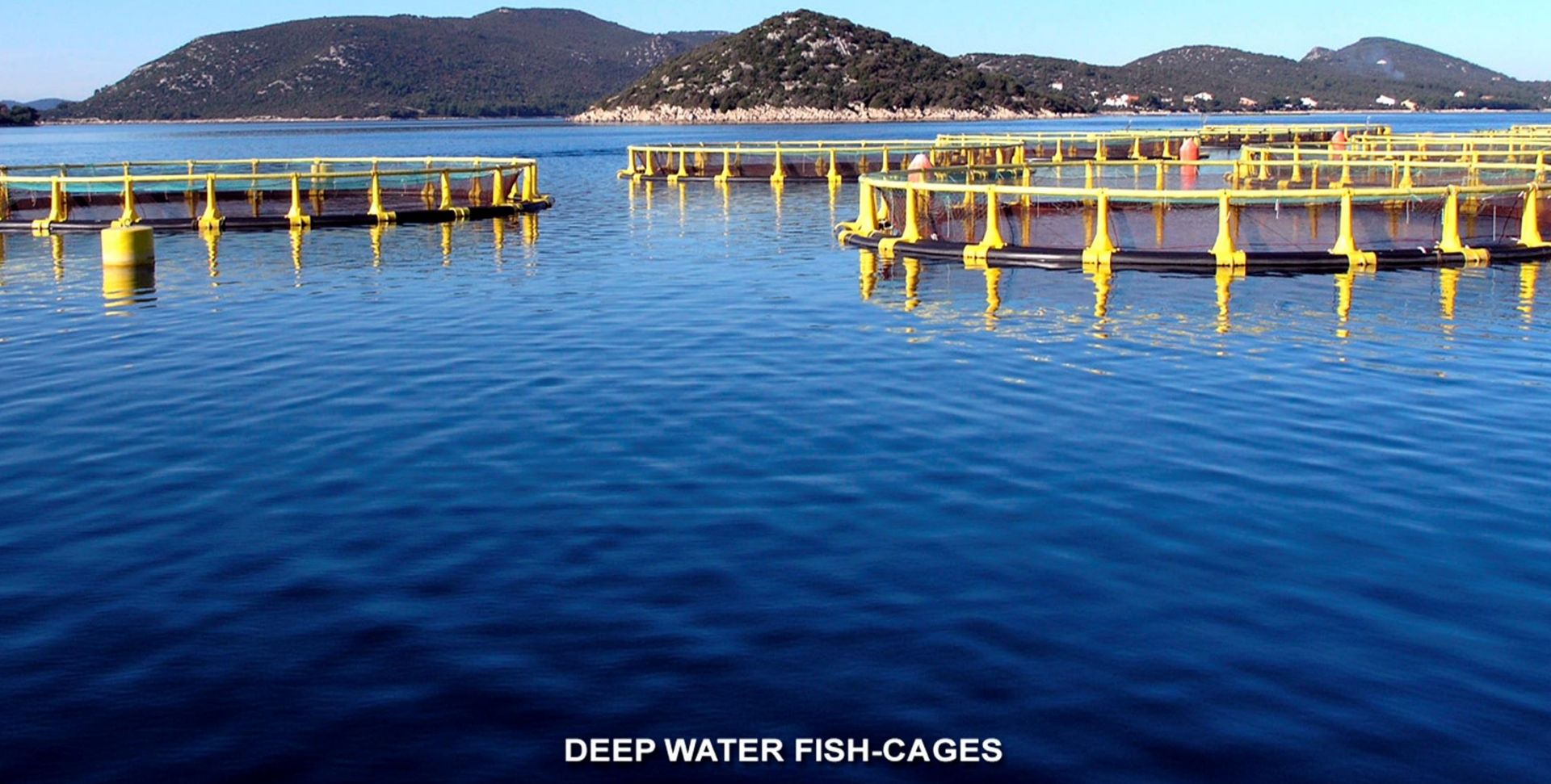
1981.



2002



CENMAR
Zadar - Croatia



DEEP WATER FISH-CAGES

Cromaris-Zadar, 2012.



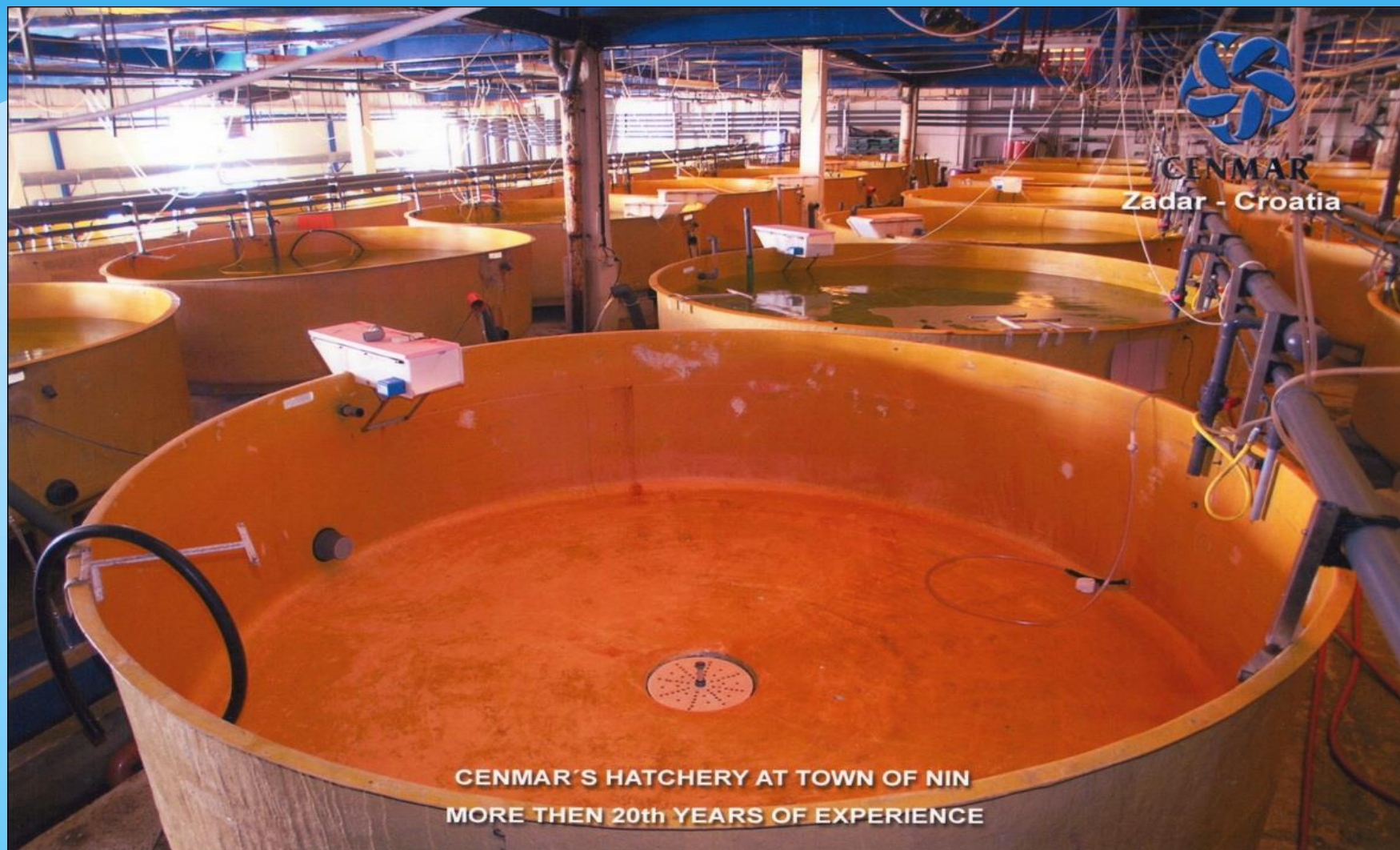
Sjedište, mrijestilište i otpremni centar 1986.

Headquarter, hatchery and dispatch center



Mrijestilište u Ninu, kapaciteta 10 mil. mlađi, Cenmar 1981.

Hatchery hall at Nin , cap. 10 mil. fingerlings



The development of marine aquaculture in Croatia from 1980 to further

Do devedesetih godina uvjeti za razvoj akvakulture bili su dobri, prije svega zbog povoljnog tržišta, razvijene obale i čiste morske vode. Cijena ribe u to vrijeme bila je vrlo visoka (oko 15€/kg za 200/300 g/kom)

Until the 1990s, the development of aquaculture has had potential , primarily because of favorable market, developed coast line and clean sea water. Price of fish at that time was very high (cca15 €/kg for 200/300 g/pc)



Neki primjeri uzgajališta i ribnjaka

Some examples of farms and ponds

Ribnjaci „Krčić”, Knin

**4.400 m² production area, 2.000m² settling tanks,
100-150 t**



Ribnjaci „Krčić”, Knin



Ribnjačarstvo Poljana d.d.

1.300 ha - 600 t



Ribnjačarstvo Poljana d.d.



Ribnjačarstvo Poljana d.d.



Ribnjačarstvo Poljana d.d.

Eel ongrowing



Ribnjačarstvo Poljana d.d.

Eel farm-RAS (100 t)(AS



Crna Mlaka d.d.
600 ha – 300 t, Ornithological reserve



Crna Mlaka d.d.



Crna Mlaka d.d.



Crna Mlaka d.d.



Crna Mlaka d.d.



Crna Mlaka d.d.



Crna Mlaka d.d.



PP Orahovica d.d.
2.800 ha – 1.500 t



2012/06/16

PP Orahovica d.d.



PP Orahovica d.d.



PP Orahovica d.d.



PP Orahovica d.d.



Cromaris d.d. Zadar, 6 farms-6000 t

Headquarter , processing and dispatch center



Cromaris d.d, Zadar



Cromaris d.d, Zadar





Lim bay-organic production 300 t



Cromaris d.d, Zadar



KALI TUNA d.o.o. Kali
34 Cages
Tuna farming, Capacity 5000 tons



KALI TUNA d.o.o. Kali



KALI TUNA d.o.o. Kali



KALI TUNA d.o.o. Kali



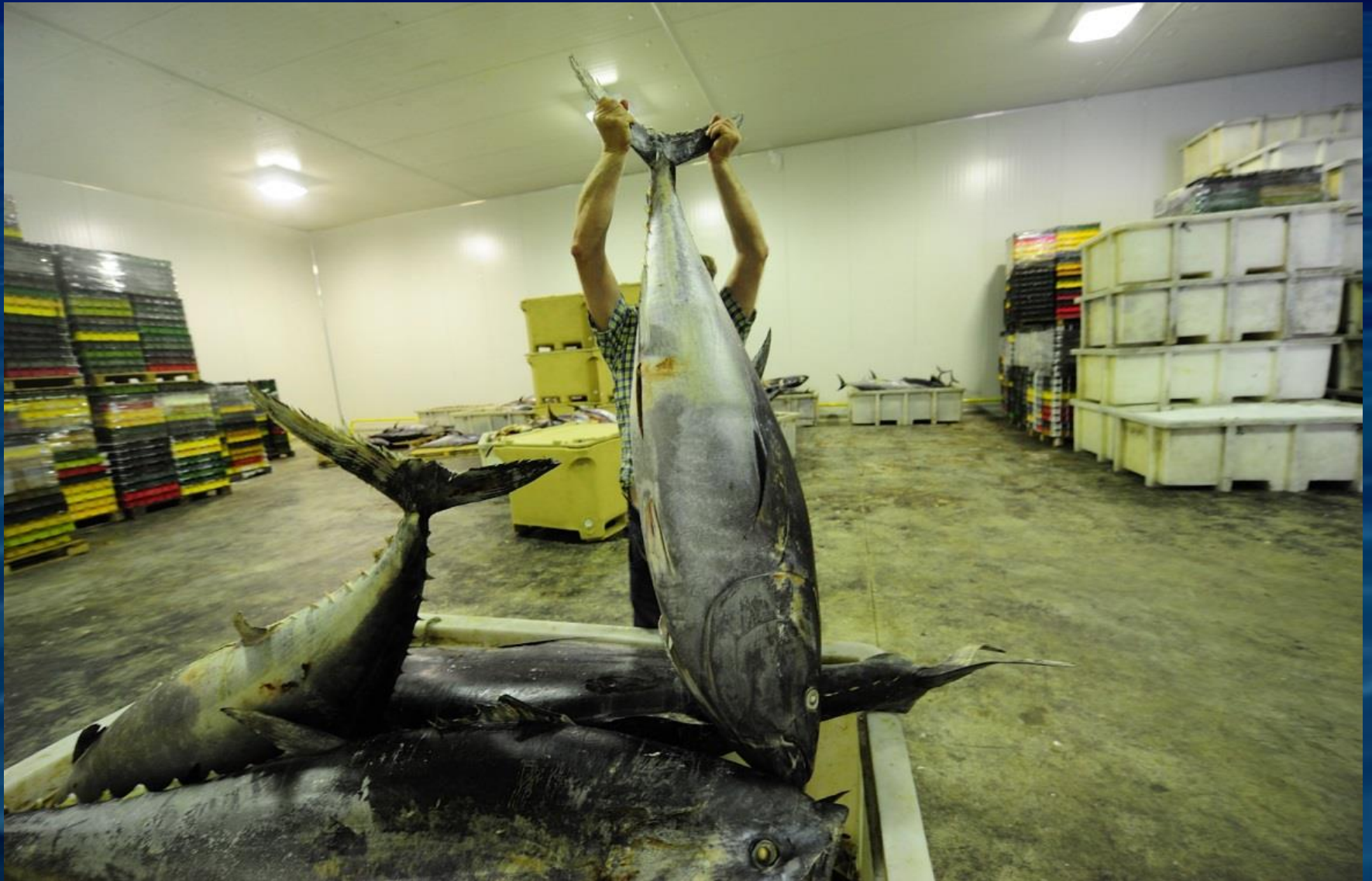
KALI TUNA d.o.o. Kali



KALI TUNA d.o.o. Kali



KALI TUNA d.o.o. Kali



Commercial products



Smoked products



Marinated fillets



Sea bass

Packed in in a controlled atmosphere



Sea bream

Packed in a controlled atmosphere



Hvala
Thank You

