Market for carps in Europe and types of products

Ekaterina Tribilustova

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Structure of the presentation

- Overview of carp market in the EU
- Production and development of prices
- Demand and obstacles for carp products
- Case study of innovative equipment
- Promotional campaigns
- Conclusions
Carp market in the EU

Development of aquaculture production in the European Union (in tonnes) by groups:

<table>
<thead>
<tr>
<th></th>
<th>European countries</th>
<th>EU countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total aquaculture output (tonnes)</td>
<td>1 800 000</td>
<td>665 302</td>
</tr>
<tr>
<td>Carps (tonnes)</td>
<td>64 061</td>
<td>60 861</td>
</tr>
<tr>
<td>Carp %</td>
<td>3,5%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Common carp – 94%, Silver carp – 4%, Grass carp – 2%
Carp market in EU

Leading European producers of common carp (output in tonnes)

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>17507</td>
<td>17258</td>
<td>17746</td>
</tr>
<tr>
<td>Poland</td>
<td>17000</td>
<td>16000</td>
<td>16000</td>
</tr>
<tr>
<td>Hungary</td>
<td>10485</td>
<td>10500</td>
<td>9927</td>
</tr>
<tr>
<td>Germany</td>
<td>10500</td>
<td>9000</td>
<td>9000</td>
</tr>
<tr>
<td>France</td>
<td>6000</td>
<td>6000</td>
<td>4000</td>
</tr>
<tr>
<td>Croatia</td>
<td>2200</td>
<td>1500</td>
<td>3100</td>
</tr>
</tbody>
</table>
Carp market in EU

Leading European producers of Grass carp (output in tonnes)

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>550</td>
<td>550</td>
<td>550</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>394</td>
<td>409</td>
<td>488</td>
</tr>
<tr>
<td>Hungary</td>
<td>591</td>
<td>600</td>
<td>437</td>
</tr>
</tbody>
</table>
Carp market in EU

Leading European producers of Silver carp (output in tonnes)

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hungary</td>
<td>2483</td>
<td>600</td>
<td>1080</td>
</tr>
<tr>
<td>Poland</td>
<td>600</td>
<td>600</td>
<td>600</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>586</td>
<td>601</td>
<td>583</td>
</tr>
<tr>
<td>Croatia</td>
<td>250</td>
<td>420</td>
<td>100</td>
</tr>
</tbody>
</table>
Carp market in the EU

Development of carp production (in tonnes) and value (in EUR million) in European countries
Carp trade: Czech case study

Developments of Czech exports of carp (in tonnes and in EUR thousands)

(2010) Live carp – 7,998 tonnes or 98% of the total carp export volume
Fresh and chilled whole carp – 87 tonnes or 1% of the total carp exports
Frozen whole carp – 107 tonnes or 1% of the total carp exports
Carp trade: Czech case study

- Top-importers: Germany, Poland, Slovakia, Austria
- Emergent importing countries: Denmark
- Positive developments (2010/2009): Poland, Denmark

2005: 7,733 tonnes of carp
- Germany: 41%
- Slovakia: 19%
- Poland: 16%
- Austria: 8%
- France: 5%
- Hungary: 4%
- Other: 4%

2010: 8,192 tonnes of carp
- Germany: 38%
- Poland: 29%
- Slovakia: 12%
- Austria: 7%
- France: 5%
- Hungary: 2%
- Denmark: 2%
- Others: 3%
Carp trade: Czech case study

Development of export prices for carp (EUR per kg)

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>2,18</td>
<td>2,63</td>
<td>2,8</td>
<td>2,64</td>
</tr>
<tr>
<td>Germany</td>
<td>2,13</td>
<td>2,58</td>
<td>2,33</td>
<td>2,28</td>
</tr>
<tr>
<td>Italy</td>
<td>2,15</td>
<td>2,73</td>
<td>2,46</td>
<td>2,71</td>
</tr>
<tr>
<td>Denmark</td>
<td>1,83</td>
<td>1,91</td>
<td>1,75</td>
<td>1,8</td>
</tr>
<tr>
<td>Belgium</td>
<td>2,12</td>
<td>2,33</td>
<td>2,3</td>
<td>2,55</td>
</tr>
<tr>
<td>Austria</td>
<td>2,18</td>
<td>2,54</td>
<td>2,61</td>
<td>2,58</td>
</tr>
<tr>
<td>Poland</td>
<td>1,94</td>
<td>2</td>
<td>1,77</td>
<td>1,9</td>
</tr>
<tr>
<td>Slovakia</td>
<td>1,84</td>
<td>2,26</td>
<td>1,93</td>
<td>2,21</td>
</tr>
</tbody>
</table>
Development of prices

Average price in EUR per kg for carp species (ex-farm) in European countries

<table>
<thead>
<tr>
<th>Year</th>
<th>Common carp</th>
<th>Grass carp</th>
<th>Silver carp</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>1.73</td>
<td>1.55</td>
<td>0.63</td>
</tr>
<tr>
<td>2003</td>
<td>1.63</td>
<td>1.7</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>1.76</td>
<td>2.07</td>
<td>1.21</td>
</tr>
<tr>
<td>2005</td>
<td>1.6</td>
<td>1.65</td>
<td>0.75</td>
</tr>
<tr>
<td>2006</td>
<td>2</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td>2007</td>
<td>1.93</td>
<td>1.94</td>
<td>1.2</td>
</tr>
<tr>
<td>2008</td>
<td>2.57</td>
<td>1.96</td>
<td>1.33</td>
</tr>
<tr>
<td>2009</td>
<td>1.95</td>
<td>1.96</td>
<td>1.39</td>
</tr>
<tr>
<td>2010</td>
<td>1.94</td>
<td>1.88</td>
<td>1.02</td>
</tr>
</tbody>
</table>
## Development of prices

### Average prices of Common carp (EUR/kg) in European countries

<table>
<thead>
<tr>
<th>Year</th>
<th>Austria</th>
<th>Croatia</th>
<th>Czech Republic</th>
<th>Hungary</th>
<th>Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>1,72</td>
<td>1,72</td>
<td>1,7</td>
<td>2,04</td>
<td>1,5</td>
</tr>
<tr>
<td>2003</td>
<td>1,63</td>
<td>1,63</td>
<td>1,55</td>
<td>1,63</td>
<td>1,7</td>
</tr>
<tr>
<td>2004</td>
<td>1,76</td>
<td>1,76</td>
<td>1,57</td>
<td>1,76</td>
<td>1,94</td>
</tr>
<tr>
<td>2005</td>
<td>1,6</td>
<td>1,6</td>
<td>1,6</td>
<td>1,6</td>
<td>1,6</td>
</tr>
<tr>
<td>2006</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2007</td>
<td>1,93</td>
<td>1,93</td>
<td>1,85</td>
<td>1,93</td>
<td>2</td>
</tr>
<tr>
<td>2008</td>
<td>2</td>
<td>2</td>
<td>1,85</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2009</td>
<td>1,93</td>
<td>2</td>
<td>1,85</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2010</td>
<td>2,2</td>
<td>2</td>
<td>1,85</td>
<td>1,98</td>
<td>2</td>
</tr>
</tbody>
</table>
Development of prices

Seasonal prices for common carp products in Hungary in 2010 (EUR/kg)
Demand and obstacles for carp

– Demand meets strong competition from other cheaper species;
– Consumption market is limited to:
  • Central and Eastern Europe,
  • Festive periods (X-mas, Easter),
  • Home consumption

<table>
<thead>
<tr>
<th>Product obstacles</th>
<th>CEE countries</th>
<th>Extra-CEE countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too many bones</td>
<td></td>
<td>Too many bones</td>
</tr>
<tr>
<td>Difficulty in preparations</td>
<td></td>
<td>Difficulty in preparations</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>“Not high gastronomic experience”</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>Specific muddy taste</td>
</tr>
<tr>
<td>Lack of product innovation</td>
<td></td>
<td>Lack of product innovation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Old-fashion image</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Difficult to find in retail and Ho-Re-Ca sectors</td>
</tr>
</tbody>
</table>
Current needs

- Need for new products to revive market and expand sales season:
  - fillets,
  - organic products,
  - breaded products,
  - «ready-to-eat products»,
  - «every day products»,
  - elimination of bones!

- Need for promotional campaigns,

- Increase of consumption in HoReCa sector and better availability in the retail sector
Commercial carp products

• Gutted and headed fish
• Semi-fillets (fillets with ribs)
• Fillets
• Minced carp meat (canned products, fish cakes and fish fingers)

Solutions to product obstacles:

- “Muddy taste” is improved by transferring fish to natural spring water for a few weeks before harvest;
- Inconvenience of bones in carp products is one of the reasons for demand drop – bone cutting machines.
Bones can be neutralized by several ways:

- Heat treatment which makes boned harmless for consumers,
- Removal of bones by pulling them out of the muscular tissue.

Difficulties with carp products:

- Headed and gutted carp – it is prevented by skin obscuring the bones,
- Semi-fillets and fillets – too little tensile strength of the bones compared to their attachment to the muscular tissue.
Case study of innovative equipment

• Sea Fisheries Institute in Gdynia, Poland and results of R&D work of SEAFOODplus.

• The easiest way to neutralize bones in commercial carp products is cutting them into very small and non-perceptible pieces (1 kg carp – 120 cuts at each side, by 3 mm).

• Three bone cutters were developed: for headed & gutted carp, semi-fillets and fillets. Portable bone cutter.

http://www.eurofishmagazine.com/magazine/all-issues/143-em-4-2010

Andrzej Dowgiallo, Sea Fisheries Institute in Gdynia
Variants of fish bone cutters for carp

Bone cutter machine for headed and gutted carp

- Carp is notched at both sides cutting bones in 3 mm parts while the spine bone remains untouched,
- Dimensions of machine -850/850/430 mm
- Size of processed fish to 500 mm long,
- Capacity to 25 fish/min,
- Operation – 1 person.
Variants of fish bone cutters for carp

Bone cutter for semi-fillets

- Semi-fillet moves under three sets of rotating knives
- Dimensions: 1300/900/1100 mm,
- Capacity – to 30 fillets/min,
- Size of the fillets – to 310 mm/length
- Operation – 1 person
Case study of innovative equipment
Bone cutter machine for carp fillets and portable bone cutter

Technical characteristics:
- Dimensions 600/600/500 mm,
- Capacity – to 30 fillets/min,
- Size of fillets – to 310 mm/length
- Operation – 1 person

Technical characteristics:
Dimensions 590/340/470 mm,
Capacity – to 50 fillets,
Size of fillets – to 400 mm,
Operation – 1 person
Promotional campaigns – Poland

“Carp International Conference” – Mr. Zbigniew Szczepański (Towarzystwo Promocji Ryb):

According to a survey conducted in 2010 on behalf of IFI in Olsztyn:

• Carp is the third top-selling fish in Poland
  79% of adult Poles bought carp at Christmas,

• But - as much as 40% of Polish women buy carp only because of tradition.

• Others do not buy carp because of:
  - too many bones,
  - inadequate taste,
  - problem of its preparation.

• What to do to convince those who still do not eat carp?
Promotional campaigns – Poland

5 promotional campaigns in the period 2005-2009 at the cost of EUR 1.8 million.

Major efforts were focused on:

1) Development of a common “Mister Carp” logo for all producers,
2) Issuing certificates,
3) Development of www.pankarp.pl,
4) Production of labeled clothing to increase identification of producers and product
Promotional campaigns - Poland

- Promotional plan for 2011: 19 cities and regions of Poland,
- Promotion actions among children (several hundred kindergartens, schools, day centers, community centers, Polish schools abroad),
- Each year children make more than ten thousand works of art about carp,
- TV commercials, exhibitions, trade fairs and other field events.
Promotional campaigns – Poland

Survey done by Fish Industry Magazine in Poland (Mr. Kulikowski):
“Opinion on carp after the promotion”

Carp is a specially tasty fish
- 46% I agree
- 18% Rather I agree
- 9% Not yes, nor not
- 11% Rather do not agree
- 14% I do not agree
- 2% I do not know

Carp is an important element of Christman tradition
- 76% I agree
- 15% Rather I agree
- 3% Not yes, nor not
- 4% Rather do not agree
- 3% I do not agree
- 4% I do not know

I buy carp only becouse of Christmas tradition
- 26% I agree
- 14% Rather I agree
- 7% Not yes, nor not
- 18% Rather do not agree
- 31% I do not agree
- 4% I do not know
Promotional campaigns – Poland

Have you seen last time Pan Carp advertisement?

Do you know Pan Carp brand?

I'm not sure 9%  
YES 20%  
No 72%
Promotional campaigns - Hungary

www.aranyponty.hu
Promotional campaigns - Germany

www.erlebnis-fisch.de
Promotional campaigns – The Czech Republic

www.rybadomaci.cz
Promotional campaigns - Lithuania

- 6 months (138 thousand Euro)
- Calendars, leaflets and folders of recipes for carp, showing the benefits of health,
- Education materials and cooking the meat of carp,
- Folders on organic fish farming in Lithuania together with the addresses of fish farms,
- Press Releases
Carp case: the UK

• “Small-scale carp farming courses” at Upper Hayne Farm,
• Encouraging Britain’s 2 million garden farm owners to farm carp,
• Signs for changing image of carp in Britain,
• Carp was well-scored in blind-taste by Fearnley-Whittingstall,
• London’s El Vino chain of wine bars is introducing carp on its menus.
• Focus on Eastern Europeans,
• Eco-conscious consumers
Conclusions

• Carp is sustainable answer to the world’s growing demand for food;

• Carp market focuses on CEE consumers, both in CEE and Western countries;

• Need to revive consumption of carp through organized national campaigns focused both at adults and young generation;

• Active national promotion and education in schools/kindergartens and HoReCa sector;
Conclusions

• Boost of demand by new products and new technologies;

• Revival of positive and attractive image through media. Reconnection of best historical traditions and festive atmosphere of carp eating with new consciousness;

• Focus on eco-concept and sustainability.
Thank you for your attention!