XXII CONFERENCE
OF THE EUROPEAN ASSOCIATION OF FISHERIES ECONOMISTS

New management issues within
the reformed Common Fishery Policy:
implementation and socio-economic impacts

CONFERENCE PAPERS

Salerno, Italy > April 28 | 30
XXII EAFE (European Association of Fisheries Economists) Conference.
Salerno (Italy) – April 28-30, 2015

Conference Web Site:  [www.eafe2015.unisa.it](http://www.eafe2015.unisa.it)
Email eafe2015@unisa.it
Tw @EAFE2015
YouTube [https://www.youtube.com/channel/UCmjAPpZCX-cXuQpseiC75WA](https://www.youtube.com/channel/UCmjAPpZCX-cXuQpseiC75WA)

Scientific Committee
• Gianluigi Coppola (Chair - University of Salerno, IT)
• Ikerne Del Valle (University of Basque Country, ES)
• Bertrand Le Gallic (University of Brest, FR)
• Rasmus Nielsen (University of Copenhagen, DK)
CAN TV PROGRAMS IMPROVE THE COMPETITIVENESS OF EUROPEAN SEAFOOD PRODUCTS? EXPLORATORY RESULTS FROM THE SUCCESS PROJECT\textsuperscript{1}.

Bertrand LE GALLIC\textsuperscript{2}, Myriam NOURRY\textsuperscript{3}, Claudio PIRRONE\textsuperscript{4}

ABSTRACT

The market of seafood products is characterised by a global demand which is increasing, and expected to further increase in the future. However, under current trade agreement, EU seafood producers are not able to reap the full benefits of the seafood market. The EU H2020 SUCCESS project aims at improving the competitiveness and economic sustainability of the European Seafood sector. A part of the project deals with the understanding of the consumption patterns in different European Countries. Within this context, this contribution aims to start exploring the links between popular cooking shows and seafood consumption patterns. A three stages approach has been followed, including the development of an online questionnaire. Preliminary results indicate that cooking shows seems to encourage the seafood consumption experience.

Key words: Seafood; Sustainability; SUCCESS; Consumer; Cooking Show

Jel Codes: Q22; M37

\textsuperscript{1} This study is financed by the EU Horizon 2020 SUCCESS project (grant agreement 635188).
\textsuperscript{2} University of Brest, UMR AMURE, Brest (France). e-mail: bertrand.legallic@univ-brest.fr
\textsuperscript{3} University of Brest, UMR AMURE, Brest (France). e-mail: myriam.nourry@univ-brest.fr
\textsuperscript{4} University of Brest, UMR AMURE, Brest (France). e-mail: claudio.pirrone@univ-brest.fr
1 Introduction

1.1 The Seafood Market

According to the World Bank forecasts, the global demand for fishery products is expected continuing to increase at strong pace: a growth of around 27% in total food fish consumption (in volume) between 2010 and 2030 is mentioned. This evolution is predicted to rely on world demography, whereas per capita consumption would be likely to remain rather stable (The World Bank 2013). As for the “Europe and Central Asia” region, which includes EU, total consumption in volume is awaited to increase by 8.1% and per capita consumption by 0.2% only. Recent statistics about EU per capita apparent consumption between 2008 and 2011 seems to corroborate such previsions (EUMOFA 2014)\(^5\).

As for the suppliers, EU Seafood producers are competing on the global markets: they compete for captures and for market opportunities. Under current trade agreement, European Seafood producers are not able to reap the full benefits of the seafood market (Commission Européenne 2009). In this context, EU production continue to decline since 2005 and the self sufficiency rate stays still around 45% (EUMOFA 2014).

1.2 The assumption tested

The H2020 SUCCESS project aims at improving the competitiveness and economic sustainability of the European Seafood sector. A section of SUCCESS is devoted to the understanding of the consumption patterns in different European Countries, as well as to suggest some lines of thought for practical action at consumers and retailers level.

For the purposes of the present contribution, it is acknowledged that there is a growing consciousness about the links between cooking shows and food consumptions patterns. Some echoes of the debate can be found in the fields of nutrition science (cf. Pope et al. 2015: 131–135); sociology of consumption (cf. Blandin 2012); communication and even in general press\(^6\). However, to the best of our knowledge, little evidence is available in economic literature.

\(^5\) Per capita consumption fell by \(5.3\)% in the period, with an increase for captured products and a parallel decline in farmed ones. However, per capita consumption slightly rose in 2011 referring to 2010.

\(^6\) “There's no denying the profound effect that MasterChef and the unstoppable Jamie Oliver have had on the way we think about our daily food ...” (Kalina 2014).
In the aim of filling the gap, this paper presents an exploratory work undertaken at University of Brest, France, investigating about the development of food and cooking TV shows, and their likely effects on diet decisions.

2 Methodology

The study followed three steps: a) an inventory of past and existing TV culinary programs, in France; b) the analysis of the place of seafood products in specialised TV program; and c) an online survey to investigate if, and to which extent, these programs are actually modifying the consumption patterns of seafood products.

As for point b) we deeper focused on Masterchef, one of the most popular cooking shows in France\(^7\), and we broke down the seafood presentations into market segments (whitefish, mussels and crustaceans). Concerning the survey, we decided to address the restrained audience formed by the personnel and the students of the University of Western Brittany belonging to: a) Faculty of Law, Management and Economics; b) Faculty of Letters and Arts; c) European Institute of the Sea (IUEM).

Even if this choice led to a non random sample, it showed some advantages. First, the potential audience spreads across ages (students vs. staff) and social classes, from full professors to, say, technical support staff. Second, given the functioning of French society, we thought that the prominence of women among the population might lead us to reach people who actually cook at home. Also, this population is used to surveys, so that we expected a good return rate and sincere answers. Thus, we were confident in allowing the self administration of the questionnaire\(^8\). Finally, it was a cost-saving choice, which was necessary for an exploratory work. Globally, 273 answers were collected.

3 First results

3.1 The inventory

First cooking show in France was broadcasted in 1954: “Arts et Magie de la Cuisine”. Since then, there was no blank year for TV cooking shows. However, the number of programs

---

\(^7\) According to the press, the show had an average audience of more than 5 millions viewer in 2011, and a market share of around 30% for the final the same year (http://www.toutelatele.com/masterchef-6-8-millions-pour-la-victoire-finale-d-elisabeth-36286).

\(^8\) Available at https://docs.google.com/forms/d/1xLsPG_RQmhKDWDLuIN0-bxKY21FzWCIDOeRL-ZeUdw/viewform?edit_requested=true
remains low (three or less per year) until 2000. On the contrary, numbers grew steadily in last fifteen years and 2014 marked a record with 30 programs.

Figure 1: Cooking shows per year, France.

As for the content, the most of the shows are based on the real time preparation of recipes. Some of the programs also rely on travel experience (La carte postale gourmande, Le tour de France culinaire de Sarah Wiener, ...). In more recent years, competitive formats appeared where different candidates struggle to be the best chef. In France the pioneer was Un diner Presque parfait (2008), adapted from the British program Come dine with me (2005).

3.2 The place of seafood products in Masterchef (France)

According to the official website of the show\(^9\), among the 662 recipes presented over the four seasons considered\(^{10}\), 124 were seafood based courses (18.7\%). Fish based recipes accounted for 68\% of them, followed by molluscs (19\%) and shellfishes (13\%).

Table 1: Top 10 species in Masterchef recipes (% on seafood recipes)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Salmon</td>
<td>18</td>
<td>14.5%</td>
</tr>
<tr>
<td>Octopus</td>
<td>16</td>
<td>12.9%</td>
</tr>
<tr>
<td>Sea Bream</td>
<td>11</td>
<td>8.9%</td>
</tr>
<tr>
<td>Cod</td>
<td>10</td>
<td>8.0%</td>
</tr>
</tbody>
</table>

---

\(^9\) Source [http://www.tf1.fr/masterchef/recherche/resultat/?w_typeplat=TYPEPLAT_4&w_candidat=&w_rubrique=3417926\&w_rubrique=3417927&w_titre=](http://www.tf1.fr/masterchef/recherche/resultat/?w_typeplat=TYPEPLAT_4&w_candidat=&w_rubrique=3417926\&w_rubrique=3417927&w_titre=) The page has been updated and is no longer available. new page: [http://www.tf1.fr/tf1/masterchef/recettes-masterchef/](http://www.tf1.fr/tf1/masterchef/recettes-masterchef/)

\(^{10}\) Season 1 to 4, from August 2010 to December 2013.
Unsurprisingly, the top species in the shows matches relatively well with the most consumed and known varieties in France (cf. France AgriMer 2010), with the exception of Octopus in the TV program and the absence of Mussels or Pollock for instance.

### 3.1 The survey

Globally, 273 answers were collected. Women counted for 3 out of 4 respondents. Two thirds of people involved are less than 30 years old. Only 1 out of 9 is older than 50. Sixty percent of the respondent declared watching TV cooking shows, and 53.5% declared they prepare meals at home “regularly” or “very regularly”.

<table>
<thead>
<tr>
<th></th>
<th>Watch</th>
<th>Don't watch</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Answers</strong></td>
<td>164</td>
<td>109</td>
<td>273</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>17.68%</td>
<td>32.11%</td>
<td>23.44%</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>82.32%</td>
<td>67.89%</td>
<td>76.56%</td>
</tr>
<tr>
<td><strong>16-29</strong></td>
<td>68.29%</td>
<td>55.96%</td>
<td>63.37%</td>
</tr>
<tr>
<td><strong>30-49</strong></td>
<td>25.00%</td>
<td>26.61%</td>
<td>25.64%</td>
</tr>
<tr>
<td><strong>50-64</strong></td>
<td>6.10%</td>
<td>15.60%</td>
<td>9.89%</td>
</tr>
<tr>
<td><strong>65+</strong></td>
<td>0.61%</td>
<td>1.83%</td>
<td>1.10%</td>
</tr>
<tr>
<td><strong>Cook</strong></td>
<td>82.93%</td>
<td>9.17%</td>
<td>53.48%</td>
</tr>
</tbody>
</table>

If splitting the audience as for watching/don’t watching culinary programs it appears that, at least in our sample, people who watch are both more feminine and younger. Also, the consumption of TV cooking shows seems to be strongly correlated with a regular (or more frequent) practice of cooking at home (questions number 1 and 8, see Table 2).

If focusing specifically on the “watch” subsample, it is remarkable that more than 70% of the TV culinary programs are interested in discovering “new cooking methods and recipes”\(^\text{11}\). However, this openness seems not fully transforming in actual change of culinary habits: as matter of facts, only 1 respondent out of 5 actually replicated a recipe (see Table 3).

\(^{11}\) For comparison, only 47.5% of viewers declared to like “cooking contests”
Table 3: The “watch” subsample and cooking habits

<table>
<thead>
<tr>
<th>Answers</th>
<th>164</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wants to discover new methods and recipes</td>
<td>70.73 %</td>
</tr>
<tr>
<td>Introduced new elements in cooking</td>
<td>50.54 %</td>
</tr>
<tr>
<td>Replicated a recipe</td>
<td>20.53 %</td>
</tr>
</tbody>
</table>

There is no clear evidence about the reasons of this gap. Complementary researches on available literature were not conclusively helping, either. Among possible reasons, some unpublished sources indicate that some people find the recipes to be difficult and time spending. This seems consistent with the “contest” approach. However, we have to remind that only a minority of viewers declared to like cooking contests. This implies that there is probably room for adapting the message delivered by the shows in order to better fit the viewers’ expectations.

Specifically referring to seafood, it has to be noticed that the survey audience appears to be rather familiar with it. This is probably related to the area of Brest, where most of the respondents live, and its maritime nature. Thus, the share of people declaring consuming seafood “regularly” or “very regularly” seems to be rather high.

Table 4: The “watch” subsample and seafood

<table>
<thead>
<tr>
<th>Consumption (regularly or more often)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fish</td>
</tr>
<tr>
<td></td>
<td>58.54 %</td>
</tr>
<tr>
<td></td>
<td>Crustaceans</td>
</tr>
<tr>
<td></td>
<td>Seashells</td>
</tr>
<tr>
<td></td>
<td>Discovered new seafood</td>
</tr>
<tr>
<td></td>
<td>Modified his/her seafood consumption</td>
</tr>
<tr>
<td></td>
<td>Found inspiration for preparing seafood</td>
</tr>
</tbody>
</table>

Despite this high starting point, it seems that TV cooking shows end in having some effects on seafood consumption. One respondent in eight (among viewers) discovered some new seafood; more than one in seven was inspired by the programs for modifying their cooking habits and more than one in six modified his/her consumption (see Table 4).

4 Discussion

4.1 A win-win situation (broadcast companies and seafood sector)
Their strong development since 2000 witnesses the TV culinary programs profitability. Relatively inexpensive if compared to other high level TV programs (including abroad adventure programs), they are likely to generate high revenues. For instance, the season 3 of Master Chef, in France, generated 49.4 EUR millions in advertising.

As for the food producers, and the seafood sector in particular, the development of cooking shows seems to reinforce the familiarity with the products and the techniques of preparing them, as well the final consumption.

4.2 Ways forwards

From an operational point of view, this situation calls for a closer cooperation between TV industry and seafood sector, which should be beneficial for all the parts involved. For instance, seafood companies could evaluate the interest of sponsoring, or even co-producing, some TV culinary programs. Also, the manner the recipes are showed in the programs might be improved, lesser stressing the contest side and adopting a more didactical approach.

Another issue is variety: the recipes in TV shows seem to be concentrated on relatively few species. A highlight on some lesser known products would be likely to benefit both to broadcasters and seafood producer. If necessary, specific training session of Chefs about some seafood products might be considered.

As for the economic science, this preliminary work needs to be refined and completed. Involving a wider audience and including non maritime areas are key issues for better understanding of the relation between viewers/not viewers and seafood. Also, some questions would better be reformulated, thus allowing sharper analysis. Finally, it would be useful to interview the programs’ producers about their motivations; expectations, forecasted impacts of the show, and so on.

For these reasons, a follow-up is planned. Further researches will be undertaken within the SUCCESS project and they will include international comparisons.

5 References


