

# Consumer attitudes on electrical stunning of sea bream and sea bass in Greece's largest markets

#### **Executive Summary**

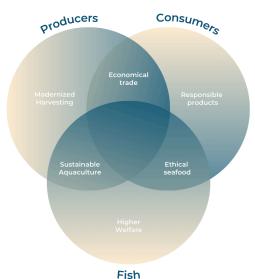
In June 2024, the Centre for Aquaculture Progress commissioned Savanta, a leading market research company, to conduct a comprehensive study analyzing consumer preferences for fish welfare in Greece, Italy, Spain, and France. The representative survey, which included 1,600 participants, revealed that an overwhelming majority of consumers (83%) endorse humane slaughter practices for sea bream and sea bass, specifically the use of pre-slaughter electrical stunning. Moreover, among consumers who purchase these fish species, 80% expressed willingness to pay more for humanely slaughtered fish. This indicates that introducing pre-slaughter electrical stunning can be economically viable and even profitable for fish producers. These findings highlight an opportunity for the Greek fish industry to align their practices with consumer expectations while simultaneously modernizing its harvest processes.

### Background

The Greek aquaculture industry has experienced significant growth and is expected to grow further, with sea bream and sea bass being among the most

commonly farmed fish species. However, the adoption of electrical stunning, a humane slaughter method that significantly improves fish welfare, has only been adopted to a very limited extent for these species. This is despite scientific evidence demonstrating that stunning before slaughter reduces stress and suffering in fish during the harvest process.

To evaluate the potential of new technologies in aquaculture, it is essential to consider a holistic perspective that takes into account the potential benefits for both consumers and producers. Consumer awareness and concern



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<sup>&</sup>lt;sup>1</sup> Welfare of farmed fish: Common practices during transport and at slaughter

<sup>&</sup>lt;sup>2</sup> <u>Humane slaughter in Mediterranean sea bass and bream aquaculture: farm characteristics, stakeholder views, and policy implications</u>



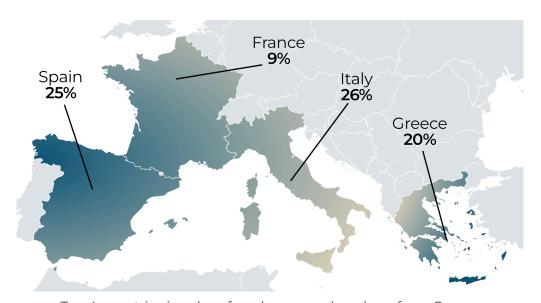
for animal welfare have been on the rise, with many individuals seeking products that align with their values. This study aimed to assess consumer interest specifically in humanely slaughtered sea bream and sea bass, as strong consumer demand could provide an opportunity for producers to differentiate their products in an increasingly competitive market.

The objectives of this study were:

- 1) to evaluate consumer attitudes towards electrical stunning as a humane slaughter method for sea bream and sea bass; and
- 2) to determine consumers' willingness to pay a premium for humanely slaughtered fish.

#### Methodology

Savanta, a reputable market research company, conducted an online survey using a targeted, structured questionnaire with closed-ended questions. The survey received responses from a total of 1,600 consumers equally distributed across Greece, Italy, Spain, and France. These countries were selected due to their significant market size of sea bream and sea bass for fish producers from Greece.<sup>3</sup>



Top 4 countries in sales of sea bream and sea bass from Greece

The sample was selected to be a national representative of the population in terms of age and gender, and near representative based on natural fallout for income and region. An online survey design was chosen.<sup>4</sup>

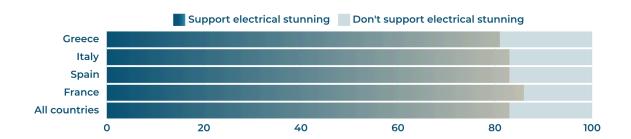
<sup>&</sup>lt;sup>3</sup> Fish From Greece Report 2023

<sup>&</sup>lt;sup>4</sup> According to <u>data from Eurostat</u>, the statistical office of the European Union, 90.52% of rural households in the EU-27 had internet access in 2023.

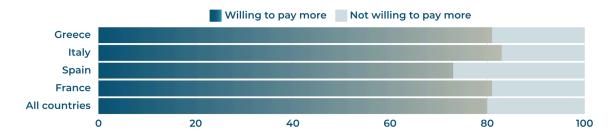


### **Key Results**

The survey results revealed a strong consumer preference for humane slaughter practices in the aquaculture of sea bream and sea bass.



A majority of 83% of respondents across all four countries expressed support for the use of pre-slaughter electrical stunning, indicating a widespread demand for improved fish welfare. This finding was consistent across all examined markets, suggesting that the desire for humane slaughter practices is consistent across Greece's largest markets.



Furthermore, the study found that 80% of consumers who purchase sea bream and sea bass would be willing to pay an additional €0.05 per serving (defined as 200g) for fish that had been humanely slaughtered. While the observed willingness to pay more is similar across Greece, Italy, and France, it is lower in Spain.<sup>5</sup> This result highlights the strong connection between consumer values and purchasing decisions, as well as the potential for producers to capitalize on this demand by implementing more humane practices.

No major differences have been observed between different demographic groups (age, gender, and income levels), indicating broad support for these issues in the population.

Access the report data online: cap.fish/consumer2024

<sup>&</sup>lt;sup>5</sup> Note that for Spain, price levels of Fish are significantly lower compared to the other countries examined, see: <u>Comparative price levels for food, beverages and tobacco</u>



#### Conclusion



More than 8 out of 10 consumers support pre-slaughter electrical stunning

The overwhelming majority of consumers (83%) favor the use of pre-slaughter electrical stunning for sea bream and sea bass as a humane slaughter method, with similar values observed across all examined markets. This finding, coupled with the fact that 80% of sea bream and sea bass consumers are willing to pay €0.05 more per serving for humanely slaughtered fish, presents a compelling case for the aquaculture industry to adopt more welfare-friendly practices.

To position fish from Greek aquaculture as a responsible product for consumers to buy, fish welfare needs to be seriously considered. In today's market, consumers are increasingly conscious of the ethical implications of their purchasing decisions, seeking out products that align with their values and demonstrate a commitment to animal welfare.

Relevant studies<sup>6 7</sup> indicate that the price increase per serving of fish (200g) would be significantly less than  $\leq$ 0.05. Estimates for Greek aquaculture suggest an increase of less than  $\leq$ 0.02 per serving. These findings underscore the cost-effectiveness of implementing pre-slaughter electrical stunning in the aquaculture of sea bream and sea bass, as it allows producers to meet strong consumer demand without incurring substantial additional costs.

The Centre for Aquaculture Progress is committed to supporting fish producers in advancing their slaughter processes, offering free and independent assistance to those interested in adopting more humane practices. By working together, the industry can respond to the clear consumer preference for improved fish welfare, while also enhancing the overall sustainability and competitiveness of the sector.

## For more information, please contact info@centreforaquacultureprogress.org

<sup>&</sup>lt;sup>6</sup> <u>Economic Evaluation of Humane Slaughter Methods for farmed Fish in Greece</u>

<sup>&</sup>lt;sup>7</sup> Report from the EU Commission on the possibility of introducing certain requirements regarding the protection of fish at the time of killing