





With the funding support of



SMALL-SCALE FISHERS' FORUM

Non-indigenous species: from health and safety to marketing opportunities

Akyaka (Gökova Bay), Türkiye, 21-23 November 2023

Report

Executive summary

This SSF Forum workshop was held in Akyaka, Türkiye, from 21 to 23 November 2023, with the support of the Mediterranean Conservation Society (MCS). The meeting was attended by 50 small-scale fishers and stakeholders from 10 Mediterranean countries. The objective of this workshop was to build capacity of small-scale fishers who increasingly find non-indigenous species (NIS) in their catches. In particular, the workshop provided the space for participants to share their experiences on on how to effectively manage, deal with and capitalize on NIS in different Mediterranean subregions, with a focus on the first-hand experience of fishers in Gökova Bay. Through group discussions, participants explored strategies for capitalizing on potential new market and job opportunities for these species. The workshop was also linked to the GFCM pilot study on non-indigenous species which aims to ensure interactions with stakeholders operating in the sector of NIS, including fishers.

Background and objectives of the meeting

- 1. This SSF Forum workshop was held in Akyaka, Türkiye, from 21 to 23 November 2023, with the support of the Mediterranean Conservation Society (MCS). The meeting was attended by 50 small-scale fishers and stakeholders from 10 Mediterranean countries. The meeting agenda is provided in Appendix 1 and the list of participants is provided in Appendix 2.
- 2. The GFCM Secretariat recalled that the SSF Forum is an initiative responding to the recommendations of the Regional Plan of Action for small-scale fisheries (RPOA-SSF) to offer capacity building opportunities and provide a mechanism to exchange for small-scale fishers and fish workers. In the framework of the SSF Forum 2023-2024 programme, this meeting was the first out of four workshops decided through a participatory process involving small-scale fishers and stakeholders on the occasion of the SSF Forum consultation (March 2023, Rome).
- 3. The GFCM having recently endorsed a pilot study on NIS, the workshop also aimed to initiate interactions with fishers operating in the sector of NIS and to gather their feedback of fishers on handling NIS, with a view to ensure stakeholder engagement in the implementation of the GFCM pilot study.
- In light of the growing prevalence of NIS in the Mediterranean region, the GFCM pilot study on NIS was first introduced with the objective to address the eastern Mediterranean subregion in a first phase before considering the replication of the model to other Mediterranean subregions, emphasizing how fisher-scientist collaboration may enhance knowledge on NIS. Participants then explored the impacts of NIS on small-scale fisheries, including socio-economic and environmental impacts, and the results of engaging in data collection. After delving into the local experience of fishers in Gökova Bay in handling NIS, in particular lionfish, and the creation a market-based solution, the workshop looked into management initiatives from other Mediterranean subregions, for example blue crab, where fishers shared their experience on handling NIS in their area. In order to effectively cope with NIS, participants went on to exchange on market opportunities for these species and discussed potential strategies, including to improve inclusion of women along the value chain and attract young fishers. The perspective of chefs having incorporated NIS in their restaurant menus was also shared to expand on innovative aspects and potential ways to address the issue. Finally, participants visited the marine protected area of Gökova Bay, providing a complete overview of the engagement of local cooperatives in the management of their area and local NIS. This SSF Forum represented the opportunity for fishers and stakeholders to engage, exchange experiences, and develop conclusions on effective ways for fishers to contribute, through a participatory approach, to addressing the impact of NIS and build up market opportunities for the sustainable management of NIS.

Conclusions and recommendations

- 5. Fishers participating to the SSF Forum have observed an increasing presence of non-indigenous species in the waters where they fish over the past decade (e.g. lionfish, blue crab, etc.), although the number of species and their abundance can vary widely from one site to another. Due to various factors, including the warming of sea temperatures and overfishing, participants expect to continue seeing an increase in arrivals of NIS.
- 6. The arrival of NIS can disturb the balance of marine ecosystems, including affecting indigenous species targeted by commercial fisheries, thus potentially impacting fisheries-dependent livelihoods. There is therefore a need to share experience on how to deal with and capitalize on NIS, noting that some of these species represent important revenue generation opportunities (e.g. blue crab, rapa whelk).

Improve and better disseminate knowledge on NIS:

7. Collaboration and exchange of experiences is essential to share best practices from around the region, in particular on where and when NIS appear, the biological characteristics and behavior of NIS species, health

and safety information fishers should be aware of (i.e. trainings on how to safely handle harmful species), and gear and fishing techniques for targeting NIS. To this end, participants proposed to explore potential channels (e.g. a regular newsletter, a catalogue of NIS fishing techniques, a WhatsApp group, etc.) for swiftly and efficiently exchanging information.

- 8. Improved scientific knowledge is needed to better understand the impact of NIS on local marine ecosystems, as well as on indigenous species of commercial importance.
- 9. Fishers represent a valuable source of local ecological knowledge on NIS and good collaboration between fishers and scientific experts should be promoted, particularly in the context of the GFCM pilot study.
- 10. Noting that, in some cases, NIS become established commercial resources, guidance is needed for decision-makers and other stakeholders on when and how to begin managing these species, as well as on how to engage fishers in the participatory management of NIS.

Strengthen marketing of NIS and raise awareness among consumers:

- 11. The marketing of consumable NIS can open up new market opportunities, as well as create jobs, particularly for women along the value chain. It could be capitalized on as a tool for attracting young people to the sector.
- 12. In parallel, there are training needs regarding non-edible poisonous NIS in order to exchange and identify ways to handle them.
- 13. To create a new market for NIS species, there is a need to:
 - Ensure consistent supply of the product to the market, as well as to consolidate the quantity available;
 - O With the support of relevant administrations, put in place, early on, an appropriate marketing and pricing strategy. Participants remarked on the difficulty of moving from a low to a high price, and therefore recommended it could be strategic to take an economic loss early on (e.g. by initially providing the product free to consumers, in order to build demand) and then subsequently introduce the product to the market at an appropriate price.
- 14. "Consumers won't purchase what they don't know". There is a need to raise awareness among consumers regarding NIS species to create a market for these species, including by:
 - Providing opportunities for consumers to taste the product;
 - Teaching consumers how to prepare the fish;
 - Combating negative perceptions about the species (i.e. that lionfish is poisonous or confusion between lionfish and pufferfish);
 - o Sharing information about the nutritional value of the product;
 - o Preparing promotional materials and establishing collaborations with chefs and restaurants.
- 15. Producer organizations and cooperatives (including women's organizations) have an essential role to play in terms of acting as intermediaries between fishers and the market, consolidating supply and identifying marketing channels.
- 16. Product transformation is an important strategy for increasing value and for accessing export markets, as in the process of rapa whelk export (e.g. processing blue crab into crab sticks, or lionfish into filets or fish stock, etc).

Follow-up actions and way forward

- 17. Participants emphasized on the importance of following a bottom-up approach in the management of NIS, encouraging a participatory process as the knowledge comes from the fishers themselves.
- 18. Considering the increasing interest in SSF Forum workshops as they aim to build capacity of small-scale fishers in the Mediterranean region and create a space for discussions and exchanges, the GFCM Secretariat will continue this interactive exercise in the framework of the SSF Forum to pave the way for stronger collaboration with small-scale fishers and fish workers who hold key knowledge on NIS and realities at sea. Such cooperation will contribute to ensuring sustainable management of NIS from a socio-economic and ecological perspective.
- 19. To ensure effective stakeholder engagement for the launch of the GFCM pilot study on NIS, the GFCM Secretariat will share the conclusions of the workshop with the experts appointed for the pilot study for consideration at the kick-off meeting.

Appendix 1

Agenda

- 1. Welcome, introduction of participants and presentation of the SSF Forum
- 2. Enhancing knowledge on NIS through fisher-scientist collaboration
- 3. Impacts of NIS on small-scale fisheries
- 4. ZOOM-IN: the experience of cooperatives in Gökova Bay in handling NIS
- 5. ZOOM-OUT: handling and managing NIS in the Mediterranean
- 6. Market opportunities in the management of NIS
- 7. Conclusions and recommendations
- 8. Final words to the participants
- 9. Field trip to marine protected area and local cooperative

List of participants

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